Red and czerwony as cognitive categories: a corpus based study
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This article reports on research into the polysemies of two equivalent basic colour terms: English ‘red’ and Polish ‘czerwony’. The analysis encompasses the core and peripheral readings revealed through the investigation of large samples of corpus citations retrieved from the British National Corpus (BNC) and the PWN Corpus of Polish (PWN). Drawing on the prototype theory, cognitive mechanisms of meaning extensions (conceptual metonymies and metaphors) and corpus data, the research compares and contrasts the resulting radial networks and entrenchment of respective readings for the two colour terms as semantic categories. The outcome clearly suggests that blood and fire motivate the conceptualisations underlying the current usage of this basic colour term in both languages.

Keywords: colour terms, conceptual metonymy and metaphor, polysemy, prototype-based categorization, corpus-based analysis

1. Introduction

The following sections present a parallel semasiological analysis of one of the basic colour terms as it is used in two languages. The study based on a thorough investigation of samples of 1,500 corpus citations for each term is limited to the adjectival forms of red and czerwony, which – hopefully – should not affect the qualitative part of this research.

The theoretical framework for this study includes the prototype theory as proposed and developed by Eleanor Rosch (1973; 1975), and the theory of conceptual metaphor and metonymy as construals of human thought. The theoretical concept of a domain as defined by Langacker (1987) is applied in descriptions of conceptual mappings, whereas the method of representation of polysemous categories as radial networks draws upon the model proposed by George Lakoff (1987), which, however, has been slightly modified in order to combine the outcomes of the qualitative and quantitative analyses conducted for each colour category. While the radial networks are intended to illustrate phenomena such as membership gradience and family resemblance, nodes of different sizes indicate the relative salience of each attested meaning on the basis of the frequencies revealed in corpus analysis.

2. Establishing prototypes for red and czerwony

Research into the symbolism of red has revealed multiple associations. “For both physiological and psychological reasons it is the most salient colour for human beings, cf. Ratcliffe 1976:323; MacLaury 1997:22; Miller 1997:159” (Allan 2008: 5). Traditionally red has been perceived as a symbol of light and radiance, as well as fire (including infernal fire). In the Christian tradition, it symbolises the blood of life and the blood which has been shed. Analogically, it evokes associations with war, rage, and revolution. Its passionate nature is reflected in symbols of love. Undoubtedly “this vast array of symbolism makes red one of the most semantically productive colours as far
as linguistic expressions are concerned” (Philip 2003: 25). As Gage (2006: 110) notes, blood is the primary motivation for these associations:

Few colours have been so heavily freighted with symbolic resonances as red. In the Indo-European languages this may have been because ‘red’ has been seen as the colour par excellence of life-giving blood. Indeed the terms ‘red’, ‘rouge’, ‘rot’, or ‘ross’ derive from the Sanskrit word rudhirā meaning ‘blood’.

Wierzbicka’s (1980: 43) linguistic research also posited blood as the only prototype for conceptualisations of red. However, inspired by descriptions of red as a ‘rich’ and ‘warm’ colour, Wierzbicka observed associations with fire as well. A curious finding in her research was that the most frequent response to the question “What is the colour of fire?” was “orange”. Yet, when asked about the colour they associate with fire, the subjects gave a different answer: “red.” These observations led to a rephrasing of the definition of red to include fire and blood as the prototypical exemplars (Wierzbicka, 1990: 127). Later, Wierzbicka (1996: 315) quotes semantic and pragmatic examples of this association: red-hot, fiery red, red coals, czerwony kur, and the name of a popular Australian brand of matches: Readheads. Niemeier (1998: 131) in her analysis of red extends the prototypical pair to include the setting sun. As far as czerwony is concerned, Tokarski (2004: 90) assumes that the conceptualization of red in Polish stems from two prototypical references: fire and blood.

2.1 Dictionary definitions

<table>
<thead>
<tr>
<th>English and American dictionaries</th>
<th>Natural prototypes</th>
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<tbody>
<tr>
<td>Oxford Advanced Learner’s Dictionary of Current English (1974)</td>
<td>blood, rubies, human lips, the tongue, maple leaves in autumn</td>
</tr>
<tr>
<td>Webster’s Encyclopedic Unabridged Dictionary of the English Language (1989)</td>
<td>blood; the extreme end of the visible spectrum</td>
</tr>
<tr>
<td>The American Heritage Dictionary (1994)</td>
<td>blood; long-wave end of the visible spectrum</td>
</tr>
<tr>
<td>Oxford English Dictionary (online)</td>
<td>blood, fire, flowers (like poppy, rose), ripe fruits</td>
</tr>
<tr>
<td>Cambridge Advanced Learner’s Dictionary (online)</td>
<td>fresh blood</td>
</tr>
<tr>
<td>Merriam-Webster’s Online Dictionary (no date)</td>
<td>being in the color range between a moderate orange and russet or bay</td>
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<tr>
<th>Polish dictionaries</th>
<th>Natural prototypes</th>
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<tr>
<td>Słownik języka polskiego (1807)</td>
<td>7th colour in order;</td>
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<tr>
<td>Słownik języka polskiego (1983)</td>
<td>the first colour in the rainbow; blood; blush/flush</td>
</tr>
<tr>
<td>Uniwersalny słownik języka polskiego PWN (2003)</td>
<td>blood</td>
</tr>
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Table 1 The prototypes of red and czerwony in dictionary definitions.
The dictionary entries imply that blood is the primary natural exemplar of redness. A few explications are based on the scientific factor of wavelength. However, the latest editions focus on blood and the variety of shades covered by ‘red’ in popular use, which is consistent with corpus data and the non-scientific concepts of colours in the speakers’ minds. The only dictionary which includes ‘fire’ in its definition of red is the most comprehensive Oxford English Dictionary (online version).

2.2 Etymological data

According to The Oxford English Dictionary, red and its Germanic cognates, e.g. OS. ród, OHG., MHG. rōt (mod.G. roth, rot), ON. raudev (Sw., Da. rød), are supposed to have derived from Sanskrit rudhirá-, meaning ‘red’. The reconstructed PIE root is *reudh- which gave rise to several other colour terms like English ruddy and Polish rudy. The latter generally denotes the red tinge of hair and in this sense its usage overlaps with English red. According to Hill (2008), who quotes Bachilina (1975: 112 ff.), Proto-Slavonic *rudь may have designated both the shades close to focal red and off-red until it was replaced by ěrвень to signify intense red (Hill 2008:64).

The Polish adjective czerwony has been attested since the 15th century as “of the colour of blood; (of the face) blushing” (Boryś, 2008: 96-97), and since the 16th century the meaning has been extended to “red, scarlet, russet, bay” and “high purity gold” (ibid.). The proto-Slavonic ěrвень meant “dyed with the worm called czerw, kermes3, and was derived from the verb ěрвiti (‘to dye with kermes’). Czerw gradually transformed into the participle form czerwiony to, finally, become the adjective czerwony (‘treated with kermes’). Thus the colorant’s name gave rise to the colour term via the ontological metonymy: THE COLORING AGENT FOR ITS COLOUR4. As Philip (2003: 25) speculates, red tends to be “indicative of wealth, because as a dyestuff, kermes was extremely costly.”

To conclude, etymology does not indicate the prototypical entity or phenomenon which could be regarded as the main motivating factor for the conceptualisations present in the polysemy of red and czerwony.5 It does, however, illustrate the importance of dyes in colour naming in general.

2.3 Corpus data

For the current study the similes red as and czerwony jak were extracted, and their right collocates reviewed. Thirty-five relevant similes were found in the BNC with the following collocates (with the number of occurrences in brackets): blood (7), berries (4), apples (2), and fire in two figurative phrases: flames of Hell and flaming petals. Single collocations included the light at dawn or dusk, or artificial sources of red light:

(1) Red as the clouds which flush beneath the sun’s slant rays, says Ovid, red as the rosy Dawn

(2) He saw her breath quicken ever so slightly, and her chin lift, and the light glittered in her half-hooded eyes, red as the embers.

(3) … his eyes shone red as Cortina brake lights.
Citations (1) – (3) come from works of fiction, which accounts for their unconventional character. No comparison to light has been attested in the spoken data, which might be regarded as evidence that blood is the primary prototype for red, while the light of the rising or setting sun is secondary in conceptualisations of the colour.

