Cracking the colour code: A case study of red

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For both physiological and psychological reasons the colour *red* is one of the most salient and semantically productive basic colours for human beings. Due to its stability over time, it has received a prominent status among speakers of different language communities. The present paper demonstrates a parallel semasiological analysis of linguistic expressions containing the colour term *red* in English and Croatian. Contrastive analysis of online corpora seeks to give insights into contextual samples and numerous meaning extensions in both languages under study. In line with Rosch's prototype theory (1973, 1975) and Lakoff's model of radial networks (1987), the extensions of the polysemous category RED are presented as networks of related senses emanating from the prototypical core. Available empirical data in the colour domain clearly suggest that there are both universal and language/culture-specific facets of colour terms. The aim of the paper is therefore twofold. Firstly, it has been argued that fairly universal natural prototypes, such as blood and fire, motivate the conceptualizations underlying non-central readings in both languages (Wierzbicka 1990; Verosub 1994). Secondly, the analysis attempts to confirm the crucial role of two cognitive mechanisms – metaphor and metonymy – in such a lexical creation. Special attention is paid to identification of metonymic types as construal of human thought, where we expect to find some cross-linguistic commonalities. The entrenchment of senses, on the other hand, might point to language/culture-specific variations. Therefore, it has been argued that the underlying cognitive mechanisms can only partly account for the wealth of the figurative expressions across languages. In order to describe how conventional figurative units really function, we suggest a rather dynamic meaning construal involving both knowledge of the language and

relevant cultural factors.

1. Introduction

The story of colours takes us back to the beginning of time. Any investigation into the colour-term system so far has taken into consideration a wide-range of disciplines. This case study is intended to be a small contribution to the previous colour term research and an attempt for a more comprehensive overview of the Croatian data, since very few things have been left uncovered in English language.

The present paper demonstrates a parallel semasiological analysis of collocational units containing the colour term *red* in English and Croatian. Due to the space limitation, the basic category RED is chosen for its complexity, saliency and productive nature in both languages under study. Being a fertile testing ground for numerous meaning extensions, it will be further analysed and compared in greater detail within the scope of two disciplines – phraseology and cognitive linguistics.

1.1. *The spread of red*

All the attempts to define colour have resulted in uncompleted versatile definitions that still fail at giving the clear picture of the phenomenon. The artists treat it as an aesthetic notion of contrast in dramatic expression, while physicists as the phenomenon of light. According to Berlin and Kay's (1969) basic colour term criteria, English and Croatian have a complete inventory of eleven colour terms including: *white, black, red, green, yellow, blue, brown, purple, pink, orange*, and *grey*. Red is supposedly the first colour perceived by Man. Of all the colours in the visible spectrum red has the lowest frequency and the longest wavelength of light discernible by human eyes.

The basic colour category RED occupies an important place in the development of colour vocabulary, whether in the evolution of colour perception (Berlin, Kay 1969; Boynton 1975; Thompson 1995; Jameson et al. 1997), infant language learning (Pitchford 2011), or the history of particular languages (Niemeier 1998; Uusküla 2011).

RED has a very long and powerful historical background, from by far the largest number of meaning extensions over the years, to the highest increase in lexis

nowadays. Due to its stability over time, it has received a prominent status among speakers of different language communities. It is not surprising that it has easily found its way into the language in the form of numerous and very colourful collocational units *(red face, red herring, red card, red tape, in the red, to catch somebody red-handed, to paint the town red, like a red rag to a bull, …)*. Along with the category WHITE, it demonstrates the largest number of meaning subdivisions. *Vermillion, maroon, burgundy, ruby, rouge, cinnabar, rust, crimson, carmine, scarlet* – to name just a few – are shades at the subordinate level of the category that enable concepts such as 'typical exemplars of redness' and 'degrees of redness' to be explored. Although we can distinguish millions of colours visually, we can name only few. The linguistic designation of colour is accompanied by categorisation. Underspecified colour adjectives are good enough for everyday communication and functional requirements of language, when there is no need for a particular reference. What we rely on is generally shared knowledge structure and linguistic designation of colours. However, naming a specific shade of colour for laypeople is difficult, almost impossible, as long as this shade is not present as the object of reference for both interlocutors.

Fundamentally, one could claim, like some linguists do (Steinvall 2002), that colours do not have meaning. Apparently, it is their usage that gives them meaning. Others might say that colour red communicates a host of meanings – from declaring our political beliefs (*red peril, Red Army*) to warning us of danger (*red alert, red flag*). Ambiguity of *red* in nature (perceived as both a warning sign and a welcoming signal in poisonous berries) is universally reflected in everyday life (as a sign of both vitality and aggression). The following research into the polysemy of *red* will help place the category in its cultural context and explain its longstanding salience for speakers of both languages.

1.2. *Problem statement*

On the basis of our research and the data collected from the two online corpora (the British National Corpus – BNC and the Croatian National Corpus – HNK), the following questions are posed:

1. Is the basic colour red similarly productive in the phraseology of both English and Croatian and does the entrenchment of lexis point to possible anomalies?

2. What will the detailed case study of RED reveal about the possible cross-

linguistic commonalities or language/culture-specific variations?

3. Can fairly universal natural prototypes, such as *blood* and *fire*, account for the conceptualizations underlying non-central readings in both languages?

4. What linguistic or conceptual processes can be identified as participating in the extension of the colour term from the prototype?

1.3. *Research methods*

A case study is a detailed semasiological analysis of the two colour terms – *red* and *crven* (mostly, though not exclusively, in their Modifier–Head relation) – based on 3,000 corpus citations (1,500 for each term). Contrastive analysis of online corpora seeks to give insights into contextual samples and numerous meaning extensions. An extensive investigation describes the ways in which colour term *red* may be used to refer to nuances outside their normal area of designation and to attributes outside the colour domain.

