

Ana V. Halas Popović<sup>1</sup>  
University of Novi Sad  
Faculty of Philosophy  
Department of English

## *KEEP A COOL HEAD ABOUT THIS HOT ISSUE – THE ANALYSIS OF METAPHORIC SENSES IN THE SEMANTIC STRUCTURE OF ADJECTIVES FROM THE DOMAIN OF TEMPERATURE IN ENGLISH AND SERBIAN<sup>2</sup>*

*Abstract: This paper analyses the derivation of metaphoric senses of English and Serbian adjectives primarily denoting a certain degree of temperature as a physical property of objects. The aim of the analysis is to identify conceptual metaphors that have driven the derivation of these senses and compare English and Serbian in terms of conceptualisations of abstract notions using temperature as the source domain. Furthermore, the analysis aims at revealing whether the conceptualisation of an abstract notion using a certain degree of warmth as the source domain activates the conceptualisation of the opposite abstract notion starting from a degree of coldness and vice versa, i.e. to investigate whether there are pairs of opposite metaphors activated in semantic dispersion of the given adjectives. The analysis has shown that there is a significant similarity between English and Serbian regarding the conceptualisation of abstract notions using temperature as the source domain. Still, English displays a greater variety of abstract notions conceptualised in the given way. There are rare cases in which derivations of metaphoric senses of adjectives belonging to the opposite sections of the temperature scale are mutually related in the sense that they are driven by opposite metaphoric patterns.*

*Key words: conceptual metaphor, conceptualisation, temperature, metaphoric sense, English, Serbian.*

<sup>1</sup> ana.halas@ff.uns.ac.rs

<sup>2</sup> The paper was presented at the conference *Languages and Cultures in Time and Space 9* in November 2019 in Novi Sad, Serbia with the title *The Derivation of Metaphorical Senses of Adjectives Belonging to the Domain of Temperature in English and Serbian.*

## 1. Introduction

The subject of this paper is an analysis of metaphoric senses of English and Serbian adjectives whose primary meaning refers to a certain degree of warmth or coldness, i.e. a certain point on the scale of temperature. The general aim of the analysis is to investigate motivated derivations of these senses in the two languages and compare them. This general aim comprises three more specific ones. The first is to identify conceptual metaphors that have driven figurative extensions of the primary meaning of these adjectives. The fulfilment of this aim enables us to gain an insight into abstract notions conceptualised by speakers of English and Serbian starting from the domain of temperature as the source domain. Secondly, the aim is to establish similarities and differences between English and Serbian in terms of conceptual metaphors activated in the derivation of metaphoric senses of the adjectives in question, i.e. in terms of conceptualisations of abstract notions using the domain of temperature as the source domain. Thirdly, the analysis is aimed at examining whether derivations of metaphoric senses of adjectives belonging to the opposite sections of the temperature scale are mutually related in the sense that they are driven by directly opposite conceptual metaphors. The question to be answered is whether it is possible to establish pairs of directly opposite metaphorical patterns activated in semantic structures of adjectives belonging to the opposite parts of the scale of temperature. These opposite metaphorical patterns are understood in the analysis as those whose source domains involve certain degrees on the opposite sections of the scale while their target domains are directly opposite abstract notions, such as, for example, *EMOTIONAL IS WARM* and *UNEMOTIONAL IS COLD*. Hence, the essential intention is to reveal whether, in English and Serbian, the conceptualisation of a particular abstract notion using a certain degree of warmth as the source domain activates the conceptualisation of the directly opposite abstract notion that starts from a certain degree of coldness and vice versa.

The comparison of English and Serbian in the aforementioned context as the focus of this paper refers to the issue of cross-linguistic universality and variation of metaphors, which has already been established in contemporary cognitive linguistic literature as an influential topic concerning even non-linguistic areas of research and knowledge (e.g. philosophy, anthropology, etc.). This topic is closely related to universal human bodily experience, which encompasses, among other bodily sensations, those caused by different degrees of temperature used as a common source domain in conceptualisations of abstract notions in various languages, which is further elaborated in section 3 of the paper. In regard to linguistic realisation of degrees on

temperature scale, both English and Serbian offer quite a wide choice of adjectives with diverse metaphorical semantic dispersion yielding meanings related to a variety of abstract notions from different domains. Therefore, the given adjectives in the two languages provide a sample suitable for gaining significant insight into associative linkage between the domain of temperature and various abstract domains, or more generally speaking, into the role of human bodily experience in conceptualisation of abstract notions, while the comparison of English and Serbian, the two languages with their own cultural specificities, in this context can contribute to the investigation of cross-linguistic universality and variation of conceptual metaphors, a cognitive linguistic issue requiring constant research involving various domains.

## 2. Conceptual metaphor and polysemy

As Lakoff and Johnson (1980: 7) claim, metaphoric expressions are linguistic realisations of metaphor as a cognitive mechanism operating in our conceptual system. One of the essential ideas of this understanding of metaphor is that it is a mechanism of thinking that we use in order to understand certain concepts by cognitively relating them to concepts that are more familiar or experientially closer to us<sup>3</sup>. Kövecses (2010: 4) summarises the structure of a conceptual metaphor by saying that it includes two domains, the target domain or the one that we try to understand and the source domain or the one we use in order to understand the target domain.<sup>4</sup> In the example frequently cited in literature on conceptual metaphor, ARGUMENT IS WAR, argument as a more abstract target domain is understood in terms of an experientially closer source domain – war, while this conceptual structure is linguistically realised through metaphoric language expressions, such as the following: *Your claims are indefensible, He attacked every weak point in my argument, He shot down all of my arguments*, etc. (Lakoff and Johnson 1980: 5).

However, the mechanism of conceptual metaphor can also be used for explaining the derivation of metaphoric senses of polysemous words. Cognitive linguistics views polysemy as a form of categorisation<sup>5</sup>. In relation to this, Lakoff (1987) describes the semantic structure of a polysemous lexeme as a radial category

<sup>3</sup>More on conceptual metaphor as a cognitive mechanism in: Croft & Cruse (2004), Evans and Green (2006), Filipović Kovačević (2021), Ungerer & Schmid (2006), etc.

<sup>4</sup>This mechanism is asymmetric because the target domain which we know less about is related to the source domain which we know better (Stanojević 2013: 83).

<sup>5</sup>More on polysemy from the cognitive-linguistic perspective in: Cuyckens & Zawada (2001), Dragičević (2007), Evans & Green (2006), Geeraerts (2010), Halas Popović (2017a), Lewandowska-Tomaszczyk (2007), Nerlich et al. (2003), etc.

comprising all its mutually related senses which are radially positioned around the prototypical sense. Mutual relatedness of senses in a polysemous structure arises from the functioning of semantic mechanisms through which new senses are derived from the already existing ones. One of the most commonly employed mechanisms in this derivation is metaphor. The linguistic mechanism of polysemy known as lexical metaphor (Dragičević 2007: 148) is actually based on the cognitive mechanism of conceptual metaphor<sup>6</sup>.

The functioning of the aforementioned derivational mechanism, through which, as Bartsch claims (2003: 73), a new concept is construed from an already existing one, will be shown on the example of the adjectives *hard* in English and *tvrđ* in Serbian. Both of these adjectives are, in their primary meaning, used to describe an entity that is not easily bent, broken or pierced. However, in one of their secondary meanings, they refer to life, time, etc. that is difficult to bear (e.g. *hard times*, *hard life*, *hard conditions*; *tvrđ život*, *tvrde godine*, etc.). Although these two uses of the given adjectives seem completely unrelated, there is actually a systematic link between them represented by the conceptual metaphor MENTALLY OR PHYSICALLY TIRING IS HARD (MENTALNO ILI FIZIČKI NAPORAN JE TVRĐ) (Halas Popović 2017b: 104). This conceptual metaphor shows that we conceptualise something that is mentally or physically tiring using the notion of physical hardness. The given conceptual metaphor shows a conceptual pattern operating in our cognition on the basis of which a new, metaphorical meaning of the adjectives *hard* and *tvrđ* has been derived.