Forty relevant citations for czerwony jak indicate that the prototypical exemplars are: blood (7), beetroot (6), red wine (5), cooked crayfish (4) and poppies (2). Thus, Polish seems to have a wider variety of associations with redness, including food and wine. Less typical collocates are rubies, roses, fire engines and tomatoes. No reference to light has been found in the material available.

The analysis of collocates of red with displays 109 results, 67 relevant, with collocates such as: blood (15), strong emotions (like embarrassment, anger, rage) (22), rust (5), wine (3), crying and tears (2) and a few others of minor significance in terms of prototypicality. Thus, what makes one red is blood and emotions that are marked by a sudden blush or reddening of the face which is caused by high blood pressure. Again, blood is overwhelmingly important as the cause of redness, with no mention of light altogether.

Polish, again, reveals a greater variety of referents, with collocates of czerwony od such as: blood (5), cold and frost (4), crying (4), light (3), rust (3), effort (3), and heat (2). The results (46) exhibit a balance with blood, temperature and light being almost equally important sources of redness. Despite having become obsolete, the phrase czerwony kur, used to denote a blazing fire, reveals the perception of fire as red. When combined with the concept of danger, this strongly affects the meaning extensions of czerwony.

To conclude, the primary prototype for both languages, as indicated by the corpus data, is blood. The secondary prototype, fire, has not been attested in definitions and is exceptionally rare (or figurative) in conventionalized comparative phrases, yet various citations confirm its referential importance for the concept of redness. Fire is associated with light and heat and “traditionally, and following common sense, red is warm, passionate, and aggressive color. These connotations are confirmed by clinical tests and validated by noted psychologists: exposure to red accelerates the heartbeat, alters arterial blood pressure, and increases the respiratory rate” (Sassoon 1992: 173).

The symbolism of blood, especially the blood of slaughtered animals, menstrual blood, the blood of murder and the blood of witchcraft (rituals), refers to a high emotional charge and so do most of the figurative senses of red and czerwony.

3. Metonymic and metaphorical extensions of red and czerwony

Two main chains of conceptualizations (3.1, 3.2) derive from the salient exemplars, i.e. blood and fire:

3.1 OF BLOOD

The use of red as a modifier of blood is generally regarded as a chiefly poetic device [OEDO] and corpus data validate the opinion. There is only one citation in each corpus, one from popular fiction (BNC) and one from a poem (PWN):

(4) … drenched with her own red blood
Moja krew czerwona nie ostynie już

Highlighting the salient property implies the strong impact it has on our perceptions. The post-modifying position of czerwony is also characteristic of the emphatic function of the adjective. The colour, branded as one that shouts (Norton 2002: 53), is intended to reinforce the readers’ associations, otherwise blood is not premodified since its colour is obvious in regular usage. Another reason why red is highlighted is to stress the special quality it is believed to possess, as blood is indispensable for our existence, and the metonymic use of red therefore carries the connotation over to other domains and areas of human existence and activity.

3.1.1 OF SUPERIOR QUALITY

A literary quote is a telling example of this meaning of red: “Inasmuch as very red blood of the superior quality, like inferior blood unlawfully shed, will cry aloud” (Dickens, 1955: 669). The BNC also provides a citation with such a reading:

(6) … a rich harvest from the red blood, seed of her martyrs …

The Polish corpus data cite:

(7) Jak wesz pijesz moją czerwoną krew …

and imply that blood is precious, a carrier of life-giving power, and that those who want to deprive you of it are dangerous. In the following citation:

(8) Gdy twe serce przeze mnie czerwoną krwią boli …

blood is attributed with the ability to feel, as a whole living body might do, or a part of that body. This imagery of blood has few verbal manifestations. Although the value of blood is unquestionable, its magic powers are not stressed to the extent observed in primitive tribal societies where rites include bloodletting. On the other hand, the imagery of Christ’s blood with the saving power is salient in Christian cultures. Although unattested in the corpus material, the value and purity of blood mapped onto the heart is present in:

(9) A czyste serce czerwienśe od wszystkich rubinów …

The pure heart is one in which pure blood flows. The image of pure sinless blood contrasts with the symbolic value of menstrual blood implying “highly feared risks of contamination” (Sassoon 1992: 173) symbolised by black (within EVIL domain) and red (which metonymically stands for BLOOD).

3.1.1.1 STRONG, VIRILE. The phrase red-blooded man, where the positive qualities of blood are rendered through the use of the colour term, once again stresses the importance of the salient colour. The vital property of blood, as life-sustaining and life-giving, is partly mapped onto the colour itself which is used to emphasise vigour and potency. This conceptualisation overlaps with the passionate side of erotic relationship in LOVE IS FIRE.
3.1.2 OF MENSTRUAL BLOOD

Once blood is outside the body, it is associated with injury, suffering or death. Menstrual blood was traditionally believed to be dangerous and defiling. The imputed malevolence and symbolic “pollution” has not retained its traditional taboo sense in the semantics of red and czerwony. However, the negative associations of menstrual blood as “almost universally evil” (Buckley & Gottlieb 1998: 7), can be reflected in the tendency to avoid the words blood, krew and related forms in the context of menstrual bleeding. Instead euphemistic phrases with metonymic or metaphorical uses of red are popular. Allan (2008: 7) lists the following English euphemisms: the Red Sea’s in, it’s a red letter day, riding the red rag, flying the red flag, surfing the red wave, red sails in the sunset, snatch box decorated with red roses.

Such phrases may relate to blood without referring to the colour as in: massacre at the Y or nosebleed in Australia. Polish has a modest repertoire of ‘menstruation euphemisms’ and they do not employ the colour term czerwony.

3.1.3 OF MEAT

Fresh uncooked meat (such as beef and mutton), bright with the redness of blood is described as red/czerwone in contrast to white meat (e.g. poultry). “The principal pigments of meat are haemoglobin, the pigment of blood, and myoglobin, the pigment of muscle, […] The appearance of meat is determined by the quantity and type of myoglobin.” It is blood that is the most conspicuous feature and motivation for classifying certain kinds of meat as red. According to the corpus data analysed, red meat might seem to play a more significant role in British cuisine with 17 citations in the BNC against 6 in the PWN corpus.

3.1.4 OF FACE, SKIN, EYES

Descriptions of human appearance focus on the colour quality of skin and eyes as the indicators of emotional states as well as factors revealing good or poor health. Neither pale (white) nor inflamed (red or purplish-red) skin are desirable states, and all the hues in between reveal an array of states and emotions. In conceptualising the human body as a container and blood as its contents, we tend to, for example, picture a person blushing as a container being gradually filled with blood in the same way we might fill a glass with wine. This idea is exploited in cartoon films.

3.1.4.1 TEMPORARILY FLUSHED, BLUSHING. As a result of embarrassment, anger, or strenuous activities, blood vessels near the surface of the skin get filled up with more blood as a result of higher blood pressure. This is accompanied by the subjective feeling of a rise in temperature (hot-tempered). The visible signs for the physical effects of anger have a rich basis in semantic evidence. Red face – sign of embarrassment or emotions manifested with blushing. Also the corpora attest red in this sense:

(10) He thumbs through it, glances at the summary and goes red in the face.

(11) … caught a considerable number of clients red-handed, red-faced and red in several other places as well.”

Citation (11) reflects, in a hilarious combination of metaphors and metonymies, the flexibility of red in conceptualizations of different images. In the Polish language, faces
which are with anger or embarrassment are compared to beets or cooked crayfish. Associations with the redness of turkey heads can be found, as in:

(12) … rozindyczona kobieta, czerwona z gniewu …

Anger is accompanied by czerwone plamy (red patches) on the face and neck, reminiscent of red paint.