In line with Rosch's prototype theory (1973, 1975), Lakoff's model of radial networks (1987) and Langacker's usage-based model (2000), the extensions of the polysemous category RED are presented as networks of related senses emanating from the prototypical core. The entrenchment, on the other hand, appears to be affected by specific environmental and cultural factors. Following Verosub's (2004) definition of RED and Gieroń-Czepczor's classification of the cognitive category, we introduce a few adaptations concerning the subdivisions of the retrieved corpus data.

2. Analysis and discussion

2.1. *Prototypes for* red *and* crven

One of the most well-known assumptions about colour terms is that they name categories organised around a prototypical core. Moreover, both prototype theory (Rosch 1973) and reference point theory (Rosch 1975) were brought into being through studies of colour terminology. For the purpose of our case study, we shall embrace at least two different prototypes involved in the conceptualisation of colour – *blood* and *fire*.

Despite the enormous cultural and experiential diversity of the world, the morphology and functioning of the human body seems to be shared by all the humanity. Out of the vast array of symbolic meanings of *red* (including 'life', 'light',

'passion', 'love', 'radiance', 'fire', 'aggression', 'power'), blood seems to be the most productive motivation for numerous linguistic expressions in different languages. Entrenched associations between colour terms and blood have led to the establishment of various collocational units such as English comparative construction *as red as blood*, compound *blood red*, or Croatian *crven kao krv*, *boje krvi.* Due to its experiential salience and red colour, it seems plausible to consider blood to be one of the best candidates for the prototype of the category RED.

In her earlier work Wierzbicka (1980: 43) proposed the following definition of the conceptualisation of *red* via the concept of 'blood': "red – colour thought of as the colour of blood". Later on, under the influence of new research findings, she rephrased her definition and included yet another prototypical exemplar – *fire* – in the final formula.

> "*X* is red. =
> when one sees things like *X* one can think of fire
> when one sees things like *X* one can think of blood." (1996: 316)

"The fact that people tend to perceive the colour of fire as orange or yellow rather than red does not undermine the conceptual link between fire and redness" Wierzbicka 1996: 316). Moreover, she offers at least two good reasons in favour of fire being a more obvious prototype of red:

1) there is no invariable environmental model for *red*;[1]

2) although there is the invariable experiential model of blood, for most human beings it is not nearly as visually salient, of culturally, existentially important as fire.

Additional support in favour of the above reasoning is the existence of set phrases in both English (*red-hot, fiery red, red coals*) and Croatian (*vatreno* 'fiery red', *boje krvi* 'blood-red', *bakreno* 'copper-red').

In line with the previously mentioned linguistic research (Rosch 1973, 1975), we assume that the conceptualization of red in both English and Croatian rests upon two prototypical referents: blood and fire, which also coincides with the focal colour red, to which a human eye is most sensitive.

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[1] Unlike the obvious and analogues points of reference for *yellow* – the sun, for *blue* – the sky or the sea, and for *green* – the vegetation.

In order to verify our assumption and establish the natural prototypes, we additionally searched for the relevant *dictionary definitions*, *etymological* and *corpus data*.

Extracted definitions, collected from ten English and two Croatian dictionaries, confirm the dominance of blood as a prototypical natural referent over the occasional scientific wavelength association or some immediate aspect of our surroundings.

Etymology of the terms *red* and *crven* point out to different meaning origins:

1) terms 'red', 'rouge', 'rot', or 'ross' derive from the Sanskrit word *rudhirā* meaning 'blood'

2) terms 'crven', 'czerwony', 'čerweny', 'čerwoni' meant "dyed with the worm called *crv*, *kermes"*

The final confirmation of *blood* and *fire* as prime exemplars of the category RED is searched among the comparative constructions *as red as* and *crven kao/poput*, respectively. Thus, the primary prototype for both languages is *blood*. The secondary prototype, *fire*, seemingly rare in number, associates colour red with light and heat in the interpretation of symbolic readings such as love, passion, aggression, violence. All the other one time occurrences point to greater variations in the reference-point status of natural prototypes.

2.2. *Category extension by metonymy and metaphor*

The present section attempts to provide additional evidence in support of the by now well accepted thesis that metaphor and metonymy are crucial mechanisms of lexical creation (cf. Kövecses and Radden 1998).

The corpus data demonstrate an extensive investigation into the semantic realizations of the underlying conceptual metonymies and metaphors and the entrenchment of attested readings based of frequency counts. Furthermore, they offer a greater insight into the contextual use of collocational units ranging in a continuum from metonymy to metaphor. We shall take up Langacker's (2000) usage based model and Niemeier's (1998) and Barcelona's (2000) assumption of metonymy being a "conceptual prerequisite for metaphor" in our attempt to examine the complexity of conceptual category RED as reflected in language. Metaphorical mappings will not be excluded, but are only of the secondary nature. We begin our quantitative analysis with the first of the two chains of conceptualization, i.e. *blood.*

2.2.1. *BLOOD*

Very few instantiations of *red* as a premodifier of *blood* are found in the corpora. It seems redundant to use an adjectival premodifier with a noun such as *blood* which is inherently *red* in colour. Although the noun itself implies the prototypical colour term, the reasons for such a usage might be twofold: as an intensifier, to highlight the importance of blood as a life-giving, indispensable and precious life-substance; as a poetic or suggestive device, in addition to referential function in commercials or works of fiction.