### 3. Temperature as a domain in conceptualisations

Klikovac (2004: 19) firmly claims that source domains are based on our bodily experience, which is a conclusion she draws from Johnson's work (1987), where one of the essential ideas is that we use our existing bodily experience gained through our functioning in the world around us by moving and using our senses to understand and interpret some new experience.<sup>7</sup> Temperature, the central notion in this paper, is a physical property of objects that we can register using our sense of touch. As such, temperature is among the most common source domains in metaphors (Kövecses 2010). It is particularly prominent as the source domain in conceptualisations of emotions (Geeraerts & Grondelaers (1995), Grady (1997), Kövecses (1990), (2003), (2005), Lakoff & Kövecses (1987). Furthermore, there are studies done in

<sup>6</sup>More on metaphor as a mechanism of polysemy in Halas Popović (2017a), Halas Popović (2017b), Halupka-Rešetar & Radić-Bojanić (2015), Radić-Bojanić (2020), etc.

<sup>7</sup>The idea of concepts grounded in the body and physical environment is supported by Gibbs (2003) as well as Gibbs et al. (2004).

various languages and often of a contrastive type, analysing metaphoric meaning extensions of temperature adjectives based on principles of cognitive linguistics and conceptual metaphor theory (e.g. Bergström (2010), Deignan (1999), Lorenzetti (2009), Valiulienė (2015), etc.), which show that the domain of temperature is associatively linked with various other abstract domains, so that this conceptual link forms the base for derivation of a significant number of metaphoric senses constituting rich polysemous structures of the adjectives in question.

A study of polysemy of temperature adjectives in English and Serbian (Rasulić 2015) reaches the conclusion that English and Serbian are significantly similar in terms of overall metaphorical conceptualisation using temperature as the source domain. In addition to this, some of the aforementioned contrastive studies show a high degree of similarity between English and other specific languages in terms of the given metaphorical conceptualisations. For instance, Lorenzetti (2009) investigates English and Italian temperature terms and their metaphorical patterns in a contrastive corpus-based study and realises that patterns linking the domain of temperature with the domain of emotions are consistent cross-linguistically between the two languages. Valiulienė (2015) contrastively analyses temperature metaphors in Lithuanian and English and finds out that the majority of the identified metaphors overlap in the two languages. Since basic physiological and cognitive functioning is common for all human beings, metaphors including source domains related to this functioning tend to be very similar or even universal (Kövecses 2005: 34). This observation about universality of metaphors as well as the fact that the notion of temperature is related to our bodily experience explain the findings of these studies and justifies the expectation that this research will generally confirm results obtained in Rasulić's study (2015) referring to a high degree of similarity between English and Serbian. However, it should be pointed out that, while the aforementioned study defines mechanisms underlying the derivation of metaphoric meanings of temperature adjectives in the two languages focusing on qualitative and quantitative aspects of conceptualisations using temperature as the source domain, energy transfer as a constituent of the given conceptual motivation and transitive cross-domain mappings as well as on the effect of the given semantic extensions on general semantic characteristics of the analysed adjectives, the research described in this paper focuses more on similarities and differences between English and Serbian in terms of specific abstract notions conceptually linked with the temperature domain and the connection between conceptualisations starting from the opposite sections of the temperature scale, i.e. those reflected in the pairs of directly opposite metaphorical patterns.

#### 4. Methodology of the analysis

Temperature is understood here as being scalar in its nature, which is an interpretation of this category relying on the principles of fuzzy logic. According to them, all phenomena and entities can be defined in terms of degrees, scalarity, graduality, etc. (Radovanović 2015: 29). Our bodily experience tells us that an object can be more or less warm or more or less cold. Hence, the gradual nature of temperature is obvious. These different degrees of warmth and coldness or different points on the temperature scale are expressed in English and Serbian by various adjectives (e.g. *warm, hot, cold, freezing; topao, vreo, hladan, mrzao*, etc.). We should not forget that the “in-between” point on this scale connecting the two extremes is also expressed in these languages (e.g. *lukewarm, tepid; mlak*). The sample for this analysis comprises English and Serbian adjectives whose primary meaning denotes a certain degree on the scale of temperature and whose semantic structure contains metaphoric senses. The primary meaning is understood here as the one listed first in a dictionary entry of the given adjective. The adjectives *warm, lukewarm* and *cold* in English, and *topao, mlak* and *hladan* in Serbian are taken as representatives of three basic ways of expressing an object’s temperature and as starting points in collecting the sample for the analysis. Their synonyms<sup>8</sup> fulfilling the aforementioned criteria for the analysis have been excerpted from dictionaries of synonyms and thesauri of the two languages<sup>9</sup>. Finally, there have been formed three groups of adjectives labelled by the following features: +warm (encompassing various degrees of warmth), ±warm (referring to points where two extremes, warmth and coldness, meet and melt into each other yielding temperatures characterised as lukewarm) and -warm (including various degrees of coldness). The excerpted English and Serbian +warm adjectives are the following: *warm, hot, sizzling, scorching, scalding, heated, burning; topao, vreo, vruć, ključao, gorući, žarki, jarki*, while the selected -warm adjectives of the two languages include the following: *cool, cold, chilly, frosty, frigid; hladan, studen, mrzao*. Among the excerpted adjectives from both languages, there are also ±warm ones: *lukewarm, tepid; mlak*.

This qualitative and contrastive analysis has included the following steps: (1) compiling the inventory of all possible senses of every analysed adjective on the basis of its entry in the consulted dictionaries<sup>10</sup>, (2) identifying the way in which each sense of a particular adjective is related to its primary or basic sense (the one

<sup>8</sup> Near-synonymy, understood according to Cruse’s classification (Cruse 1991: 265), is taken into account since it enables the collection of a wider sample for the analysis.

<sup>9</sup> The list of the sources is provided at the end of the paper.

<sup>10</sup> The list of the sources is provided at the end of the paper.

referring to a certain degree on the temperature scale), i.e. identifying the semantic mechanism through which the given sense is derived from the basic meaning (e.g. metaphor, metonymy, etc.), (3) compiling the inventory of metaphoric senses of each adjective, (4) grouping of the identified metaphoric senses of all the analysed adjectives according to the domain they refer to (e.g. emotions, intensity, public interest, etc.) based on dictionary sense definitions and illustrative examples showing the context in which the given sense is typically used or specific referents typically used with the given adjective in this meaning, (5) identifying the specific metaphoric pattern underlying the derivation of the given sense(s), (6) identifying pairs of directly opposite metaphoric patterns, (7) comparing the identified metaphoric patterns of the two languages including pairs of opposite metaphors.

## 5. Analysis and discussion of results

The results of the analysis are presented according to the established groups of metaphoric meanings. Each group refers to a different target domain.

### 5.1. Derivation of Metaphoric Meanings Related to the Domain of Emotions

Through the analysis of polysemous structures of adjectives from both English and Serbian whose primary meaning denotes a certain degree on +warm section of the temperature scale, it has been noticed that they have a significant number of metaphoric senses that are related to the domain of emotions. These senses are presented in the following two tables:

Table 1 Metaphoric meanings of *hot*, *sizzling*, *heated* and *warm* from the domain of emotions

hot
<ul style="list-style-type: none"><li>• 'lustful or erotic'<sup>11</sup> (e.g. <i>a hot passionate kiss</i>)</li><li>• '(of popular music) strongly rhythmical and excitingly played' (e.g. <i>hot Cuban rhythms, hot jazz</i>)</li><li>• 'filled with passionate excitement, anger, or other strong emotion' (e.g. <i>hot with rage, hot emotions</i>)</li></ul>

<sup>11</sup> In the case of the analyzed English adjectives, the formulations of sense definitions and their illustrative examples have been taken from the online version of *Oxford Dictionary of English* and *Collins English Dictionary*.