> ? BLUSHING FOR LOVE

Physiological, expressive and behavioural responses can, metonymically, stand for emotions. Lovers experience an increase in heart rate and body heat, which are accompanied by blushing. The redness in the face, passion flaring up, hot hearts, blood boiling and bodies burning with passion combine the imagery of fire and blood. As far as lexical data are concerned, love is not perceived as wild, hot, consuming, fierce, or burning. However, these are frequent attributes of passion, as corpus data reveal. Passion explodes, consumes and stirs, while love hurts emotionally (if not reciprocated). Thus love is all about feelings, while passion boils down (!) to sexual arousal. This might account for the fact that while red roses and heart are symbols of love, no semantic evidence reflects such a conceptualisation. BLUSHING STANDS FOR LOVE metonymy proposed by Kövecses (2003: 124) seems far-fetched in the light of linguistic data. Blushing, however, does reveal excitement and sexual arousal which echo in the usage of red and czerwony. The terms red light girls and red-light districts are especially explicit in this context (see 3.2.4 below).

3.1.4.2 ANGRY Verbal and non-verbal evidence suggests that conceptualisation of anger as fire combines the visual perception of facial redness and the high temperature (or its semblance) experienced by an individual. For instance, when a cartoon character gets angry, steam comes out of the ears, red creeps over the body and an explosion may even occur. While not as entertaining to watch in real life, the state of anger causes physical effects in human beings as well. The response varies from person to person, but some symptoms may include teeth grinding, fists clenching, flushing, paling, prickly sensations, numbness, sweating, muscle tensions and temperature changes (Tavris 1982). Linguistic evidence includes: red in the face. Another conceptualisation is that of the body as a container. In this case the contents labelled as red might imply either fire or blood. On the one hand, certain events “make your blood boil”, on the other, “you need to vent” or “let off steam” in order to calm down. Mikołajczuk (1998) notes that Kövecses (1986, 1990) and Lakoff (1987) distinguish between metaphors of “wet heat” (i.e. expressions invoking boiling, seething, simmering, steaming, and the like), and metaphors of “dry heat” (i.e. fire and burning) in English. The physiological effects of anger are sometimes presented as red liquid rising up to the top of the head in cartoon films. Cognitive semanticists point out the frequent use of fire metaphors based on metaphorical thinking with an experiential basis. Lakoff (1987), Kövecses (2002), Barcelona (2003), and Kövecses, Palmer and Dirven (2003) are among those semanticists who have provided multiple examples of conceptual metaphors traced in everyday language: ANGER IS FIRE/HEAT, EMOTION IS HEAT and BODY IS A CONTAINER FOR EMOTIONS. In more recent cognitive semantic literature, it is metonymy that is regarded as a source of conceptual motivation, e.g. REDNESS IN FACE AND NECK AREA STANDS FOR ANGER (Kövecses 2002) in conceptualizations.
of emotions. Barcelona is quite clear in his claim that “every metaphorical mapping presupposes a conceptually prior metonymic mapping” (Barcelona 2003: 31) and since the emotion is strictly combined with visual effects, no cross-domain mapping is required.

3.1.4.3 OF BLURRED VISION. Among the metonymies of anger enumerated by Mikołajczuk (1998: 163) (e.g. AN INCREASED BODY TEMPERATURE), INTERFERENCE WITH PERCEPTION is noteworthy for the purpose of this study. The PWN corpus attests 8 citations in which vision is impaired as a result of overwhelming anger or exhaustion. Czerwona mgła (‘red fog’), and czerwona płachta (‘red sheet’) block the sight:

(13) Co ujrzał, sprawiło, że czerwona mgła przesłoniła mu oczy …

Moreover, the redness is attributed to blood:

(14) Zaczęły mu latać myśli tak czerwone, jakby były okrwawione …

which is consistent with krew zalewa kogoś, where the image of overflowing (hot) blood - known as ANGER IS THE HEAT OF A FLUID IN A CONTAINER, a submetaphor of ANGER IS HEAT (Lakoff 1987) – culminates in the person being flooded with the red liquid. Similarly, English has the phrase to see red where the scene is analogically conceptualised, with red being a metonym for blood, while the whole phrase is metaphorical, with elements from the domain of VISUAL PERCEPTION (source) mapped onto the EMOTION domain (target). Mikołajczuk (1998: 159) assumes that the conceptualization of interference with bodily functions is based on “‘naïve psychological’ assumptions about the physiological effects of anger.”

The English language provides another term for such symptoms, red mist. OEDO defines it as “the apparent physiological effect of a rush of blood to the head in anger or excitement, represented as an impediment to vision”; figuratively, “a fit of extreme rage or violent passion that clouds one’s judgement.”

(15) He had lost all control. He saw everything through a red mist. A woman's hysterical wail rose above the crackings of the whip.

(16) Fury gathered in her head like a cloaking red mist. “Let me tell you, Deveraugh,” she gritted

Relatively new, attested by OEDO in 2002, the phrase has 9 citations in the entire corpus, none in the sample of 1,500.

Another reason for ‘red’ vision disorders is physical effort. The symptoms of exertion include:

(17) Przed oczami pojawiają się czerwone plamy, a koszulka leje …

(18) szum w uszach, a przed oczami fruwały czerwone płatki …

Czerwone plamy (‘red patches’), płatki (‘flakes’) i krążki (‘discs’), which are said to be flying or flashing in front of someone’s eyes, indicate extremely high blood pressure, characteristic
of symptoms revealed in angry people. This image is not groundless according to the findings of physiology: blurred vision is one of the consequences of inadequate oxygen intake. However, medical records include seeing grey, rather than red, which would confirm the strength of folk theories in descriptions of anger.

3.1.4.4 RED WITH COLD, HEAT, ALCOHOL ABUSE. Redness in the face can be a long-lasting or permanent feature if it is a consequence of exposure to heat, frost, sunshine or alcohol abuse. Red and czerwony describe the face, nose, ears or veins visible beneath the skin. The BNC describes the redness in:

(19) a large bulbous red nose …

(20) faces that glowed red with the cold …

(21) … red drunken faced gombeen men …

The PWN corpus has 20 citations of czerwony in this sense, ranging from descriptions of work-worn hands, or weather-beaten faces to images of drink-sodden mugs:

(22) … czerwone nosy i uszy …

(23) … twarz przepita i czerwona Kapitana Palemona.

Prominent facial blood vessels, although varying in colour, are also described as red:

(25) … czerwone żylki i pajączki …

3.1.4.5 (OF SKIN or EYES) INFLAMED, IRRITATED. Descriptions of irritated skin as red prevails in English, while Polish seems to exhibit a more frequent use of red for bloodshot eyes, frequently a sign of weeping. The BNC has 18 citations describing red gums, patches on the skin, scalp and face, itchy lumps, etc. These conditions may be accompanied by the sensation of warmth, as in:

(25) … face had become red, warm and swollen …

which again reveals traces of the prototypes, as both blood and fire are associated with high temperature. Polish examples include similar uses in 8 citations. Richer evidence is found in the descriptions of inflamed eyes, which can indicate tiredness, sleeplessness or weeping. In the latter case, redness is not necessarily limited to the eyes alone, as in:

(26) … ja czerwona od płaczu …

(27) … czerwona, załzawiona twarz …

where the whole face or individual are affected. The BNC sample includes only one citation with red eyes.
Irritation of the skin may be caused by long exposure to sunlight. This has supposedly motivated the metonymic phrase which functions as a prejudicial term, rednecks, which originally denoted a poor white farmer in the Southern states of the United States, laboring in the open, commonly associated with negative features such as narrow-mindedness and bigotry. Due to further metonymic mapping, in its modern usage redneck stands for the characteristics of ‘ignorant, bigoted, violent’ white Southerners.

3.1.4.6 WITH MARKS OF DISEASE. There are four citations in the BNC referring to:

(28) red bumps, pimples, and in the worst acne cases, …
(29) a red spotted rash’,
(30) covered in mysterious blotches. He feared he had chicken pox …

Quite unexpectedly, the PWN corpus has no hits in this category, while the Google search offers 16,900 results for czerwona wysypka (‘red rash’).

> OF DISEASES MARKED BY EVACUATION OF BLOOD OR CUTANEOUS ERUPTIONS

Although neither corpus attests medical terms for conditions characterized by haemorrhage or red rash, they do exist in both languages: czerwonka, as dysentery is popularly called, is characterized by diarrhea, often containing mucus and blood. Czerwienica (Vaquez disease) is a chronic disease of the blood in which the red cells are increased in number and the face is a deep red.11 Czerwona zaraza (‘red plague’), with two citations in the sample, is characterized by the reddening of a shrimp’s body. Czerwona choroba (‘red disease’), however, is metaphorical in nature, coined by a journalist to describe unrealistic expectations of socialist equality in the eastern part of unified Germany (Myslek 2007).