All the other instantiations of *red* refer to numerous *Red Cross* examples in both languages where, according to the phrase origin, *red* metonymically stands for *blood* shed by wounded soldiers on the battlefield.[2]

According to the occurrence of *red* and *crven* in the corpora and their respective readings (see Figure 1.), the most entrenched senses related to *blood* emanate from the **body parts** or are associated with **aggression, violence** or **political beliefs**. Motivation for some of the meaning extensions will be analysed and exemplified in the following sections.

BODY PARTS - FACE/SKIN/EYES. Similar number of attested citations – BNC (15), HNK (9) – in both corpora reveals that REDNESS of the body parts – mostly face and hands, i.e. skin – is a result of exposure to extensive *heat* (1), *cold* (2), *sunlight*. Thus, *red* metonymically stands for *blood* vessels (easily visible on the skin surface) susceptible to change due to the outer (weather) or inner conditions (swollen substances) (3). It overlaps with additional metaphoric extension CHANGE OF COLOUR IS A CHANGE OF STATE.

(1) *Hot and **red head** and **face**, cold extremities*.

(2) *… od zime **crveni nosić**.*
       'little nose red with cold'

(3) *… a sense of suffocation. They choke and gag and **get red in the face***.

The BNC corpus attests 29, while Croatian only 5 citations of conceptualisation of intense feelings such as *anger, rage, hate*. Fairly familiar concept ANGER is often exploited in cartoons where "bottled up" substance/strong emotion is rising up within the character's body (i.e. head) and is often accompanied by some other physical manifestations like possible steam coming out of the character's ears and eventual explosion (4).

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[2] The battle of Solferino and San Martino in 1859, northern Italy.

(4) *Her **face** was full and **red** now, almost <u>bursting</u>.*

In line with the bulk of recent cognitive developments, this paper gives preference to metonymy as a source of conceptual motivation. Barcelona (2000: 31) thus claims that "every metaphorical mapping presupposes a conceptually prior metonymic mapping". All the examples below are consistent with the PHYSIOLOGICAL EFFECTS OF AN EMOTION FOR EMOTION/EFFECT FOR CAUSE metonymic mapping. These types of metonymy seem extremely productive in everyday life, partly because they are associated with our understanding of human body symptoms and feelings.

Aside from a fairly universal nature of the concept ANGER, the linguistic evidence point to much versatile lexicalisations of red in English than in Croatian. It definitely affects physical symptoms of the face/eyes area in both languages, but unlike Croatian, English verbal evidence point to rather subtler nuances of red, ranging from pink, to red, even purple on the SCALE IMAGE SCHEMA. In some lexical expressions the additional reading *EXTREME* is triggered by the colour hue, while in others (5), the intensity of emotions is explicitly stated within the context. Lexical expressions *red in the face* point to yet another image schema, that of the body as a CONTAINER. The substance *red* as the content part of the container may equally stand for *blood* or *fire.*

(5) *… **as red as it was physically possible for it to go red**, and a surge of <u>hate</u> and <u>rage</u> and <u>fear</u> swept through …*

Similarly, English phrase *to see red* (6) exhibits former generic PASSIONS ARE FLUIDS metaphor or more specific ANGER IS THE HEAT OF A FLUID IN A CONTAINER metaphor, whereby *red* metonymically stands for *blood,* while the whole phrase is metaphorical cross-domain mapping between the domain of VISUAL PERCEPTION to the domain of EMOTION. When passions such as anger, love, hatred etc. arise, they are perceived as boiling fluids going around the arteries. Other expressions supporting the same conceptual metaphors are: *her heart bursts with love, he was boiling with anger, the lid flew off*, and many others.

(6) *The wife of a senior council official **saw red** when she spotted her husband's car outside the home …*

Linguistic evidence *red eyes* (7) are yet another colour-body part combination, a meaning of which is not obtained compositionally. Therefore, it prompts a well-known productive metonymic reading RED EYES FOR ANGER due to the physiological effects of anger resulting from an increase of blood pressure and subsequent

dilatation of the eyeball vessels which make the eyes look redder than under normal circumstances.

(7) *He remembered those mad, **red eyes** which had glared at him earlier that day.*

Blushing as an involuntary result of excitement, embarrassment, shame and fatigue represents very productive EFFECT FOR CAUSE metonymy, very similar in the interpretation to the above *red eyes* (7) in the sense of physiological manifestations (redder blood veins under the skin surface and rise in temperature as a result of higher blood pressure).

While blushing might be considered a physiological manifestation of excitement and erotic love, there is no evidence supporting Kövecses's (2003) BLUSHING STANDS FOR LOVE metonymy in any of the corpora under study.

Frequently attested *red eyes* in both corpora deserve our closer attention. Apart from the *anger* interpretation exemplified in (7), there are several other interpretations of the same collocational unit.

As visually prominent part of the body, red eyes could be a sign of *disease* (5 citations in the BNC and 4 in the HNK). Furthermore, they could be a sign of *weeping*, *crying*, *sleeplessness* or *fatigue*. Metonymic motivation in both languages is easily recognizable due to the fact that redness of the eyes is the most prominent bodily symptom of fatigue. Consequently, phrase like a *red eye flight* metonymically refers to a night flight, which crosses several time-zones. Deprivation of sleep is one of the most obvious causes for having red eyes. As a salient physical feature of a person who travels on such a flight, it becomes an eligible subdomain to stand for the whole situation (PART FOR WHOLE). The last of the possible meanings we are about to analyse is retrieved from the BNC as a single citation with a slightly different interpretation. This time, the source domain stands for an effect of photographs in which people's eyes appear somewhat redder than usual (EFFECT FOR CAUSE). The eyes (as the most salient property of the photograph) are red due to the reflection of the camera flash. No such examples have been extracted from the HNK corpus.