<p>sizzling</p> <ul style="list-style-type: none"> <li>‘very exciting or passionate’ (e.g. <i>a sizzling affair, sizzling performance</i>)</li> </ul>
<p>heated</p> <ul style="list-style-type: none"> <li>‘inflamed with passion or conviction’ (e.g. <i>a heated argument, a heated debate, a heated, passionate kiss, a long, passionate, heated affair</i>)</li> </ul>
<p>warm</p> <ul style="list-style-type: none"> <li>‘having or showing enthusiasm, affection or kindness’ (e.g. <i>warm, friendly smiles, a warm welcome</i>)</li> </ul>

**Table 2** Metaphoric meanings of *vreo*, *vruć*, *žarki*, *topao* and *ključao* from the domain of emotions

<p>vreo</p> <ul style="list-style-type: none"> <li>‘strastan, vatren’<sup>12</sup> (npr. <i>vreo poljubac, vrela krv</i>)</li> </ul>
<p>vruć</p> <ul style="list-style-type: none"> <li>‘pun topline, usrdan, srdačan, svesrdan’ (npr. <i>vruć pozdrav, vruća molitva</i>)</li> <li>‘vatren, strastven, strastan’ (npr. <i>vruć poljubac, vruć zagrljaj</i>)</li> <li>‘strasno privržen, oduševljen, veoma odan’ (npr. <i>vruć zagovornik</i>)</li> <li>‘veoma zainteresovan, zagrejan za kupovinu nečega’ (npr. <i>vruć kupac, vruća mušterija</i>)</li> <li>‘koji je plahe, bujne naravi, plah, plahovit, bujan, neobuzdan, nagao’ (npr. <i>vruća narav</i>)</li> </ul>
<p>žarki</p> <ul style="list-style-type: none"> <li>‘strastan, vatren’ (npr. <i>žarki rodoljub</i>)</li> </ul>
<p>topao</p> <ul style="list-style-type: none"> <li>‘pun topline, srdačnosti, prisnosti’ (npr. <i>topao pogled, topla preporuka</i>)</li> <li>‘osećajan, čovekoljubiv’ (npr. <i>topla duša</i>)</li> </ul>
<p>ključao</p> <ul style="list-style-type: none"> <li>‘strastan, uzburkan’ (npr. <i>ključala krv</i>)</li> </ul>

All of these senses refer to passionate excitement that takes different forms in different contexts in which the given adjectives are used. The English adjectives *hot*,

<sup>12</sup> In the case of the analyzed Serbian adjectives, the formulations of sense definitions and their illustrative examples have been taken from *Rečnik srpskoga jezika* (2011).



*heated* and *sizzling* as well as the Serbian adjectives *vreo* and *vruć* refer to romantic or erotic passion (e.g. *a hot, passionate kiss, a sizzling affair, a heated, passionate kiss; vreo poljubac, vruć poljubac*). *Hot* also describes music that is passionately, excitingly played (e.g. *hot jazz*) or refers to passionate excitement that can involve negative feelings, such as anger (e.g. *hot with rage*), which can be denoted by *heated* as well (e.g. *a heated argument*). *Sizzling* in English and *vruć* in Serbian are used to describe an entity showing passion which can be inflamed by burning enthusiasm (e.g. *a sizzling performance*) or a wish to buy something (e.g. *vruća mušterija*). Passion the Serbian adjective *ključao* refers to has the form of general fierce emotional excitement (e.g. *ključala krv*), which is often felt by a quick-tempered person whose character is described by the adjective *vruć* (e.g. *vruća narav*). *Žarki* and *vruć*, in one of their uses, are related to a specific form of passion that is expressed in supporting or advocating some ideology, idea, attitude, etc. (e.g. *žarki rodoljub, vruć zagovornik*).

However, the adjective *warm* in English and *topao* and *vruć* in Serbian are, in one of their metaphoric senses, used with referents showing a different emotion, the one of affection (e.g. *warm, friendly smiles; topao pogled, topla duša, vruć pozdrav*).

The analysis carried out so far indicates that English and Serbian adjectives belonging to +warm section of the temperature scale denote two emotions, passionate excitement and affection, which trigger off our physiological reaction so that our heart pounds, we feel warm or hot. Therefore, English and Serbian speakers' mind associates the experience of these emotions with warmth. This associative link is reflected in the conceptual metaphors PASSIONATELY EXCITED IS HOT/HEATED/SIZZLING or STRASTVEN, UZBUĐEN JE VREO/VRUĆ/KLJUČAO/ŽARKI, AFFECTIONATE IS WARM or SRDAČAN, PRISAN JE TOPAO/VRUĆ. AFFECTION IS WARMTH is already established as one of primary, fundamental metaphors, found cross-linguistically (Grady 1997). In addition to affection, emotions like anger, passion or lust, excitement are typically associated with high temperature in other studies as well (Kövecses 2003, Rasulić 2015). In this analysis, these feelings are lumped under the general notion of passionate excitement as it is the component they all share. Also, these are all highly intense emotional states, which supports the observation that high temperature as a source domain highlights intensity as an aspect of emotional concepts (Kövecses 2003: 41).

The examination of semantic structures of -warm adjectives in both English and Serbian has revealed that they also contain a significant inventory of metaphoric senses related to the domain of emotions, as shown by the following tables:

**Table 3** Metaphoric meanings of *cool*, *cold*, *chilly*, *frigid* and *frosty* from the domain of emotions

<p>cool</p> <ul style="list-style-type: none"> <li>• ‘showing no friendliness towards a person or enthusiasm for an idea or project’ (e.g. <i>a cool reception</i>, <i>a cool response</i>)</li> <li>• ‘free from excitement, anxiety, or excessive emotion’ (e.g. <i>a cool head</i>, <i>cool logic</i>)</li> <li>• ‘(of jazz) restrained and relaxed’ (e.g. <i>cool jazz</i>)</li> </ul>
<p>cold</p> <ul style="list-style-type: none"> <li>• ‘feeling or characterised by fear or horror’ (e.g. <i>cold shivers</i>)</li> <li>• ‘lacking affection or warmth of feeling; unemotional’ (e.g. <i>a rather cold and calculating man</i>, <i>cold black eyes</i>, <i>formal cold manner</i>)</li> <li>• ‘not affected by emotion; objective’ (e.g. <i>cold statistics</i>, <i>cold logic</i>, <i>cold reality</i>)</li> <li>• ‘sexually unresponsive; frigid’ (e.g. <i>cold and unresponsive</i>, <i>cold and barren</i>)</li> <li>• ‘depressing or dispiriting; not suggestive of warmth’ (e.g. <i>a cold light</i>, <i>a cold and clinical design</i>)</li> </ul>
<p>chilly</p> <ul style="list-style-type: none"> <li>• ‘unfriendly’ (e.g. <i>a chilly reception</i>, <i>chilly persona</i>)</li> </ul>
<p>frigid</p> <ul style="list-style-type: none"> <li>• ‘stiff or formal in behaviour or style’ (e.g. <i>frigid elegance</i>, <i>frigid stepmother</i>)</li> <li>• ‘unable to be sexually aroused (typically used of a woman)’ (e.g. <i>an uptight frigid woman</i>)</li> </ul>
<p>frosty</p> <ul style="list-style-type: none"> <li>• ‘cold and unfriendly in manner’ (e.g. <i>a frosty look</i>, <i>a frosty reception</i>, <i>a frosty glare</i>)</li> </ul>