3.1.5 MARKED BY BLOOD, FIRE, VIOLENCE

Red is a strong colour that conjures up a range of seemingly conflicting emotions from passionate love to violence and warfare. Red and czerwony in the meaning “suggestive of blood and fire” refer to the methods and consequences of combat. Again red is a metonymic term for blood or fire, or both. Although neither corpus attests red or czerwony in this meaning, popular culture exploits this metonymy as the title of a song, Bright Red Violent Sex by Bobaflex. “The streets are going to run red with blood”12 was the promise and threat voiced by a combatant involved in a blood feud. The Polish corpus quotes an ominous statement:

(31) … że pola będą czerwieńsze od krwi.

Less violent, yet etymologically based on the concepts of wildness and revelry, with red possibly signifying blood, is the idiom to paint the town red. A variety of explications are offered by etymological sources with one element in common: that of violence. For instance, Martin (n.d.)13 sees the origin for the current meaning “engage in a riotous spree” in an incident dating from 1837 when “the Marquis of Waterford
and a group of friends ran riot in the Leicestershire town of Melton Mowbray, painting the town’s toll-bar and several buildings red.” Martin also quotes *Morris Dictionary of Word and Phrase Origins* whose authors “link it to ‘red light district’ and suggest that people out for a night ‘on the town' might very well take it into their heads to make the whole town red.” An inconclusive, yet plausible explanation was offered by Professor T. F. Crane, that “the peoples of the earth since the dawn of time have used “red” as a symbol of violence; hence that the expression is a natural figure of speech, signifying “to do violence in town” (Funk:1993: 73). In the current use the idiom implies the more innocent and civilised “going on a spree.”

3.1.5.1 *RADICAL, REVOLUTIONARY.* Sociological literature discusses the relationship between colours and ideologies. Colours permeate human experience and reflect social and political realities. “Colours that identify the various social organizations (…) are often very revealing about the implicit categories of values.” (Sassoon 1992: 169). *Red* as a metonym of blood and fire, features of biological existence, also implies bloodshed and the purgative power of flames. Red is “the color of extroverted energy: the color of battle”, “universally chosen as the standard of revolutionary transformations” (Sassoon 1992: 173). *Red* signifies the triumph of light over darkness. The ideological power of *red* is amply reflected in language to signify political fervour and revolutionary ambitions, often in the metonymic forms.

The BNC contains 6 citations of *red* for left wing parties, as well as associations of colours with ideologies in:

(32) blue for the Tories, red for Labour and yellow for the Liberals …

The following citation emphasises the colour of the blood shed by workers in their fight for social justice:

(33) … czerwona robotnicza krew na będzińskim bruku …

3.1.5.1.1 *COMMUNIST, BOLSHEVIK.* In the samples of 1,500 citations there are 29 in the BNC and as many as 209 in the PWN corpus with reference to the Red Army, Red Revolution, Red Star and other related metaphorical uses of *red* and *czerwony.* The colour (already involved in metonymic mappings as the colour of fire and blood, as well as the power which can purify and bring about changes in world order) is mapped onto the domain of IDEOLOGY to signify ‘communist’ or ‘bolshevik’. As the corpus data (and Polish history show), the salience of *czerwony* in this meaning is extremely high. One hundred and fifty-six citations for *the Red Army* include the metonymic (whole-part) use in sentences about the damage and harm done by its soldier(s):

(34) Została tego dnia przez Armię Czerwoną zgwałcona …

The most frequent contexts include looting, rape and devastation. The negative connotations of ‘communist red’ are reflected in a range of citations:

(35) Raz sierpem, raz młotem, czerwoną hołotę …
Similar negative emotions underlie the use of the metonymic collective term Czerwoni (SALIENT PROPERTY FOR CATEGORY):

*… nazwał sędziego „czerwonym zbrodniarzem i komunistyczną czerwona świnią…*

Zieloni (for farmers) and czarni (for the clergy) are convenient mental and lexical shortcuts. Metaphorical mappings include the head nouns in *czerwona świńia, czerwona hołota* and *czerwona zakala*, all of which reveal high emotional load and hostile attitudes towards communism in the Polish society. These nominal heads include proper names as well. The adjective in *Czerwona Łódź, czarwona Bolonia* and *czerwona Libia* suggests the political prevalence of communists in these towns.

The modest occurrence of *red* in the current usage and the lack of flexibility and further mappings are consistent with historical facts. English-speaking nations were only slightly affected by the communist ideology, while for Polish native speakers communist rule and the constraints of everyday life under the ‘socialist’ regime are still fresh in the national memory.

Less radical communists are labelled as *pink*, which reflects the human tendency to picture the domain of COLOUR as a continuum (not a set of focal colours as in a coloured pencil box), and this image is transferred along the regular mappings onto other domains. Pink - as the lighter shade of red - denotes political parties with moderate leftist sympathies among their members, as in:

*… zagrożeniem dla naszego kraju są czerwoni i różowi czyli SLD.*

Unattested in the BNC, *red-diaper* relates to the children of radical left-wing parents, and *reds under the bed* has been used to denote “an exaggerated or obsessive fear of the presence and harmful influence of communist sympathizers in a particular society, institution” [OEDO]. *Red menace or red peril* indicated the military threat by the Soviet Union during the Cold War period.

3.1.6 STAINED OR COVERED WITH BLOOD
Both languages record the metonymic use of *red* for blood as in:

*She was red, red all over. The thorns were cutting her to pieces …* and the idiom *to catch somebody red-handed*, which has traditionally been interpreted to mean ‘to catch somebody while his hands are still red with blood spilt’ (Allan 2008; Wyler 1992: 155). According to this view, *blood* is metonymically replaced by *red*. Plausible as it is, this interpretation may well be giving way to a new one. As shown in a corpus study reported in Philip (2003: 79), this idiom is no longer used with reference to violent crime in contemporary English; rather, it is used when speaking about illegal dealing or theft. For
an alternative interpretation of the conceptualization behind this idiom, see HEATED TO REDNESS (INTENSITY) below.

3.2 OF FIRE, FLAMES, LIGHTNING

The colour of burning flames and fire in general is described as red (via the metonymic mapping known as generalisation), especially when the event is regarded as dangerous. The corpus data include descriptions of explosions and dangerous fires, as in:

(42) … poprzez dym przebijać się jęły czerwone języki ognia.
(43) The whole room lit up like daylight only it was red. It was like hell on earth.

Less terrifying instances include a distant glow of fire, dying embers, and the tip of a burning cigarette, which indeed are close to focal redness:

(44) … drew on his cigarette until the end glowed red.
(45) Nad wulkanem widać było czerwoną poświатę …

Gage (2008: 52) notes that in the classical and medieval traditions red was regarded as the colour of light, and used accordingly in arts for the images of the sun and divine light. Nowadays, similar association have been observed in German and Russian, whose speakers tend to describe the sun as either red or yellow (Philip 2003: 142). This quantitative dimension of red (i.e. brightness) has given rise to further conceptualizations.

3.2.1 OF THE SUN (AT SUNSET OR DAWN)

The prototypical image of red light is far from the focal hue. It is rather the setting (or rising) sun, spreading an orange-reddish-crimson glow across the sky. Corpus data, full of red sunsets and red skies, provide vivid images:

(46) … sunset hues which turn the mountain here from a gentle rose to red each evening …
(47) … grey warmed into red like hot iron, then into pink, until the lower sky glowed …
(48) … the sun was a red orange …
(49) … niebo czerwone, pełne ogniczych …
(50) Na wschodzie stała czerwona smuga …

The nearly prototypical redness of the setting or rising sun is remarked upon in:

(51) … pumpkins as full and red as the morning sun in winter.

These descriptions, which also include references to ‘glowing’, ‘evening fires’ and ‘hot iron’, evoke images of burning, and like the celestial phenomena themselves, command our
attention. This image and connotations are further exploited in the use of *red* as an indicator of danger.

3.2.2 OF OBJECTS LIT BY FIRE

Objects lit by the rising or setting sun look reddish too:

(52) … the first rays of sun shone through the birch-bark roof, lighting it up like red cellophane and tinging the loose pine-needles on the floor the colour of ripe apricots.