AGGRESSION, VIOLENCE, POLITICAL BELIEFS. Many researchers (Niemeier 1998; Wierzbicka 1990) into colour semantics agree in their identification of the universal features of blood and fire as a prototype of the category RED. Since the dawn of time symbolism of red is associated with violence and aggression. The duality of blood as a source of life and cause of death is evidently present in numerous meaning extensions. Examples (8–9) account for the EFFECT FOR CAUSE

metonymy, where the colour term itself evokes blood, while skin marks are direct consequence of the *violent behaviour*.

(8) … *meaning a punch on the face probably comes from the **red 'patch'** left on the skin by such a blow*.

(9) … *da je Wagner pritom zadobio ogrebotine i **crvene podljeve**, ...*
     *'… that Wagner ended up with some scratches and **red 'patches'**, …'*

The other famous idiom *to paint the town red* requires a rather dynamic approach to the meaning interpretation. Etymological origin of wildness and violence and possible blood reference is nowadays completely lost. Some origins[3] date in 1837, when apparently a group of friends ran riot in the Leicestershire town, painting several buildings red. Once a metonymic motivation of a colour term is lost, it contributes little to the proper interpretation of the idiom. What used to be marked as violent night out in the town is now restricted to rather innocent and simple good time.

Red has often been perceived as the colour of energy, power, fire, blood. Consequently the ideological power of red is often reflected in language to denote either a *political aspiration*, *revolutionary turbulence* of *left-wing tendency*. Croatian linguistic instantiations (44) offer a full range of metonymic forms in their figurative readings, whereas there is only one retrieved BNC citation signifying radical left-wing politics. In politics, red is used metonymically to stand for socialist or communist political beliefs, symbolized by the colour red as used in red flags. *Red politics* stands metonymically for a whole range of political ideas and institutions like *red unions, red parties, red government, red newspaper*. Extremely high number of occurrences in both corpora reflects the influential political circumstances of the past. In example (10) the colour term metonymically stands for a political belief (COLOUR FOR IDEOLOGY). However, the term Army does not refer to all the members, but only to some of its soldiers (WHOLE FOR PART/CATEGORY FOR ITS MEMBERS).

(10) *George went across to introduce himself to **the Red Army**, …*

Well entrenched and complex attribute structure of type modifications may lead to a metonymic extension THE SALIENT ATTRIBUTE FOR THE WHOLE CATEGORY, as is evidenced but unattested in corpora, by a phrase such as *red peril*[4] or *red menace*.

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[3] Available online at http://www.phrases.org.uk/meanings/paint-the-town-red.html.

[4] The phrase is still being used but in reference to sport, especially football, where red cards are given for offences.

Here, *red* stands for people, i.e. the Soviet Union military during the Cold War period, and *peril* triggers an abstract attribute dangerous, threatening.

The same metonymic extension underlies the collective terms *the Reds* or *crveni*, as attested in example (11). Deadjectival nouns as such are usually associated with negative connotations or offensive language.

(11)   *… ogorčeni protivnici i mrzitelji pogrdno nazivati **'crvenima'**, 'komunjarama', 'prodanim dušama'.*
'*…bitter opponents and enemies would call them **'Reds'**, 'Commies', 'turncoats', …*'

An expression *to catch someone red-handed* is well entrenched and conventionalised. It is employed to refer to the act of catching someone in the act of doing something wrong or illegal. Thus, it is also a straightforward allusion to having blood on one's hands after committing a severe crime (back in the days, stabbing or murder might be classified as such). Red hands are highly prominent part of the situation and a source domain of the metonymy. Nowadays, the expression is metaphorically developed to account for all sorts of wrongdoing besides murder, and minor criminal acts, such as thefts, which do not include blood.

2.2.2. *FIRE*

According to Wierzbicka (1990: 315), "the common association of the colour red with fire is well attested from a wide variety of times and places". Being metaphorically considered as "a rich, warm colour", it is associated with culturally and existentially most important experiential model: fire. Even though the fire may be described as rather yellow or orange, it does not prevent the conceptualisation of fire and the colour term red. Since the term "macro-red" covers yellow, orange and red, in some cultures (Croatia, USA) the sun is perceived as yellow, while in others (China, Japan, Germany) as red.

A large number of hits in both corpora confirms a well-known fact that redness is prototypically associated with *lightning*, and thus, by extension, with *urgency*, *attention* and *danger*.

Red lights/letters and *crvene žarulje* 'red light bulbs' are figurative expressions signifying **attention** and **urgency**. Traditionally, a lamp with red glasses was used as a doctor's sign of a contagious house in order to prevent people from entering and getting ill. *Red light districts* in the sense of licensed brothels got their name due to a display of red lights back in the 19th century. Red lights thus signify **atten-**

tion.

To fully understand the phrase *red herring* (originally *to draw a red herring across the trail*), whose compositionality is very low indeed, we should check its etymological sources in the dictionaries. As will be proved, there is nothing special about the colour term red, aside from the fact that it is a poor representative of the colour (reddish-brown, having a slightly red gleam), far from the prototypical hue, that could contribute to the proper meaning. However, the explanation should be looked for in some of the aspects the fish was once used, namely dragged by fugitives across the trail in order to prevent dogs from following them. Thus, red cannot be regarded as having a figurative function in this expression. Rather, it is the whole phrase that produces the figurative meaning. Consequently, we may argue that the colour red metonymically stands for the colour of the smoked fish, and the whole nominal phrase for the object to follow. Further metaphorical motivation rise in the sense that such a false clue could be applied everywhere and nowadays it has evolved in a linguistic metaphor, where red herring stands for something that distracts from the true state of affairs. As attested in the corpora, the phrase is found in its nominal and premodifier construction. All the culturally motivated idioms, whose metonymic motivation of the colour term is somewhat lost, are very difficult to interpret. Fully equivalents in another language do not exist simply because they do not evoke the same etymological overload. The colour, for the same reason, is not lexicalised and the phrase ends up being translated by a completely different equivalent or paraphrase.