**Table 4** Metaphoric meanings of *hladan*, *studen* and *mrzao* from the domain of emotions

<p>hladan</p> <ul style="list-style-type: none"> <li>• ‘koji izaziva osećaj jeze, jezovit; strašan’ (npr. <i>bladni žmarci</i>, <i>bladna smrt</i>)</li> <li>• ‘koji se ne uzbuđuje, ne uzrujava, staložen, miran, hladnokrvan, trezven’ (npr. <i>hladan čovek</i>, <i>ostati hladan</i>, <i>biti hladne glave</i>)</li> </ul>
--

<ul style="list-style-type: none"> <li>• ‘uzdržan, rezervisan; ravnodušan, neosetljiv; neljubazan; koji odražava takve osobine’ (npr. <i>biti hladan prema nekome, hladno službeno lice, hladno držanje, hladan doček, hladan prijem</i>)</li> </ul>
<p>studen</p> <ul style="list-style-type: none"> <li>• ‘bezosećajan, neosetljiv, hladan; koji odražava takvo osećanje’ (npr. <i>studen pogled</i>)</li> </ul>
<p>mrzao</p> <ul style="list-style-type: none"> <li>• ‘lišen svake topline, osećajnosti, hladan, leden’ (npr. <i>mrzle duše</i>)</li> <li>• ‘koji ledi duh, koji izaziva jezu, užas, stravičan’ (npr. <i>mrzla strava, mrzli strah</i>)</li> </ul>

The English adjectives *cold*, *chilly*, *frosty* and *frigid* and the Serbian adjectives *studen* and *hladan* describe referents characterised by the absence of friendliness and affection (e.g. *cold black eyes, a chilly reception, a frosty look, frigid elegance; studen pogled, hladan doček*). *Cool* refers to a lack of enthusiasm (e.g. *a cool response*). *Cold* and *frigid* denote a lack of erotic or sexual passion as well (e.g. *cold and barren, an uptight frigid woman*). However, such use is not identified among the analysed Serbian -warm adjectives. *Cool* and *cold* in English and *hladan* in Serbian also describe entities that are freed from emotions in general, especially excessive ones, due to which they are characterised by objectivity and rationality (e.g. *a cool head, cold logic; biti hladne glave*). However, in the case of the Serbian adjective *mrzao*, the complete absence of emotions is not a cause of objectivity but extreme insensitivity (e.g. *mrzle duše*). As opposed to the adjective *hot* which describes jazz that is played passionately and excitingly, *cool* used in the phrase *cool jazz* denotes the absence of passion.

Yet, the given adjectives in the two languages do not refer only to a lack of particular emotions or emotions in general but also to the experience of emotions perceived as negative or destructive. Thus, *cold* in English and *hladan* and *mrzao* in Serbian denote fear (e.g. *cold shivers; hladni žmarci, mrzli strah*). *Cold* can also be used to describe entities causing someone to feel depressed or dispirited (e.g. *a cold and clinical design*).

Zooming onto –warm section of the scale, it is noticeable that it is used in the two languages as the source domain in conceptualisations of a lack of emotions in general as well as a lack of affection and any form of passionate excitement involving erotic passion, enthusiasm, etc., i.e. a lack of emotions associated with warmth. These conceptualisations are based on an associative linkage between the domain of emotions and -warm section of the temperature scale, which is

reflected in the conceptual metaphors UNEMOTIONAL IS COOL/COLD or NEEMOTIVAN JE HLADAN/MRZAO and, in the case of a lack of specific emotions, NOT AFFECTIONATE IS COLD/CHILLY/FROSTY/FRIGID or NESRDAČAN, NEPRISAN JE STUDEN/HLADAN, NOT PASSIONATELY EXCITED IS COOL/COLD/FRIGID. Hence, the feeling of warmth is cognitively connected with the experience of certain emotions, while the feeling of coldness, as the notion opposite to warmth, is related to the absence of these emotions. In line with this observation, the conceptualisations of the presence of emotional excitement and affection and their absence form two pairs of directly opposite conceptual metaphors. Their target domains are directly opposite abstract notions understood by relying on the opposite sections of the temperature scale as the source domains. It can be assumed that the conceptualisation of the presence of these emotions based on our bodily experience has triggered off the conceptualisation of their absence, as its logical counterpart.

Furthermore, in both languages, there are expressions (e.g. *a cool head*; *biti hladne glave*) which show that being freed from any emotions is a state related to being objective or rational. A more indepth analysis reveals that the meaning of such expressions is based on the collaboration of two metaphors, UNEMOTIONAL IS COOL/COLD or NEEMOTIVAN JE HLADAN and RATIONAL IS COLD or RACIONALAN JE HLADAN, where the second one has already been recognised in cognitive linguistic literature (e.g. Kövecses 2005: 288-289).

However, we should not neglect the observation that the experience of fear or depression is associatively linked with coldness, which is the conclusion reached by Rasulić (2015) as well. This link is reflected in the following metaphoric patterns: FEELING OR AROUSING (INTENSE) FEAR OR DEPRESSION IS COLD or KOJI OSEĆA ILI BUDI (INTENZIVAN) STRAH JE HLADAN/MRZAO. Fear or dispirited mood triggers off our physiological reaction which includes shuddering, shivers going down our spine or, in general, unpleasant bodily reaction characteristic of our physical experience of coldness. This explains why speakers of English and Serbian associate the given destructive feelings with -warm section on the temperature scale.

It can be concluded that an aspect of coldness that plays a role in the given conceptualisations is unpleasant bodily experience it causes. Consequently, in some conceptualisations, coldness is associated with unpleasant emotions (e.g. depression, fear) or unpleasant mental experience in general caused by a lack of affection, enthusiasm or passion. Hence, -warm section of the scale, as a source domain, can highlight unpleasantness as an aspect of emotional concepts.

## 5.2. Derivation of Metaphoric Meanings Related to the Domain of Intensity

Another productive associative linkage that has driven the derivation of metaphoric senses in semantic structures of the adjectives in question in both English and Serbian is the one established between the notion of high temperature and high intensity, as shown in the following tables:

**Table 5** Metaphoric meanings of *scorching* and *scalding* from the domain of intensity

scorching
<ul style="list-style-type: none"> <li>• ‘(of criticism) harsh; severe’ (e.g. <i>scorching criticism</i>)</li> </ul>
scalding
<ul style="list-style-type: none"> <li>• ‘intense and painful or distressing’ (e.g. <i>a scalding pain</i>)</li> </ul>

**Table 6** Metaphoric meanings of *vruć*, *vreo*, *žarki*, *jarki* and *gorući* from the domain of intensity

vruć
<ul style="list-style-type: none"> <li>• ‘jak, žestok, silan’ (npr. <i>vruće batine</i>, <i>vruć šamar</i>)</li> </ul>
vreo
<ul style="list-style-type: none"> <li>• ‘vrlo jak, silan, žestok’ (npr. <i>vrela potreba</i>, <i>vrela čežnja</i>)</li> </ul>
žarki
<ul style="list-style-type: none"> <li>• ‘intenzivan, snažan’ (npr. <i>žarka želja</i>)</li> <li>• ‘jak, žestok’ (npr. <i>žarko vino</i>, <i>žarka rakija</i>)</li> </ul>
jarki
<ul style="list-style-type: none"> <li>• ‘intenzivan, snažan; izrazit, upečatljiv’ (npr. <i>jarka eksplozija</i>, <i>jarko obeležje</i>)</li> </ul>
gorući
<ul style="list-style-type: none"> <li>• ‘žarki, vatren, žestok (o osećanjima)’ (npr. <i>goruća ljubav</i>, <i>goruća želja</i>)</li> </ul>