(53) … the cathedral glowed a warm *red* in the fading sun

(54) … *czerwone w ostatniej poświacie słońca* …

As these examples suggest, the light and the colour it sheds are considered to be warm. This widely-held opinion is contradicted by scientific data. The perception of *red* as a warm colour is based on sensation and human experience, rather than scientific reasoning. As Gage (2006: 22) explains:

> Colours seem ‘warm’ or ‘cool’ only metaphorically, of course, but the radiation of which they are the visible symptom is radiant energy, and we have known (…) that it must be interpreted in the opposite sense to the metaphorical usage. The short-wave, high-frequency energy of the blue-violet end of the spectrum signals the greatest capacity to heat, and the long-wave, low-frequency red end, the least.

Scientific facts, however, have little in common with the conceptualisation and meaning extensions of *red*, *czerwony*, or other BCTs. It is the prototypes and basic bodily experience that govern our patterns of thought and semantics. Fire, sunshine and fresh blood are hot, or at least warm, as is the colour in the folk understanding which is reflected in both languages.

3.2.3 HEATED TO REDNESS (INTENSITY)

The image of the red glow of melting metal is the experiential basis for the conceptualisation of *red-hot*, used either literally or figuratively (via INTENSITY IS HEAT metaphor):

(55) … stryczek, topór, pal i czerwone żelazo … (a set of torture tools)

(56) … rozpalony jak czerwona głownia mózg …

The second citation describes metaphorically the intense process of thinking, pictured as a red-hot, glowing brain. The sense of *red hot* as ‘intense’ can be employed in various domains to denote excitement, anger, or enthusiasm:

(57) How about you and me doing a little *red-hot reading* after supper? (Wierzbicka, 1991:215)

(58) she kept her hatred burning *red-hot*
After the red-hot protests of the retired classes

Although the BNC sample does not provide any citations with this meaning of *red*, references to catching someone or being caught *red-handed* are by no means rare. Thirty-seven hits for *red-handed* were found in the entire BNC corpus material (two of which were irrelevant). The motivation seems to be a combination of metonymy and metaphor: the culprit is caught in the heat (!) of the action. The heat is metonymically rendered by *red*. This image, however, is metaphorical, no real heat accompanies the action. A cross-domain mapping takes place, with the domains of *temperature* and *action* (via an *action is heat* metaphor, Kövecses 2003:90) involved.

Another interpretation has been suggested by Kövecses (2002) who considers blood on the culprit’s hands as the primary image and motivation for the use of *red* in the phrase (see also STAINED OR COVERED WITH BLOOD section, 3.1.6). However, the motivation suggested above is psychologically grounded as well. Moreover, it is akin to the Polish phrase *złapać kogoś na gorącym uczynku* (lit. ‘to catch someone in the act of a hot deed’), which relates to the *temperature* domain and the image of ‘glowing’ hands. The explication offered by Kövecses is based on etymological sources, while Philip’s research -based on corpus data - disputes his opinion:

Not once is the phrase used in the context of serious physical injury, murder or other bloody death. Such a context would be literal and as such is theoretically plausible and possible; yet it does not appear to be used (Philip 2003: 171).

This clearly confirms the view advocated and shared among cognitive semanticists that it is context rather than etymology that reflects underlying conceptualisations, although it must be admitted that both sources of interpretation prove to be highly consistent in numerous cases.

### 3.2.3.1 Love is fire

*Love is fire* intensity is heat metaphor is explicit in linguistic expressions of passion and sexual appeal such as *red-hot lovers* and *red hot mamas*. Red as a symbol of love, especially erotic love is common to many cultures. Bierwiażonek (2002: 139), in his exhaustive cognitive study of the concept of love, quotes semantic realizations of the *love is fire* metaphor, e.g. “My heart is on fire, (…) She is his latest flame” and concludes that “(b)ecause of its extreme intensity, the metaphor is suitable only for EL [EROTIC LOVE, emphasis mine].” There are extra-lingual, cultural grounds for supposing that this conclusion is tenable. Red has traditionally been regarded as a symbol of guilt, sin and anger, often as connected with blood, sex and lust (Oehler & Day, 1883/1978: 320). *Scarlet woman* and *red-light areas* reflect the connotations of sexual sin. As semantic evidence indicates, *red* and *czerwony* emphasise the passionate and sexual side of a relationship, based on references to fire rather than blood.

### 3.2.3.2 Recent (Glowing hot > Dangerous)

Based on the image of freshly baked or cooked food (which is too hot to touch) are the associations of redness and heat as in the image of melting metals or glowing ambers. This evokes conceptual links between ‘new, fresh’ and ‘hot, and potentially dangerous’. For this reason, *red-hot* tends to be applied in contexts which highlight recentness:
I can exclusively reveal that Britain’s Grand Prix hero last night secretly agreed to a multi-million-pound link-up with film star Paul Newman’s red-hot team.

I can't get worked up about red-hot issues. I commission most of my research from an agency.

Allan (2008: 6) mentions “red-hot as a description of stolen goods actively sought by the law.” There seems to be a chain of conceptualisations akin to those in hot cakes (fresh) and hot potato (one you cannot hold for too long without getting burnt). Similarly, red-hot goods are better disposed of as soon as possible to avoid punishment. Another semantic/conceptual area for red-hoi is that of intensity (passion):

You painted a picture of such a red-hot lover, too, that the idea that he was content with snatched secret nights …

3.2.4 OF LIGHTS AND SIGNALS (ATTENTION)
Red/czerwony applied in lighting systems is intended to signal danger. Niemeier (1998) regards red as a colour of attention and the imagery of blood and fire. These, in turn, are linked with hazardous events and fatal consequences. Such associations do play a role in conceptualizations of red. Figuratively, czerwone światełko (‘red light’) or lampka (‘little lamp’) is an imaginary warning signal activated by a person’s intuition when faced with danger:

… w głowie zapalają mi się czerwone światełka …

Nie miała złych doświadczeń i czerwona lampka nie włączała się.

This metaphorical use of red light/lamp is absent in the British corpus data. The figurative red light below tends to overlap the meaning of a red card, a symbol of disapproval and boycotting:

The Scandinavians introduced the red light against the south African golfers

The plural form red lights is highly salient in the meaning “houses of prostitution”, dating from 1890–95 (allegedly so called because brothels displayed red lights).17 Used as a modifier red-light typically collocates with district, area or girls:

Then because of the reputation the area got for the blues or for the so called red light area, you get people coming in from out of town, which then brought

Red light girls ‘to be legal’ BRITAIN’S first legal red light district could soon be given the go-ahead

English has one phrase, red herring, which clearly belongs to the domain of ATTENTION and refers to a deliberate attempt to mislead. This conventionalised phrase was once believed to have originated in traditional methods of training young hounds, through the use of “pungent fish to throw off hounds in pursuit” (Hendrickson 2000). In fact, the keen word
and game hunter, Michael Quinion, has found evidence to disprove this idea: “a dead cat or fox should be dragged as a training-scent for the hounds, so that the horses could follow them. If you had no acceptably ripe dead animals handy (…) you could as a last resort use a red herring” (Quinion, 2008: par.6).

Red in the phrase stands for the reddish-brown colour of a smoked kipper, and the whole nominal phrase is used metonymically as “an object to follow”, and metaphorically as one intended to mislead people, although not necessarily the chasers. False clues, ideas, even people are perfect red herrings:

(68) killed by any sort of missile (the open window must have been a red herring).
He was killed by a needle-like instrument

(69) And the issue of privatization is a complete red herring. The debt charges on the recreation facilities, for example, would remain

(70) “Yes, in some ways,” he said. “You are a perfect red herring,” she said. “Let them police you.”

Regardless of this erroneous etymological history regarding the huntsmen’s practice of training dogs and the colour of smoked herrings, the phrase is well fixed in the English vocabulary, with 8 citations in the sample, and in every conceivable sense it may be regarded as evoking the ‘attention’ reading.