By far the largest number of hits in the HNK (263) and fairly large number in the BNC (37) points to a prominent conceptualisation of red as an indicator of ***limitations*** or ***danger***. Being the most conspicuous colour perceptually, red easily finds its way into various linguistic instantiations in two overlapping domains – DANGER and LIMITATION. It is therefore not surprising to find ourselves surrounded my numerous traffic signs, most of which are coloured red.

The 'limitation' reading of *red* can be successfully traced in the *red card* (164) term, which apparently, due to the nature of the corpus text or simply due to the national status of soccer, is retrieved in more than half of the total hits in the Croatian corpus. Although unattested, far more interesting from the point of analysis might be the figurative usage of the same phrase with the possible 'disapproval' reading.

Traces of material culture are to be found in the idiomatic expression *to be in the red*.[5] To be able to properly interpret the phrase, we need to evoke our knowledge of the accounting and banking transactions. Standard practice for accounting is to record positive numbers in black ink and negative numbers in red ink. The colour red was chosen for its prominent status among colours and as a clear contrast for black.

Alternative motivations for the idiom come from yet another etymological source. Namely, in medieval times the church, being the only centre of literacy and learning in the west, maintained meticulous accounting records. Ink was rare and expensive. When monasteries could not afford ink, domesticated animals were bled to provide a substitute in the dipping wells.

The expression entails metonymy within metaphor motivation, whereby the colour red stands for the colour of the ink or more explicitly blood and consequently is conceptualised as an undesirable, dangerous area, bounded space from which is difficult to escape. The usual verbal collocates in the attested examples (*fallen, plunge, slumped*) account for such a reading and offer additional metaphorical mapping LACK OF CONTROL IS DOWN (Kövecses 2002).

(12)   *A stock market probe was launched in September and the group's media business, including the prestigious Channel Nine, had* **<u>slumped</u> into the red**.

Traditionally, red ink is used to mark the holidays and special days in calendar, thus giving rise to metonymic conceptualisation of red in the sense of *'important'*. Metaphorical mappings take additional place from the domain of PUBLIC to the domain of PRIVATE, concerning the fact that it does not relate only to official holidays, but also to all the special occasions in someone's life.

Rolling out the red carpet of *having the red carpet treatment* is metonymic extension of the PART-WHOLE type (PART OF THE EVENT FOR THE WHOLE EVENT subtype). The ceremony itself often includes the red carpet, but at the same time it is not required and it can nowadays metaphorically refer to any ceremonial occasion, with or without one.

The reading of the idiom *red tape* might seem completely non-transparent for the speakers of Croatian. Since the original motivation (red tape is used in securing legal and other documents) is lost, we need to approach the idiom analysis dynami-

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[5] This idiom seemingly originates from the early 1900s, and there are plenty of newspapers from this time that use the phrase when referring to businesses functioning at a loss.

cally. Dirven and Verspoor (2004: 58) argue that the meaning inefficient bureaucratic procedure "derives metonymically and metaphorically from something most people have never seen, i.e. the pinkish red tape used to bind official documents". Thus, the meaning of the idiom is not arbitrary, but includes two types of mapping: metonymically red tape stands for the official documents or the inefficient procedure itself (INSTRUMENT FOR ACTION), while the same procedure is metaphorically mapped onto bureaucratic indolence.

The usual verbal collocates (13) explicitly show that red tape retains the properties of the real tape (*cut, tangled up*) and thus evokes metaphorical readings DIFFICULTIES ARE IMPEDIMENTS TO MOTION or DIFFICULTIES ARE UNDESIRABLE STATES.

(13)   *… only too well, that the system is **<u>tangled up</u>** in **red tape**, …*

The figurative meaning of the *red judge* (14) has to draw on cultural meanings (the domain of CLOTHING and the attribute of 'exclusivity', 'luxury', 'royalty') and cannot be derived from the inherent properties of the colour itself. The colour red is a metonymy for the red robe of the high court judges. Bearing in mind the high price of the red dye in the past, it's precious and luxurious quality[6] is somehow reflected in the status rank of the judicial system.

(14)   *… talijanski premijer. Ponovno se ljutio na **"crvene suce"** i na talijansko pravosuđe …*
       ' … Italian Prime Minister. Once more he got angry with the **"red judges"** and the Italian system of justice …'

Finally, given the prominent status of red, we may agree with Verosub (1994) in her metonymic definition of the colour term by saying that "ALL IMPORTANT THINGS ARE RED".

3. Conclusion

After collecting a corpus of 3,000 citations containing red and crven, mostly in their premodifying role, the analysis has been conducted in order to explore the conceptualisation of the complex category RED. Both semantically divergent 'literal' readings and the vast array of metaphorical and metonymic senses are shown.

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[6] Members of Varangian guard in Byzantium wore red clothes, they had special permission to do this. Usually the scarlet and red colours were restricted to Byzantine aristocracy. Children of Emperor were called scarletborns because they wore expensive reddish clothes. Reddish colour at clothes was mark of wealth, as red colour was expensive.