The English adjectives *scorching* and *scalding* and the Serbian adjectives *vruć*, *vreo*, *žarki*, *jarki*, *gorući* all have a use referring to the notion of high intensity. However, each of these uses represents a specific realisation of the given general notion appearing in a specific context. Therefore, *scorching* is usually used to denote the high intensity of criticism (e.g. *scorching criticism*), while *scalding* emphasises

the intensity of pain (e.g. *scalding pain*). In Serbian, *vruć* refers to the intensity of pain caused by the referent it describes (e.g. *vruće batine*, *vruć šamar*) and *gorući* to high emotional intensity (e.g. *goruća ljubav*). However, other contexts in which the analysed Serbian adjectives appear in the general meaning of high intensity are quite different from the aforementioned ones in which the given English adjectives are used. The adjectives *žarki* and *vreo* refer to the intensity of cognitive notions such as a need, a wish, etc. (e.g. *žarka želja*, *vrela potreba*). In expressions such as *žarka rakija* or *žarko vino*, the given adjective emphasises the high intensity of alcoholic drinks, while *jarki* describes an entity that is easily noticeable or stands out due to its intensity (e.g. *jarko obeležje*).

The metaphor employed in derivation of all these senses can be formulated as INTENSE IS SCORCHING/SCALDING in English and INTENZIVAN JE VRUĆ/VREO/ŽARKI/JARKI/GORUĆI in Serbian. The source of this conceptualisation is probably our physical sensation caused by our bodily contact with an object emitting heat. The intensity of this sensation is then associatively linked with the more abstract notion of high intensity. As this analysis has initially shown, +warm section of the temperature scale is related to high emotional intensity. However, further examination supports the observation that the link between high temperature and high intensity is applicable beyond the sphere of emotions (Kövecses 2003: 42).

It is interesting that neither English nor Serbian speakers use the opposite section of the temperature scale to conceptualise the notion of low intensity. It can be claimed that, in both languages, coldness is perceived as the absence and not as a low(er) degree of warmth. As a high degree of intensity is conceptually linked with a high degree of warmth, according to a logical line of reasoning, a low(er) degree of intensity should be conceptualised through a low(er) degree of warmth and not through its complete absence, so that coldness is not used as the source domain here. In the analysed dictionaries of both languages, there are examples which show that low intensity is understood through reference to the middle section of the temperature scale.

Table 7 Metaphoric meanings of *lukewarm* and *tepid* from the domain of intensity

lukewarm
• 'showing little enthusiasm' (e.g. <i>a lukewarm reception</i> , <i>lukewarm attitudes</i> , <i>lukewarm support</i> , <i>a lukewarm response</i> )

tepid

- ‘showing little enthusiasm’ (e.g. *a tepid response, the applause was tepid*)

**Table 8** Metaphoric meanings of *mlak* from the domain of intensity

mlak

- ‘neborben, nehajan, neaktivan, pasivan, nepreduzmljiv; bezvoljan, apatičan; koji je svojstven takvoj osobi, koji odaje takvu osobu’ (npr. *biti mlake naravi*)
- ‘koji je bez životne snage, energije, bez bodrosti, poleta; koji odaje takvu osobu; bezizrazan, beživotan’ (npr. *govoriti mlakim glasom, mlake oči*)
- ‘koji nešto nije u punoj meri, koji je ograničen, rezervisan, suzdržan’ (npr. *mlake pohvale*)
- ‘koji je bez dovoljno jačine, intenziteta, oštine, žustrine i sl., slab, beskrvan’ (npr. *mlak meč, mlak napad, mlaka utakmica*)
- ‘neispunjen intenzivnijim doživljajima, jednoličan, monoton, dosadan’ (npr. *mlaka atmosfera penzionerske bezbrižnosti*)

The semantic structures of *lukewarm* and *tepid* in English and *mlak* in Serbian, which in their primary meaning denote the presence of both components, +warm and -warm, contain metaphoric senses that refer to a low degree of passionate, enthusiastic excitement (e.g. *a lukewarm reception, a tepid response; mlake pohvale*), which can be manifested in inactivity, passivity, apathy, a lack of energy or vigour (e.g. *biti mlake naravi, govoriti mlakim glasom*). In addition to low emotional intensity, the Serbian adjective *mlak* refers to the notion of low intensity in general (e.g. *mlak napad*), which is in the examples such as *mlaka atmosfera penzionerske bezbrižnosti* caused by a lack of dynamics. It can be concluded that, being perceived as a lower degree of warmth, the lukewarm temperature is used by both English and Serbian speakers as the source domain for conceptualising low intensity (NOT INTENSE IS LUKEWARM/TEPID OR NEINTENZIVAN JE MLAK).

### 5.3. Derivation of Metaphoric Meanings Related to the Domain of Freshness

On the basis of their experience, both English and Serbian speakers know that what is warm or hot is newly or recently made, such as a loaf of bread. Through the mechanism of metaphor, this connection between warmth and freshness has

been brought to a more abstract level so that entities such as a recent scent or trail or the latest news are described as hot or warm, as shown in the examples in the following tables:

Table 9 Metaphoric meanings of *warm* and *hot* from the domain of freshness

warm
• '(of a scent or trail) fresh; strong' (e.g. <i>warm scent</i> )
hot
• '(of the scent) fresh and strong, indicating that the quarry has passed recently' (e.g. <i>hot scent</i> )

Table 10 A metaphoric meaning of *vruć* from the domain of freshness

vruć
• 'svež, skorašnji, nov' (npr. <i>vruć trag</i> , <i>vruće novosti</i> )

These meanings are derived on the basis of the metaphor RECENT IS WARM/HOT in English and SKORAŠNJI JE VRUĆ in Serbian. This metaphor has its direct opposite in English reflected in the pattern NOT RECENT IS COLD which has led to the derivation of the following metaphoric meaning of the adjective *cold* used with a scent or trail as its referent:

Table 11 A metaphoric meaning of *cold* from the domain of freshness

cold
• '(of the scent or trail of a hunted person or animal) no longer fresh and easy to follow' (e.g. <i>The trail went cold.</i> )

This conceptualisation also arises from the aforementioned everyday experience according to which we know that a warm loaf of bread is recently made while a cold one is not that fresh. Therefore, two possible outcomes of the same everyday situation have served as source domains for understanding two opposite abstract notions.



#### 5.4. Derivation of Metaphoric Meanings Related to the Domain of Great Public Interest

In both English and Serbian, the physical feature of objects that emit heat is used as the source domain in the conceptualisation of the quality of being current and attracting great public interest, which is observable in the semantic structures of the adjective *hot* in English and *gorući* in Serbian.

Table 12 Metaphoric meanings of *hot* from the domain of public interest

hot
<ul style="list-style-type: none"><li>• ‘involving much activity, debate, or interest’ (e.g. <i>a very hot issue, hot debate, hot dispute</i>)</li><li>• ‘(of news) fresh and of great interest’ (e.g. <i>hot gossip, hot news, a recent hot topic</i>)</li><li>• ‘currently popular, fashionable, or in demand’ (e.g. <i>the hottest dance moves, hot fashion items</i>)</li><li>• ‘(of a person) sexually attractive’ (e.g. <i>the hottest guys, the hot American girl</i>)</li></ul>

Table 13 A metaphoric meaning of *gorući* from the domain of public interest

gorući
<ul style="list-style-type: none"><li>• ‘vrlo hitan, neodložan; veoma aktuelan’ (npr. <i>gorući problem, goruće pitanje</i>)</li></ul>

A current disputable issue that attracts public interest is described as *hot* by English and *gorući* by Serbian speakers (e.g. *a very hot issue; gorući problem*). In addition to this one, *hot* is used in various other contexts referring to an entity that arouses great public interest for different reasons, such as the fact that it is fashionable (e.g. *hot fashion items*), sexually attractive (e.g. *the hottest guys*) or new (e.g. *hot news*).