3.2.4.1 INDICATING LIMITS and/or DANGER. The sight of blood indicates danger and evokes fear. This is the main motivation and inspiration that has led to the use of the colour in a wide variety of prohibition signs. Also in semantic (conceptual) terms, red is mapped, from the overlapping domains of COLOUR, BLOOD and LIGHT (FIRE), onto the overlapping domains of DANGER and PROHIBITION. The linguistic evidence is red in red zone/czerwona strefa and czerwona linia/kreska (‘red line’). Both delineate boundaries which must not be crossed. The red zone has several meanings, all of which share the sense of ‘limited access’, yet the most recent one has been a military term for unsafe areas in the territory of Iraq (in contrast to the safe Green Zone in and around Baghdad) coined by the late Steven Charles Vincent, a freelance American journalist. The Polish corpus sample cites the red war zone 5 times, each time in the context of the Iraqi war. For Poles, however, it is the czerwona linia, frequently cienka (‘thin’) czerwona linia that marks boundaries between what is regarded as right, moral, and what is shameful or dangerous. This physical or imaginary, metaphorical boundary is richly represented in the PWN corpus in as many as 24 citations. Red line is mapped onto the domain of MORAL VALUES, as in:

(71) Izrael przekroczył wszystkie czerwone linie …

(72) Inni politycy wiedzą, gdzie przebiega czerwona linia tego co wolno …
or marks a real line of division between safe and unsafe territories:

(73) Karbala to „czerwona linia”, której przekroczenie groziło …
English, on the other hand, refers to the exceeding of financial limits via the metonymic use of *red* for what is noted as a debt on a balance sheet. Being *in the red*, like staying in the *red zone*, indicates the risk of danger, either bankruptcy or death. The idiom *to be in the red* employs metonymic red within a metaphorical phrase. The *red* is conceptualized as a dangerous area, space, or abyss, with the most frequent collocating verbs: *plunge, go, dive, fall, slip, move, smash and sink*:

(74)  … the firm filming her Budgie The Helicopter books crashed deeper into the red.
(75)  the world’s largest advertising agency group, has plunged into the red after providing for £78 million of reorganisation and redundancy cost,

Evidently, LACK OF CONTROL IS DOWN (Kövecses 2002: 36) is the mapping which gives rise to these conceptualizations. The historical origin of the phrase above is evident in *red ink*, defined as a financial loss in business.\(^{18}\)

(76)  RED ink is splattered all over Britain’s companies. Heavy capital investment led to a record £23.4 billion financial deficit last year.
(77)  The papers are filled with gloom and doom. Companies are swimming in red ink …
(78)  Oki’s decision was made to staunch the flow of red ink gushing from the unit, estimated by insiders at around $\&dollar$

Red ink is perceived as a liquid, most likely as blood, and its violent flow, as a kind of a natural disaster, a flood: sudden and almost impossible to control. As Philip (2003: 158) notes: “‘Bleed red ink’ highlights not only the debt, but parallels it with the seeping away of a company’s life-blood – its finances. In doing so, it attributes to ‘red ink’ a connotation of blood that is not otherwise present.”

Bleeding red ink clearly results from MONEY IS A LIQUID/BLOOD metaphor (Goatly 2007: 17), a mapping which (partly) motivates another idiomatic phrase: *to bleed somebody white*.

Another threat is the *red card* which primarily functions in the world of football as a sign for the offender to leave the pitch. This literal use has 20 citations in the BNC, and 84 in the PWN corpus. Given the fact that football has been designated a national sport in Poland, these statistics are not unexpected. The figurative usage, however, is of greater importance for the current analysis:

(79)  THE man who masterminded Derby County's escape from bankruptcy was yesterday shown the red card by the club. Stuart Webb, who has been secretary, …
(80)  Daliśmy mu niedawno czerwoną kartę w rankingu posłów …

The figurative *red card* is (metaphorically) shown to someone who has proved themselves to be a failure or a wrongdoer, and is intended to stop the person from continuing in the same vain or at least to give them a clear signal of disapproval.
A red flag can signify a warning, martial law, or communist sympathies or power. The BNC has 11 results in the sample, covering various meanings. The ‘warning’ or ‘threat’ reading is expressed in (81) an (82):

(81) All we needed was a red flag to warn the locals that we might be about to frighten the horses.

(82) The statistic does indeed “raise a red flag” …

Czerwona flaga appears three times in the sample of 1,500 citations, all in the contexts of revolution or war. However, red flags on Polish beaches indicate that bathing is strictly prohibited or not supervised. Red alert refers to the highest level of alert when an attack by the enemy seems imminent or a state of alert resulting from imminent danger:

(83) Red Alert : More floods are on the way tonight. Read in studio Good Evening

(84) … in the quietly intense tone which would doubtless have triggered a red alert among family and friends alike. “And this may be your villa, and your bed, but if you had the minutest atom of good manners or breeding you'd get out of here right now and let me get some clothes on!”

The ‘attention’ reading of red can be traced in red route (Br.), actually a red line along the side of the road, marking traffic routes where stopping or parking is severely punished [OEDO]. Red also designates ski runs suitable for intermediate users.

3.2.4.2 INDICATING IMPORTANCE. The function of red as the colour of attention is also present in a red-letter day and red-carpet treatment. The tradition of marking holidays and special days in red print is exploited in red being used metonymically to mean ‘important’. The reading is clear in a world where calendars and watches regulate the rhythm of daily life. Apart from official holidays, the day marks a memorable, fortunate event in personal life: [mapping from PUBLIC to PERSONAL domain].

(85) One of his red-letter days was the time we took him for his first ride in our newly acquired Rolls-Royce.

(86) Our nursing squad described its discovery and its first triumphs over disease. A red-letter day indeed.

No results have been attested for red-letter day in the sample, although there are 10 hits in the whole corpus (plus one red-letter night). Polish has a synonymous phrase: czerwona kartka w kalendarzu (‘a red page in the calendar’) in which the colour of the print is generalized to stand for the whole page.

Red carpets are laid down to indicate a ceremonial welcome or lavish reception [OEDO]. Red as a conspicuous and ‘royal’ colour signifies the importance of the event and the person(s) involved.
HOME TIME WIMBLEDON are set to roll out the red carpet and bring back their original Crazy Gang.

The red carpet (as an attribute) via a part-whole metonymy signifies the ceremonial character and setting.

"Why’re they getting the red-carpet treatment?" “Because we want to know if it is in any way connected to the prince’s state visit.”

This meaning of czerwony has not been attested in the Polish corpus sample.

The idiomatic phrase red tape, referring to a long and irritating bureaucratic procedure, “derives metonymically and metaphorically from something most people have never seen, i.e. the pinkish red tape used to bind official documents” (Dirven & Verspoor, 2004: 58). From the perspective of modern speakers, this reading is totally opaque since the motivation has long been lost. Yet, again, the meaning is not arbitrary – two mappings take place; red tape stands for the documents and/or procedure. The metaphorical mapping equates the procedure with the bureaucratic sluggishness and intransigence:

Gerald Smith cut through red tape and bureaucracy to get the youngsters out of a refugee camp.

because Government red tape will leave her without false teeth for weeks.

Red tape cuts free phone line for aid troops

As verbal collocates indicate, red tape (metaphorically) cuts, hinders, surrounds and strangles, whereas people attempt to cut, reduce or lift it. The tape thus retains the properties of a real tape – due to the ontological sub-mappings or correspondences (Barcelona, 2003: 3) which are mapped onto bureaucracy.

Other metonymic or metaphorical phrases implying significance include: red hat, the symbol of a cardinal’s office; red ball, (US slang) high priority freight [OEDO]; red judge, a high court judge (the colour is a metonymy for the red robe). According to Verosub (1994) the unifying idea which determines the meaning of red is IMPORTANT THINGS ARE RED, and it extends beyond the semantics into semiotics, e.g. the use of red in signs.

3.3 OF SKIN, HAIR and FUR

The BNC data abound in the names of animals which include red, the most frequent of which include squirrel, and deer. There is an extremely high occurrence of red cattle (303 in a 2000 citations) which refer to names of breeds or colours of hides. Birds such as red kite, grouse and hawk have 52 citations in the analysed sample. The Polish corpus material provides only two examples: czerwone krowy and bydło czerwone, which is a Polish breed of cattle. In the popular use of colour terms, such specimens would be called rudy (rusty) which is also the only term for the hue of red used in reference to human hair. This accounts for the differences in the numbers of citations: red hair occurs 19 times in the BNC sample of 1,500, while the PWN corpus quotes only one phrase:
And may imply either uncertainty or the fact that the colour is not natural.