The starting point and the basic assumption of this paper is that the meaning of a linguistic unit is a category structured around a prototypical member. The prototype theory, cognitive linguistics and the theory of conceptual metaphor and metonymy have been used to prove the initial hypotheses concerning the prototypical structure of the category RED.

Since members of the categories have different status, some being better representatives than the others, it is to be assumed that all the non-central members of the category are related to the central ones on the basis of similarity. Although establishing universal prototypes of blood and fire for the category RED, different degrees of membership point to fuzzy boundaries. When it comes to colours, what perceptually in nature presents a continuum, we perceive as categories. The salient status of colour easily finds its way into the language. However, languages contain different number of colours and carve up the spectrum somewhat differently. We therefore argue that language is not a mere image of our reality. Our sensual experience is cognitively modified in our neural area and the final result is a combination of our neural responses and social and cultural constraints.

Available empirical data in the colour domain clearly suggest that there are both universal and language/culture-specific facets of colour terms. The colour term red is chosen for its prominent role and long-term prevalence in order to verify for the assumed hypotheses.

As for the question posed in section 1.2., the extensive quantitative and qualitative corpora analysis offers the following answers. Both English and Croatian exhibit 11 basic colour terms whose frequency of occurrence is in line with Berlin and Kay's evolutionary colour sequence. Relatively low frequency of colour words in Croatian in comparison to English arises from the uneven size of the corpora, as well as from the nature of the texts involved. The basic colour *red* is similarly productive in the phraseology of both languages, with slightly wider range of hues and larger number of figurative readings retrieved from the English corpus. The radial network of the possible meanings of *red* and *crven* point to a striking similarity between the conceptual structures and support the universal character of colour prototypes based on human experience. Due to the geographical proximity of the speakers, there are no substantial anomalies in the entrenchment of the senses. This is, without a doubt, in line with Gieroń-Czepczor's extensive research findings of the category RED in yet another Slavic language – Polish. Minor differences in the subclassification of related senses and the salience of their readings are mostly assigned to the cultural specificities of each language or the nature of the texts in the corpus. The fruitful interplay of two cognitive processes – metonymy (especially
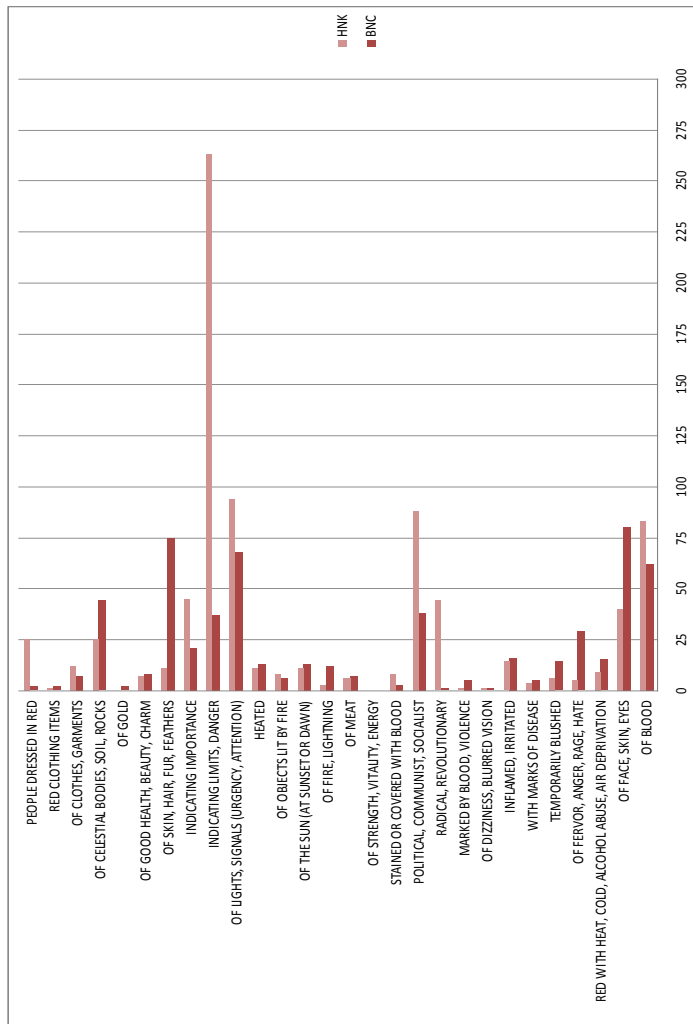
Figure 1. The occurrence of *red* and *crven* in respective readings in corpus samples of 1,500 citations.

PART-WHOLE and PART-PART subtype) and metaphor – accounts for the majority of various meaning extensions. Whereas the former type seems to be very productive, the latter, if culturally-determined and thus motivationally altered, could be considered homonymous rather than polysemous. This is the reason why many of the English expressions lack counterparts in Croatian and are therefore considered language/culture specific. Moreover, there are same tendencies in the metonymic motivation (EFFECT FOR CAUSE) for the linguistic units related to universal bodily experience which consequently leads to a greater overlap between languages. Fi-

nally, it has been argued that the underlying cognitive mechanisms can only partly account for the wealth of the figurative expressions across languages. In order to describe how conventional figurative units really function, we suggest a rather dynamic meaning construal involving both knowledge of the language and relevant cultural factors.