A physical contact with an object emitting a very high temperature jolts us and immediately grabs our attention just like an entity that awakens our burning interest. Due to the noticed similarity, we rely on a high temperature as the source domain when we talk about the attracting of publicity, which can be represented by the patterns CURRENT, AROUSING GREAT INTEREST IS HOT and AKTUELAN,

KOJI BUDI VELIKO INTERESOVANJE JE GORUĆI. However, this pattern does not have its direct opposite including -warm section of the scale as its source domain in either English or Serbian.

### 5.5. Derivation of Metaphoric Meanings Related to the Domain of Success

The adjective *hot* has three uses representing specific realisations of the broadly understood notion of success:

Table 14 Metaphoric meanings of *hot* from the domain of success

hot
<ul style="list-style-type: none"><li>• ‘very knowledgeable or skillful’ (e.g. <i>to be hot on local history, to be hot on the maths</i>)</li><li>• ‘good’ (e.g. <i>not to be so hot for business, not to be too hot with electronics</i>)</li><li>• ‘If a person or team is the hot favourite, people think that they are the one most likely to win a race or competition’ (e.g. <i>the hot favourite</i>)</li></ul>

*Hot* is used in the context in which a person possesses a quality needed for success in a particular field (e.g. *to be hot on local history, not to be so hot for business*). Also, it describes a person or team most likely to be the most successful one in a competition (e.g. *the hot favourite*). These uses have been derived according to the metaphor SUCCESSFUL IS HOT. Heat, as a high degree of temperature, is identified, in this conceptualisation, with a high level of someone’s performance yielding a good result or success in general.

### 5.6. Derivation of Metaphoric Meanings Related to the Domain of Mental Pleasantness

As the following table shows, *cool* is, in an informal register, used when a speaker wants to describe a particular referent as impressive, admirable or to say that they find a particular idea, situation or suggestion acceptable to them. Therefore, although denoting a certain degree of coldness, *cool* has a positive connotation in the following examples:

**Table 15** Metaphoric meanings of *cool* from the domain of mental pleasantness

cool
<ul style="list-style-type: none"><li>• ‘fashionably attractive or impressive’ (e.g. <i>a cool bar, a very cool collection of photographs, cool clothes, cool music</i>)</li><li>• ‘used to express acceptance of or agreement with something’ (e.g. <i>He was cool with that. That’s cool by me.</i>)</li></ul>

The connection between the notion of mental pleasantness and coolness reflected in the metaphor **MENTALLY PLEASANT IS COOL** is enabled by the fact that an entity having a cool temperature is cold but not too cold. It can be even regarded as refreshingly cold so that our bodily contact with it can be pleasant. This pleasant physical experience is then used as the source domain in conceptualising the quality of entities that are mentally pleasant to us, i.e. the experientially closer notion of physical pleasantness is used for understanding the more abstract notion of mental pleasantness.

### 5.7. Derivation of Metaphoric Meanings Related to the Domain of Difficulty

While *cool* carries a positive connotation in the previously analysed cases, *hot* has a negative one when used in the following meanings:

**Table 16** Metaphoric meanings of *hot* from the domain of difficulty

hot
<ul style="list-style-type: none"><li>• ‘difficult to deal with’ (e.g. <i>be too hot to handle</i>)</li><li>• ‘(of goods) stolen and difficult to dispose of because easily identifiable’ (e.g. <i>the hot merchandise</i>)</li></ul>

Heat is related to the characteristic of a situation or an entity which is difficult and undesirable for a certain reason. Such a cognitive link is based on our unpleasant physical experience caused by touching a hot object, which is, therefore, difficult to hold, carry or deal with in general. The given link is represented by the pattern **DIFFICULT TO DEAL WITH IS HOT**. Hence, physical unpleasantness as a negative aspect of heat is brought into focus in this conceptualisation.

## 6. Conclusion

The summary of all conceptual metaphors identified in the analysis is provided in the table below:

**Table 17** Conceptual metaphors motivating the derivation of figurative senses of English and Serbian adjectives primarily denoting a certain degree on the temperature scale

ENGLISH	SERBIAN
+warm as the source domain	+topao as the source domain
PASSIONATELY EXCITED IS HOT/ HEATED/SIZZLING	STRASTVEN, UZBUĐEN JE VREO/ VRUĆ/KLJUČAO/ŽARKI
AFFECTIONATE IS WARM	SRDAČAN, PRISAN JE TOPAO/VRUĆ
INTENSE IS SCORCHING/SCALDING	INTENZIVAN JE VRUĆ/VREO/ ŽARKI/JARKI/GORUĆI
RECENT IS WARM/HOT	SKORAŠNJI JE VRUĆ
CURRENT, AROUSING GREAT INTEREST IS HOT	AKTUELAN, KOJI BUDI VELIKO INTERESOVANJE JE GORUĆI
SUCCESSFUL IS HOT	
DIFFICULT TO DEAL WITH IS HOT	
-warm as the source domain	-topao as the source domain
NOT AFFECTIONATE IS COLD/ CHILLY/FROSTY/ FRIGID	NESRDAČAN, NEPRISAN JE STUDEN/HLADAN
NOT PASSIONATELY EXCITED IS COOL/COLD/FRIGID	
UNEMOTIONAL IS COOL/COLD RATIONAL IS COLD	NEEMOTIVAN JE HLADAN/MRZAO RACIONALAN JE HLADAN
FEELING OR AROUSING (INTENSE) FEAR OR DEPRESSION IS COLD	KOJI OSEĆA ILI BUDI (INTENZIVAN) STRAH JE HLADAN/MRZAO
NOT RECENT IS COLD	
MENTALLY PLEASANT IS COOL	

$\pm$ warm as the source domain	$\pm$ topao as the source domain
NOT INTENSE IS LUKEWARM/TEPID	NEINTENZIVAN JE MLAK

The abstract notions conceptualised through a certain degree of warmth in both English and Serbian are the following: emotions including affection and passionate excitement, high intensity, the characteristic of being recent and public interest. In addition to these, English speakers conceptualise the notions of success and difficulty using the same source domain. Coldness in its various degrees is used in both languages for conceptualising a lack of affection and emotions in general, but also the presence of rationality and destructive emotions, such as fear or depression. Unlike Serbian speakers, English ones associate coldness with the characteristic of not being recent, a lack of passion or enthusiasm and, surprisingly, with mental pleasantness. In both languages, the middle section of the temperature scale is conceptually linked to a low intensity.

If we generalise the source domain in all the identified metaphors so that all the alternative adjectives listed within a pattern are subsumed under the label for the corresponding section of the temperature scale (+warm, -warm or  $\pm$ warm), it can be said that there have been established fourteen conceptual metaphors in total. Nine of them are common for the two languages, which indicates that there is a significant similarity between English and Serbian regarding conceptualisation of abstract notions using temperature as the source domain. This similarity is especially prominent in the cases in which the given conceptualisation starts from +warm section of the scale. However, there is a wider range of abstract notions understood with the help of the domain of temperature in English in comparison with Serbian. The identified similarities between the two languages support the observation that universality is a characteristic of certain metaphors, particularly those based on universal human experience (Kövecses 2005: 63-64), such as bodily experience related to different temperature degrees. Most of the metaphors common for the two languages are related to the domain of emotions. Kövecses (2003: 161-162) notices a certain degree of universality in conceptualisation of emotions as well, finding its roots in universality of our physiological reactions to emotional states.