Interestingly, a couple of citations in the British corpus emphasize the correlation between this colour of hair and the hot-temper, or lively nature of humans endowed with such hair:

(93) The minister, who had red hair and fire in his eye, started on an upbeat note …

(94) … with curly red hair and an aptitude for getting into scrapes.

Etymological sources confirm the characteristics of red in names such as Roth (Ger.), Ruskin (Fr.), Russell (O.Fr.), Rooney (Ir.) and Roy (Scot.), all of which originated as a descriptive nickname for a red-haired person (Norman, 2003: 42, 115, 160). Polish czerwony has never referred to red hair, whether in formal or informal variations of the language (Zaręba 1954: 27).

Concerning human appearance and skin, there are similarities between both languages, with North-American Indians being labelled as red-skinned. Eight citations occur in the BNC sample against six in the PWN corpus. One Polish example is pejorative, with Indians dubbed as ‘savages’, which is not a popular image of the race among Poles nowadays.

Redness of the face and lips (provided it is not too vivid) is regarded as a sign of good health, with clearly richer exemplification of this in Polish (6) than in English. Citations also refer to the positive impression of such a rosy appearance. In particular, the folk image of vigorous healthy women with plump bodies and blushing cheeks is still reflected in descriptions of the female body:

(95) … dwie baby, takie solidne, czerwone na gębie …

(96) … czerwona aniolkowata twarz Heli …

There is no such emphasis in English; the BNC offers merely 2 citations in which facial redness itself is more delicate:

(97) My wife got scared as I went from a nice healthy rosy red colour to sheet white in a few seconds.

3.4 OF EARTH, SOIL, ROCKS

Fairly frequent in the BNC sample, extremely rare in the Polish citations is the use of red in reference to soil, rocks, clay and building materials (red brick has 27 hits in the sample alone). Red typically collocates with sandstone, volcanic stone and granite. Less typical collocates are ores, loam, mud, stone as well as hills and cliffs where red metonymically stands for the colour of the minerals. In this reading red covers a gamut of hues and shades: from ochre, pinkish to brownish-red. The frequency of red brick shows the importance of this kind of material, a near-salience, exploited in the term red-brick university.
Polish corpus data cite only red clay and czerwona chirurgia – a term coined for a surgical unit situated in a red-brick building in a hospital complex, which might imply the use of red as a kind of landmark; not as everyday object. Piaskowiec czerwony, granit czerwony, and a range of ‘red’ minerals also referred to in Polish, with no results in the citations investigated. At this point, however, it is worth noting that the Polish term for ‘ores’ is the same as that for ‘rusty’, rudy. The latter meaning is supposed to have been derived from the former\textsuperscript{19}. If so, this is a typical case of CATEGORY FOR SALIENT ATTRIBUTE metonymy, which is the motivation for most non-basic colour terms in English, e.g. turquoise, orange, purple and emerald. The results of diachronic research conducted by Casson (1994: 9-14) indicate “the priority of entity senses and the unidirectionality of metonymic development from entity sense to color sense” (Hardin & Maffi 1997: 233).

3.5 OF GOLD

Although archaic in both languages, red in the sense of ‘gold, golden’ has survived in an English idiomatic phrase red cent signifying: a cent; penny; trifling amount, especially in not worth a red cent, not give a red cent\textsuperscript{20} and in Polish czerwoniec, a term for a gold coin minted in Europe from the 13\textsuperscript{th} to 19\textsuperscript{th} century, known as ducat\textsuperscript{21} also used in reference to other gold coins.

A few theories have attempted to solve the mystery of the use of this colour term with reference to gold in the past. The most popular explanation is that medieval gold had a high copper content (Mead, 1899), another emphasizes the importance of ochre, the first red pigment used by the Indo-European peoples (Anderson 2003: 72) which influenced the denotational range of the colour term (beyond the focal red of blood towards the more earthy tones). For the English language, Barley (1974) suggests that Old English read and geolo occupied different parts of the colour spectrum in comparison to contemporary red and yellow. Read is assumed to have covered partly the range of today’s red and partly that of yellow, including the intermediate shades of orange. All these theories might contribute to such a use of both red and czerwony. Zaręba (1954: 26-27) notes that while the literary and formal registers exhibit a more limited scope for czerwony, in dialects this colour term covers a wide colour spectrum ranging from yellow, and light red, to dark brown.

3.6 OF CLOTH AND CLOTHES

Red-coloured clothes are certainly eye-catching, even provoking. Yet, they may not always achieve the desired effect:

(98) I feel so disrespectful in bright red, she said.

(99) Red’s too hot for romeos …

(100) LADIES in red may get the eye, but they seldom get the guy, says a study. This is because “women in red do not seem approachable.” But men do fancy girls wearing blue …

The combination of conceptualisations of red (destructive fire, shedding blood) and the symbolism deeply rooted in most cultures (warfare, revolution, royalty, power) might
make people in red look too conspicuous, powerful, potentially dangerous. On the other hand, it evokes the associations of passionate love as well as promiscuity. Vivid red, in particular, might be considered inappropriate, even provocative on certain occasions.

However, red as the ‘attention’ colour is a favourite among sports teams. This follows the metonymic chains: SALIENT PROPERTY FOR CATEGORY (colour for the jerseys) in referring to the colour for the football strip, including such names as: the Red Devils (Manchester United), the Red Army (Arsenal, Middlesbrough, Nottingham Forest), The Reds (Liverpool), The Owd Reds (Accrington Stanley). An analysis of the English league results since 1945 has revealed that “teams in red are more successful than those whose home shirts are yellow, white or blue.”

Few red-dyed cloths or clothes have become as entrenched as red flannel (used for making underwear and nightwear in the past). In the plural form, this refers to items of clothing made from red flannel. Red flannel hash is, however, the name of a dish made with beets and potatoes, sometimes with chopped bacon or beef.

The most popular of all red cloths is the proverbial red rag. Longman Dictionary of Contemporary English defines like a red rag to a bull (Br.E) or like waving a red flag in front of a bull (Am.E) as “very likely to make someone angry or upset.” The folk etymology behind the phrase is the common belief that it is the colour that infuriates the bull. In fact, it is the movement, not the colour of the rag, that evokes anger and causes the bull to charge. The red rag has become so deeply entrenched that it functions as an independent phrase standing metonymically for any cause of anger:

(101) Still Rachaela did not respond to Mrs Keating’s red rag.

(102) It was like a red rag to a big, black bull.

(103) … refuelling aircraft and the Stinger SA missile, once again a red rag to the Israeli bull.

The noun bull, if mentioned, tends to be modified to add to the emphatic character, as in (102) or introduce contextual elements, as in (103).

3.6.1 OF RED CLOTHING (ITEMS)

Red and czerwony, like all basic and most non-basic colours, can stand for the whole outfit. Thus, people wear red, are dressed in red, look good or bad in red:

(104) … the boys in the school red …

(105) … this swordsman wears red and white …

For red hat see the INDICATING IMPORTANCE section above (3.2.4.2).

3.6.1.1 PEOPLE DRESSED IN RED. The BNC sample attests the metonymic use of this colour term for the outfit or accessories in 6 citations in the 2000-citation sample, e.g. red shirts (Garibaldi’s army) and the Little Red Riding Hood. The Polish sample of the same size has 5 quotations: Czerwone Berety (‘Red Berets’, maroon beret worn by paratroops) and Czerwone Diably (‘Red Devils’, Liverpool Football team with red as the primary
colour). The latter term includes the metaphorical noun ‘devils’. This kind of metonymy is widely employed with reference to uniforms and sports jerseys. Scarlet robes (worn until 1 October 2008) “gave high court judges the awe-inspiring sobriquet of ‘red judge’” (Johnston 2008). By analogy, a red-coated soldier can be called a red soldier [OEDO] due to the reference to the distinctive colour of his outfit.

### 4. Conclusions

Within the domain of COLOUR, there are divergences in the applications of red and czerwony. As collocational patterns reveal, the English red describes a wider range of hues. Polish czerwony, on the other hand, denotes mainly intense red, while the colour of human and animal hair, as well as a range of mineral substances, are termed rudy. This pattern is consistent with etymological data which suggest an early specialisation within the domain of Polish reds.