Additional illustration of the case study quantitative results is to be found in Figure 1., whereas radial networks of meaning extensions in Figure 2. and Figure 3.
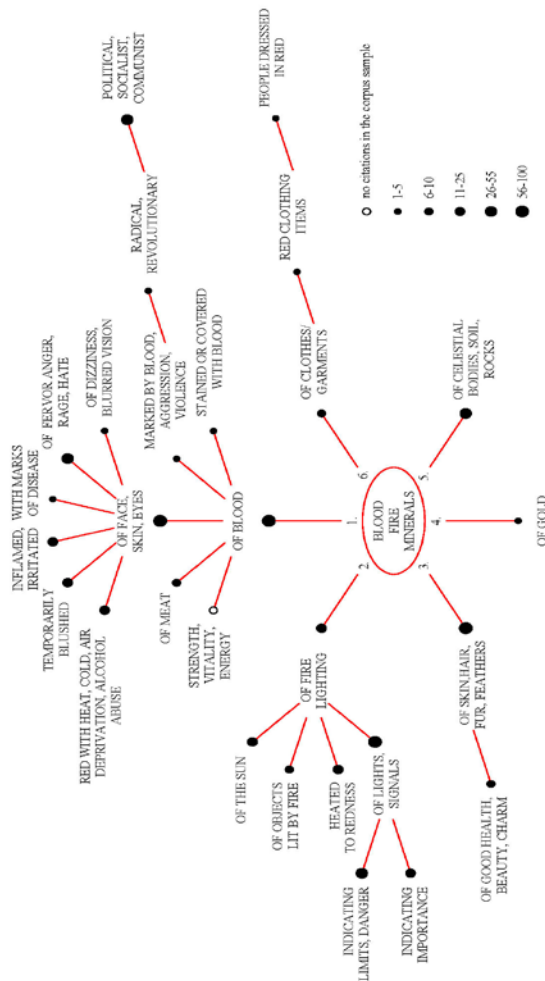
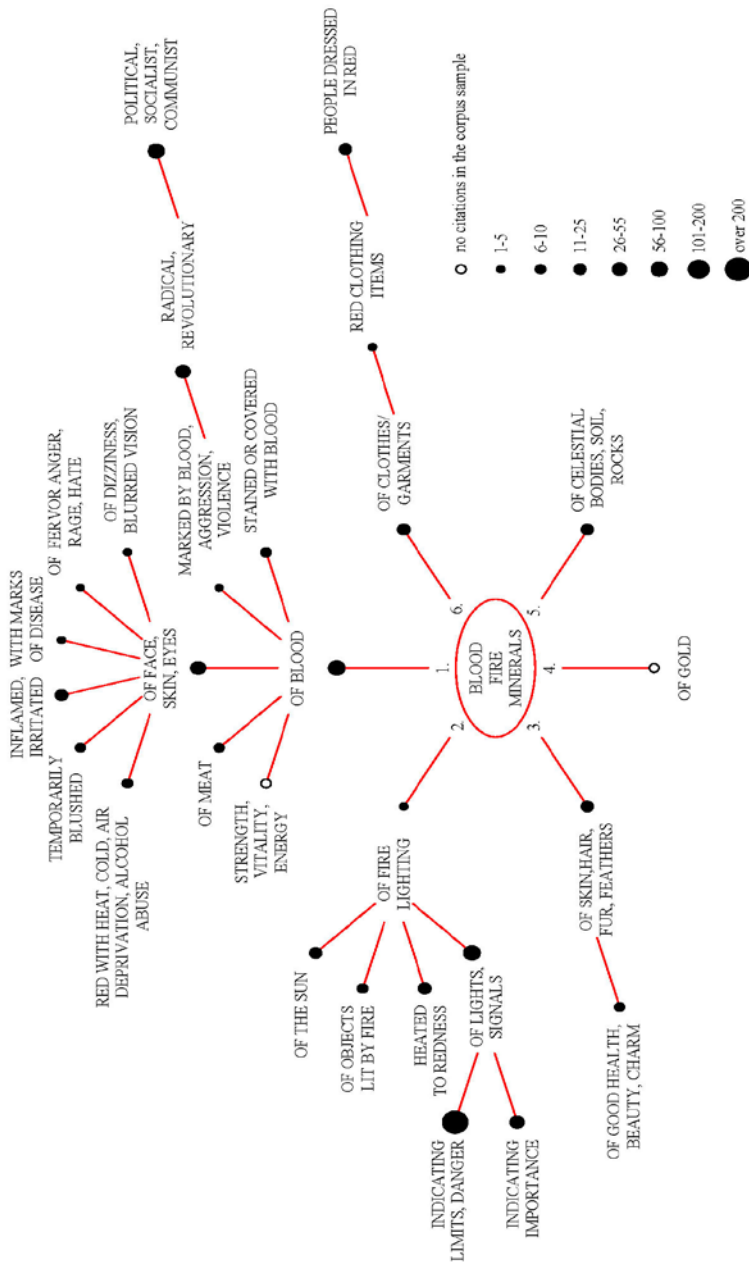Figure 2. The radial network for the category of RED.

Figure 3. The radial network for the category of CRVEN.

References

Barcelona, Antonio (2000). On the plausibility of claiming a metonymic motivation for conceptual metaphor. Barcelona, Antonio, ed. *Metaphor and Metonymy at the Crossroads.* Berlin – New York: Mouton de Gruyter, 31–58.

Berlin, Brent, Paul Kay (1969). *Basic Color Terms. Their Universality and Evolution.* Berkeley, CA.: University of California Press.

Boynton, Robert M. (1975). Colour, hue, and wavelength. Carterette, Edward C., Morton P. Friedman, eds. *Handbook of Perception*. Volume 5. New York: Academic Press, 301–347.

Dirven, René and Marjorie Verspoor (1998). *Cognitive Exploration of Language and Linguistics*. Amsterdam – Philadelphia: John Benjamins.

Gieroń-Czepczor, Ewa (2010). *Red* and *czerwony* as cognitive categories: A corpus base study. *SKASE Journal of Theoretical Linguistics* 7.3: 19–52.