The conceptual link between the domain of temperature and the one of emotions is significantly productive in both English and Serbian so that several specific metaphoric patterns reflecting this link have been established in the analysis. The observation regarding the productivity of the given link is not surprising since, as it has already been mentioned in the paper, cognitive linguistic literature recognises

temperature as a significant source domain in metaphoric conceptualisations of emotions. Finally, conceptual metaphor is very significant for the study of emotions since it can contribute to their understanding and characterisation, which can be used in other fields dealing with this domain, such as psychology, anthropology, etc. (Soriano 2015).

It has been noticed that speakers of both English and Serbian associate their bodily experience of a certain degree of warmth with specific emotions, affection and passion. On the other hand, speakers of these languages associatively link their bodily experience of coldness with situations in which affection and passion are suppressed, not shown or not expressed. Therefore, there have been established two pairs of directly opposite metaphoric patterns in English and one in Serbian: *PASSIONATE IS HOT/HEATED/SIZZLING* and *NOT PASSIONATE IS COOL/COLD/FRIGID*, *AFFECTIONATE IS WARM* and *NOT AFFECTIONATE IS COLD/CHILLY/FROSTY/FRIGID*; *SRDAČAN, PRISAN JE TOPAO/VRUĆ* and *NESRDAČAN, NEPRISAN JE STUDEN/HLADAN*. Each of the pairs contain patterns which have directly opposite source domains involving points on the opposite sections of the temperature scale, as well as directly opposite target domains referring to the presence of certain emotions, on the one hand, and their absence, on the other.

In addition to the aforementioned ones, another pair of directly opposite metaphoric patterns has been revealed, which is characteristic only of English. Namely, warmth is used as the source domain for understanding the characteristic of being recent while coldness is connected to the opposite characteristic, as can be seen in the patterns *RECENT IS WARM/HOT* and *NOT RECENT IS COLD*.

Finally, it can be claimed that the number of identified pairs of opposite metaphoric patterns is quite small in both languages in question (three in English and one in Serbian). Hence, cases in which the conceptualisation of an abstract notion relying on a certain degree of warmth as the source domain triggers off the conceptualisation of the opposite abstract notion starting from a certain degree of coldness and vice versa are quite rare in the two languages.

Summarising the findings of this research, it can be concluded that an analysis of conceptual metaphors as the motivating force in sense derivation is certainly significant for deeper understanding of polysemy in the cognitive linguistic context. For instance, the results of this research can be particularly helpful for learners of English and Serbian as second or foreign languages in understanding polysemy of temperature adjectives and memorising their metaphoric meanings. These learners can gain insight into derivational paths of the given metaphoric meanings and their relatedness to literal ones within a semantic structure. The same insight is valuable

for lexicographic practice in terms of formulating more efficient and transparent dictionary definitions of metaphoric senses. Focusing more on temperature as a domain related to our bodily experience used in conceptualisations of various abstract notions in different languages, it becomes clear that an analysis such as the one presented in this paper can be a valuable source for studies in the field of psychology, philosophy or culture, especially those investigating the role of the human body and its sensations in creating meaning. Conclusions reached in this paper regarding the comparison of English and Serbian in terms of the aforementioned conceptualisations contribute to the study of universality and variation of conceptual metaphors, still regarded as only the potential features of this cognitive mechanism. Hence, this issue needs consistent and systematic input from analyses of conceptual metaphors including those relying on the domain of temperature in various languages. Taking into account universality of human bodily experience and its significant potential as a source domain in conceptualisations of abstract notions and further examination of similarities and differences between English and Serbian in the context of universality and variation of conceptual metaphors, future research should be directed towards investigating metaphorical meanings of adjectives denoting other physical properties of objects perceived through our sense of touch in the two languages. This will provide a more thorough and reliable, though still not complete, picture of the role of human body in conceptualisations in English and Serbian as well as the extent to which these languages are similar in this respect.

## Sources

1. *Collins English Dictionary*. Accessed January 16, 2022 <http://www.collinsdictionary.com/dictionary/english>.
2. Ćosić, Pavle (2008), *Rečnik sinonima*, Beograd: Kornet.
3. Gilmour, Lorna (Ed.) (2004), *The Collins Thesaurus: the Ultimate Wordfinder*. 2<sup>nd</sup> edition, Glasgow: HarperCollins.
4. Hanks, Patrick (Ed.) (2000), *The New Oxford Thesaurus of English*, Oxford: Oxford University Press.
5. Lea, Diana (Ed.) (2008), *Oxford Learner's Thesaurus: a Dictionary of Synonyms*, Oxford: Oxford University Press.
6. *Merriam-Webster Collegiate Dictionary*. Accessed January 16, 2022 <http://www.merriam-webster.com/>.
7. Nikolić, Miroslav (ur.) (2011), *Rečnik srpskoga jezika*, Novi Sad: Matica srpska.
8. *Oxford Dictionary of English*. Accessed January 16, 2022 <https://www.lexico.com/>.

9. Stevanović, Mihailo, Svetozar Marković, Svetozar Matić i Mitar Pešikan (ur.) (1967–1976), *Rečnik srpskohrvatskoga književnog jezika I–VI*, Novi Sad, Zagreb: Matica srpska, Matica hrvatska.

## References

1. Bergström, Annika (2010), *Temperatur i språk och tanke. En jämförande semantisk studie av svenska temperaturadjektiv*. Unpublished doctoral thesis, University of Gothenburg, Faculty of Arts, Accessed January 26, 2022 on Temperatur i språk och tanke. En jämförande semantisk studie av svenska temperaturadjektiv (gu.se)
2. Bartsch, Renate (2003), “Generating Polysemy: Metaphor and Metonymy”, In: Rene Dirven and Ralf Pörings (eds.), *Metaphor and Metonymy in Comparison and Contrast*, Mouton de Gruyter, Berlin, New York, 49–74.
3. Croft, William and D. Alan Cruse (2004), *Cognitive Linguistics*, Cambridge: Cambridge University Press.
4. Cruse, D. Alan (1991), *Lexical Semantics*, Cambridge: Cambridge University Press.
5. Cuyckens, Hubert and Britta E. Zawada (eds.), (2001), *Polysemy in Cognitive Linguistics*. Amsterdam/Philadelphia: John Benjamins Publishing Company.
6. Deignan, Alice (1999), “Metaphorical Polysemy and Paradigmatic Relations: A Corpus Study”, *Word*, Routledge, Abingdon, England, 50, 3, 319–338, Accessed January 26, 2022 <https://doi.org/10.1080/00437956.1999.11432491>
7. Dragićević, Rajna (2007), *Leksikologija srpskog jezika*, Beograd: Zavod za udžbenike.
8. Evans, Vyvyan and Melanie Green (2006), *Cognitive Linguistics. An Introduction*, Edinburgh: Edinburgh University Press.
9. Filipović Kovačević, Sonja (2021), *Pojmovna metafora i metonimija u teoriji i praksi*, Novi Sad: Filozofski fakultet, Univerzitet u Novom Sadu.
10. Geeraerts, Dirk (2010), *Theories of Lexical Semantics*, Oxford: Oxford University Press.
11. Geeraerts, Dirk and Stefan Grondelaers (1995), “Looking Back at Anger: Cultural Traditions and Metaphorical Patterns”, In: John R. Taylor and Robert E. MacLaury (eds.), *Language and the Cognitive Construal of the World*, Mouton de Gruyter, Berlin, 153–179.
12. Gibbs, Raymond (2003), “Embodied Experience and Linguistic Meaning”, *Brain and Language*, Elsevier, Amsterdam, 84, 1–15.
13. Gibbs, Raymond, Paula Lenz Costa Lima and Edson Francozo (2004), “Metaphor is Grounded in Embodied Experience”, *Journal of Pragmatics*, Elsevier, Amsterdam, 36, 1189–1210.
14. Grady, Joseph. 1997. *Foundations of Meaning: Primary Metaphors and Primary Scenes*. Ph.D. dissertation, University of California, Berkeley, Accessed January 26, 2022 <https://escholarship.org/uc/item/3g9427m2>
15. Halas Popović, Ana (2017a), *Uvod u leksičku polisemiju*, Novi Sad: Filozofski fakultet.