When used figuratively, czerwony has a high frequency in revolutionary or communist contexts as compared to red, which reflects the decades-long political reality of life in Poland. Contemporary uses are predominantly pejorative, expressing resentment towards the oppressive system and those who were once involved in the communist power apparatus. Red tends to be emotionally neutral in this context, although, like czerwony, it is salient enough to map onto the ideology or communists themselves in popular usage.

The Polish BCT is more frequent than red in descriptions of blushing, flushed or angry faces. The use of red seems to be restricted to ‘positive’ contexts (blushing, healthy appearance) whereas negative emotions (anger) and coldness are commonly described as blue. Seeing red and seeing red spots (czerwone plamy), however, indicate similarities in conceptualisations of anger.

No significant differences have been revealed in the salience of other senses, and those identified in the sample do not provide grounds for any generalisations.

Culturally-motivated uses of red and czerwony include the colour of St. George’s Cross:

(106) The English and their local supporters wore red crosses.

And one of the two colours of the Polish national flag, used metonymically for the Polish team:

(107) Także i w tej kategorii, biało-czerwonym wiodło się nienajlepiej.

Red is extremely popular in the names of pubs, e.g. Red Bull and Red Lion with as many as 11 citations in the sample. Actually, the Red Lion seems to be the most popular pub name in Britain (Rothwell 2006: 323).

The table below presents the frequencies of red and czerwony in respective senses on the basis of the material retrieved from two corpora.
<table>
<thead>
<tr>
<th>Metonymic and metaphorical extensions of RED and CZERWONY in samples of 1,500 citations</th>
<th>Frequencies in the BNC</th>
<th>Frequencies in the PWN corpus</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1. OF BLOOD</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3.1.1 OF SUPERIOR QUALITY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>3.1.2 MENSTRUAL BLOOD</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.1.3 OF MEAT fresh, otherwise black</td>
<td>17</td>
<td>6</td>
</tr>
<tr>
<td>3.1.4 OF FACE, SKIN, EYES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.1.4.1 TEMPORARILY FLUSHED,</td>
<td>8</td>
<td>51</td>
</tr>
<tr>
<td>3.1.4.2 ANGRY</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.1.4.3 OF BLURRED VISION</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>3.1.4.4 RED WITH COLD, HEAT, ALCOHOL ABUSE</td>
<td>8</td>
<td>20</td>
</tr>
<tr>
<td>3.1.4.5 (OF SKIN or EYES) INFLAMED, IRRITATED</td>
<td>18</td>
<td>8</td>
</tr>
<tr>
<td>3.1.4.6 WITH MARKS OF DISEASE</td>
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<td>0</td>
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<tr>
<td>&gt; ‘RED’ DISEASES MARKED BY EVACUATION OF BLOOD OR CUTANEOUS ERUPTIONS</td>
<td>0</td>
<td>0</td>
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<tr>
<td>3.1.5 MARKED BY BLOOD, FIRE, VIOLENCE</td>
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<td>↓</td>
</tr>
<tr>
<td>3.1.5.1 RADICAL, REVOLUTIONARY</td>
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<td>1</td>
</tr>
<tr>
<td>&gt; COMMUNIST, BOLSHEVIK</td>
<td>29</td>
<td>209</td>
</tr>
<tr>
<td>3.1.6 STAINED OR COVERED WITH BLOOD</td>
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<td>4</td>
</tr>
<tr>
<td>3.2 OF FIRE, FLAMES, LIGHTNING</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>3.2.1 OF THE SUN (AT SUNSET OR DAWN)</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>3.2.2. OF OBJECTS LIT BY FIRE</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>3.2.3. HEATED TO REDNESS</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>3.2.4. OF TRAFFIC LIGHTS AND SIGNALS (ATTENTION)</td>
<td>30</td>
<td>10</td>
</tr>
<tr>
<td>3.2.4.1 INDICATING LIMITS and/or DANGER</td>
<td>46</td>
<td>118</td>
</tr>
<tr>
<td>3.2.4.2 INDICATING IMPORTANCE</td>
<td>40</td>
<td>5</td>
</tr>
<tr>
<td>3.3. OF SKIN, FUR, HAIR</td>
<td>383</td>
<td>14</td>
</tr>
<tr>
<td>3.4 OF EARTH, SOIL, ROCKS</td>
<td>59</td>
<td>2</td>
</tr>
<tr>
<td>3.5 OF GOLD</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3.6. OF CLOTHES</td>
<td>11</td>
<td>5</td>
</tr>
<tr>
<td>4.5.3.1. RED CLOTHING (ITEMS)</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>&gt; PEOPLE DRESSED IN RED</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Table 2 The occurrence of ‘red’ and ‘czerwony’ in respective readings in corpus samples of 1,500 citations

The figures included in Table 2 are presented in a graphic form below for a more convenient comparison and contrast:
The final outcome of this analysis, outlined in sections 2 and 3, is presented in two radial networks below. Either illustrates the phenomena of meaning extensions, accounted for in terms of the conceptual mechanisms of metonymy and metaphor, as well as the salience of respective readings which is reflected in frequency figures obtained in the investigation of corpus citations. The conceptual structures of the meanings of red and czerwony reveal a striking similarity, which supports the claim voiced by Wierzbicka (1990: 140) that colours are anchored in the universals of human experience.” On the other hand, the entrenchment of the senses appears to be affected by cultural factors, which due to the geographical proximity of English and Polish speakers, do not differ substantially.
Figure 2 The radial network for the category of RED
Fig. 3  The radial network for the category of CZERWONY
This article is an abridged and revised version of a chapter in my unpublished PhD thesis titled *A corpus-based cognitive-semantic analysis of the primary basic colour terms in English and Polish*.

In the implicational hierarchy formulated by Berlin and Kay (1969) red is the third colour term to appear in a language throughout its history. As such, it also reveals a significant level of salience, and therefore, may be expected to be highly polysemous.

*Kermes* was the source of red dye for centuries in Eastern Europe. It’s similar to the cochineal insect in the Americas, which also yields a red dye. The grubs were gathered in June, and they gave the name for the month of June in Polish (*czerwiec*). Source: [http://www.gbarto.com/multilingua/slav1/blog/2004/07/colors-i.html](http://www.gbarto.com/multilingua/slav1/blog/2004/07/colors-i.html)

Casson (2008) notes that: “Colorant and textile names such as russet, crimson, and scarlet were the earliest secondary color terms innovated. They referred to ingredients and products of color processing and, thus, were proximate entities that culture members could readily use as sources for new colour terms.”

Wyler (1992:40), however, claims that the Indo-European root *rhudira-* meant ‘blood’ as well as ‘saffron’.

The salience of the colour of blood was exploited in a 2004 British zombie comedy *Shaun of the Dead*. The remark “You’ve got red on you” with reference to the blood on his clothes is a recurrent motif in the movie.


According to Nestor & Tarr (2008): “Research on differences in skin tone associated with gender proves that men tend to have more red pigment in their faces and women have more green.”

See Ortony (1993:417) for a detailed analysis of similes with *beetroot*.

For Darwin (1872) blushing was “the quintessential human expression, far more so than smiling or laughing” (Ricks 1984: 50), as animals do not turn red with embarrassment.

Source: [www.whonamedit.com/synd.cfm/1789.html](http://www.whonamedit.com/synd.cfm/1789.html)


Source: MARTIN, Gary. No date. Available at: www.phrases.org.uk/meanings/paint-the-town-red.html>

Sanders (2001) notes that fire evokes the “image of purification and renewal.”

The same metaphor motivates Polish phrases *płonąć z miłości* (‘burn with love’), *gorące noce* (‘hot nights’), or *rozpalone zmysły* (‘burning/heated senses’).
16 Isaiah (1: 18) “Though your sins be as scarlet, they shall be white as snow.”


22 “In nature red is often associated with male aggression and display, suggesting high levels of testosterone. Male mandrills, for example, have red coloration on their faces, rumps and genitalia that they use to communicate their fighting ability to other males. So teams in red will subconsciously feel tougher, as well as intimidating the opposition.” Source: DART, Tom. THE TIMES, March 12, 2008.


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