Jameson, Kimberly, Roy G. D'Andrade (1997). It's not really red, green, yellow, blue: an inquiry into perceptual colour space. Hardin, Clyde L., Luisa Maffi, eds. *Colour Categories in Thought and Language*. Cambridge: Cambridge University Press, 295–319.

Kövecses, Zoltán (1990). *Emotion Concepts*. New York: Springer Verlag.

Kövecses, Zoltán (2003). Language, figurative thought, and cross-cultural comparison. *Metaphor and Symbol* 18.4: 311–320

Kövecses, Zoltán, Gary B. Palmer, René Dirven (2003). Language and emotion: The interplay conceptualisation with physiology and culture. Dirven, René, Ralf Pörings, eds. *Metaphor and Metonymy in Comparison and Contrast*. Berlin – New York: Mouton de Gruyter, 133–160.

Kövecses, Zoltán, Günter Radden (1998). Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics* 9.1: 37–77.

Lakoff, George (1987). *Women, Fire, and Dangerous Things: What Categories Reveal about the Mind*. Chicago: Chicago University Press.

Langacker, Ronald W. (2000b). A dynamic usage-based model. Barlow, Michael, Suzanne Kemmer, eds. *Usage-Based Models of Language*. Stanford: CSLI Publications, 1–63.

Niemeier, Suzanne (1998). Colourless green ideas metonymise furiously. Ungerer, Friedrich, ed. *Kognitive Lexikologie und Syntax*. Rostock: Universität Rostock (Rostocker Beiträge zur Sprachwissenschaft 5), 119–146.

Pitchford, Nicola J., Emma E. Davis, Gaia Scerif (2011). Look and learn: Links between colour preference and colour cognition. Biggam Carole P., Carole A. Hough, Christian J. Kay and David R. Simmons, eds. *New Directions in Colour Studies*. Amsterdam – Philadelphia: John Benjamins, 377–389.

Rosch, Eleanor (1973). Natural categories. *Cognitive Psychology* 4: 328–350.

Rosch, Eleanor (1975). Cognitive representations of semantic categories. *Journal of Experimental Psychology: General* 104.3: 192–233.

Steinvall, Anders (2002). *English Colour Terms in Context*. Umeå – Institutionen för moderna språk, Umeå iniversitet.

Thomson, Evan (1995). *Colour Vision: A Study in Cognitive Science and Philosophy of Science*. London: Routledge.

Uusküla, Mari (2011). *Terms* for red in Central Europe: An areal phenomenon in Hungarian and Czech. Biggam Carole P., Carole A. Hough, Christian J. Kay and David R. Simmons, eds. *New Directions in Colour Studies*. Amsterdam – Philadelphia: John Benjamins, 147–156.

Verosub, Abra L. (1994). Scarlet letters: Metonymic uses of the color red. *Semiotica* 102.1–2: 27–47.

Wierzbicka, Anna (1980). *Lingua Mentalis: The Semantics of Natural Language*. Sydney: Academic Press.

Wierzbicka, Anna (1990). The meaning of color terms: Semantics, culture, and cognition. *Cognitive Linguistics* 1.1: 99–150.

Wierzbicka, Anna (1996). *Semantics: Primes and Universals*. New York: Oxford University Press.

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RAZBIJANJE KODA: STUDIJA SLUČAJA *CRVEN*

Zbog fizioloških i psiholoških razloga crvenu boju poimamo kao jednu od najistaknutijih i semantički najproduktivnijih primarnih boja. Zbog svojeg stabilnog karaktera uživa i prominentan status među govornicima različitih jezičnih zajednica. Ovaj rad prikazuje paralelnu semasiološku analizu jezičnih izraza s komponentom crvene boje u engleskom i hrvatskom jeziku. Kontrastivnom analizom jezičnih korpusa nastojimo dati uvid u kontekstualne primjere i brojna značenjska proširenja. Primjenjujući teoriju prototipa E. Rosch (1973, 1975) i Lakoffov model radijalnih mreža (1987), proširenja polisemne kategorije CRVEN bit će prikazana kao mreža međusobno povezanih značenja koja proizlaze iz prototipnog središta. Dostupni empirijski podaci iz domene boja jasno ukazuju na njihovu

univerzalnost, ali i jezičnu/kulturološku specifičnost. Stoga je cilj ovoga rada dvojak. Prvo, propitivat ćemo motivacijsku ulogu sveprisutnih prirodnih prototipova, poput *krvi* i *vatre*, u konceptualizaciji perifernih značenjskih proširenja u oba jezika (Wierzbicka 1990; Verosub 1994). Drugo, analiza će pokušati potvrditi ključnu ulogu dvaju kognitivnih mehanizama – metafore i metonimije – u takvu leksičkom nastanku. Posebnu pozornost posvetit ćemo identifikaciji metonimijskih tipova u izgradnji ljudskog mišljenja, gdje očekujemo i određene međujezične sličnosti (Langacker 1999). S druge strane, spoznajna usađenost može ukazivati na jezično-kulturološke različitosti. Stoga ćemo pokazati da se ponuđenim kognitivnim mehanizmima može objasniti tek dio široke palete prenesenih značenja u različitim jezicima. Za potpun opis svih konvencionalnih jedinica s prenesenim značenjem predlažemo dinamični proces izgradnje značenja koji bi uzeo u obzir ne samo znanje o jeziku već i relevantne kulturološke čimbenike.

Ključne riječi: crvena boja; konceptualna metonimija i metafora; polisemija; značenjska proširenja; radijalna mreža; prototipna kategorizacija; međujezična korpusna analiza.