Keep a Cool Head About This Hot Issue – *The Analysis of Metaphoric Senses in The Semantic Structure of Adjectives from The Domain of Temperature in English and Serbian*

16. Halas Popović, Ana (2017b), “Metaforička značenja engleskog prideva *hard* i srpskog prideva *tvrd* – kognitivnolingvistička analiza”, *Godišnjak Filozofskog fakulteta u Novom Sadu*, Filozofski fakultet, Univerzitet u Novom Sadu, Novi Sad, XLII, 1, 99–115.
17. Halupka-Rešetar, Sabina and Biljana Radić-Bojanić (2015), “Polysemy of the Lexemes *Home* in English and *dom* in Serbian”, *Nasleđe*, Filološko-umetnički fakultet, Univerzitet u Kragujevcu, Kragujevac, 32, 51–60.
18. Johnson, Mark (1987), *The Body in the Mind: the Bodily Basis of Meaning, Imagination, and Reason*, Chicago: University of Chicago Press.
19. Klikovac, Duška (2004), *Metafore u mišljenju i jeziku*, Beograd: Biblioteka XX vek.
20. Kövecses, Zoltán (1990), *Emotion Concepts*, Dordrecht: Springer.
21. Kövecses, Zoltán (2003), *Metaphor and Emotion: Language, Culture, and Body in Human Feeling*, Cambridge: Cambridge University Press.
22. Kövecses, Zoltán (2005), *Metaphor in Culture. Universality and Variation*, Cambridge: Cambridge University Press.
23. Kövecses, Zoltán (2010), *Metaphor. A Practical Introduction*. 2nd edition, Oxford: Oxford University Press.
24. Lakoff, George and Mark Johnson (1980), *Metaphors We Live By*, Chicago: University of Chicago Press.
25. Lakoff, George (1987), *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*, Chicago: University of Chicago Press.
26. Lakoff, George and Zoltán Kövecses (1987), “The Cognitive Model of Anger Inherent in American English”, In: Dorothy Holland and Naomi Quinn (eds.), *Cultural Models in Language and Thought*, Cambridge University Press, Cambridge, 195–221.
27. Lorenzetti, Maria Ivana (2009), “‘That girl is hot, her dress is so cool, and I’m just chilling out now’: Emergent Metaphorical Usages of Temperature Terms in English and Italian”, Paper presented at the *Corpus-Based Approaches to Figurative Language Colloquium*, Liverpool, UK, July 2009, Accessed January 26, 2022 <http://www.cs.bham.ac.uk/~amw/pdfVersions/Lorenzetti.pdf>
28. Lewandowska-Tomaszczyk, Barbara (2007), “Polysemy, prototypes, and radial categories”, In: Dirk Geeraerts and Hubert Cuyckens (eds.), *The Oxford Handbook of Cognitive Linguistics*, Oxford University Press, Oxford, 139–169.
29. Nerlich, Brigitte, Zazie Todd, Vimala Herman and David D. Clarke (eds.), (2003), *Polysemy. Flexible Patterns of Meaning in Mind and Language*. Berlin/New York: Mouton de Gruyter.
30. Radić-Bojanić, Biljana (2020), “Metaforičnost leksema iz leksičkog polja *family* na engleskom i *porodica* na srpskom jeziku”, *Filolog – časopis za jezik, književnost i kulturu*, Filološki fakultet, Banja Luka, 22, 52–67.
31. Radovanović, Milorad (2015), *Fazi lingvistika*, Sremski Karlovci, Novi Sad: Izdavačka knjižarnica Zorana Stojanovića.

32. Rasulić, Katarina (2015), "What's Hot and What's Not in English and Serbian: A contrastive View on the Polysemy of Temperature Adjectives", In: Maria Koptjevskaja-Tamm (Ed.), *The Linguistics of Temperature*, John Benjamins Publishing Company, Amsterdam/Philadelphia, 254–299.
33. Stanojević, Mateusz-Milan (2013), *Konceptualna metafora. Temeljni pojmovi, teorijski pristupi i metode*, Zagreb: Srednja Europa.
34. Soriano, Christina. (2015). "Emotion and Conceptual Metaphor", In: Helena Flam and Jochen Kleres (eds.), *Methods of Exploring Emotions*, Routledge, New York & London, 206–214.
35. Ungerer, Friedrich and Hans-Jörg Schmid (2006), *An Introduction to Cognitive Linguistics*. Second edition, Harlow: Longman.
36. Valiulienė, Edita (2015), "Temperature Metaphors in Lithuanian and English: Contrastive Analysis", *Verbum*, Vilnius University Press, Vilnius, 6, 207–219.

Ana V. Halas Popović  
Univerzitet u Novom Sadu  
Filozofski fakultet  
Odsek za anglistiku

**BITI HLADNE GLAVE U VEZI SA OVIM GORUĆIM  
PROBLEMOM – ANALIZA METAFORIČKIH ZNAČENJA  
U SEMANTIČKOJ STRUKTURI PRIDEVA IZ DOMENA  
TEMPERATURE U ENGLESKOM I SRPSKOM**

*Rezime*

Ovaj rad predstavlja analizu derivacije metaforičkih značenja prideva iz engleskog i srpskog jezika koji primarno označavaju izvestan stepen na skali temperature kao fizičkog svojstva predmeta. Cilj analize jeste identifikovanje pojmovnih metafora koje su motivisale derivaciju ovih značenja i poređenje engleskog i srpskog jezika u pogledu konceptualizacija apstraktnih pojmova u kojima je temperatura izvorni domen. Takođe, analiza teži otkrivanju toga da li konceptualizacija apstraktnog pojma u kojoj je izvestan stepen toplote izvorni domen aktivira konceptualizaciju suprotnog apstraktnog pojma koja polazi od izvesnog stepena hladnoće i obrnuto, odnosno utvrđivanju eventualnih parova direktno suprotnih pojmovnih metafora. Analiza je pokazala da postoji značajna sličnost između engleskog i srpskog u pogledu konceptualizacije apstraktnih pojmova pomoću temperature kao izvornog domena. Ipak, u engleskom je utvrđen širi dijapazon različitih apstraktnih pojmova koji se konceptualizuju na ovaj način. U obama jezicima, po svojoj produktivnosti, izdvaja se asocijativna veza između domena temperature i

Keep a Cool Head About This Hot Issue – *The Analysis of Metaphoric Senses in The Semantic Structure of Adjectives from The Domain of Temperature in English and Serbian*

domena emocija, te je u analizi utvrđeno nekoliko metaforičkih obrazaca koji odslikavaju ovu povezanost, a na osnovu datih metafora izveden je značajan broj značenja u semantičkim strukturama analiziranih prideva iz oba jezika. Identifikovani su retki slučajevi u kojima su izvođenja metaforičkih značenja prideva koji označavaju suprotne delove temperaturne skale međusobno povezana u smislu da su motivisana direktno suprotnim metaforičkim obrascima.

► *Ključne reči*: pojmovna metafora, konceptualizacija, temperatura, metaforičko značenje, engleski, srpski.

Preuzeto: 23. 5. 2022.  
Korekcije: 12. 11. 2022.  
Prihvaćeno: 16. 11. 2022.