

Meanings of the Color Yellow and Its Color Associates, Yellow-Black and Yellow-Green*

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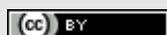
Abstract: Embedded in culture historical research on color, the present study contributes to the hypothesis that a given color only obtains its cultural or symbolical meanings in association with another color. By analyzing Hungarian examples of the color yellow, I will demonstrate that a color may have associations of a different character in relation to another color: this association may rely on symbolism alone, as seen in the relationship between yellow and black in connection with the concept of impurity tied to bile, excrement and dirty soil. Connections between colors may also be based on sensory-psychological/cognitive similarities, such as those drawn between yellow and green in earlier times across Europe, an association that can be traced in some archaic elements of Hungarian culture, such as in the ideas connected to jaundice. In addition to this argument, I also propose that, out of excreta, compared to feces light yellow urine is closer to the category of white associated with purity (through the analogy of white wine) than to yellow which (also) symbolizes impurity.

Keywords: *basic color terms, cognitive connection of color, color symbolism, color metaphor, impurity, bile, mud, urine, excrement*

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As the French historian, Michel Pastoureau, stated in his cultural historical monograph on the color black, "A color never stands alone: it obtains its meaning, it functions in social, artistic and symbolical senses, if it is associated with several other colors" (2012: 11). The

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present study discusses a group of the symbolic meanings surrounding the color yellow in order to substantiate the truth of Pastoureau's statement. In her groundbreaking, aesthetical study on yellow, Sabine Doran deplored the fact that yellow was, "one of the least discussed colors in scholarly writing" (2013: 2). Since then, several papers have examined the question of yellow, including Hickey's (2015) research on medieval to early modern medical texts and the practice of uriscopy, Pastoureau's historical summary (2019) and Jonauskaite et al's psychological study (2019) spanning fifty-five countries. Hickey (2015) concluded that yellow is not necessarily negative symbolically and that "good yellow can equate with health." My own research on Hungarian sources showed that the yellow color of the urine may in fact have a positive, medicinal connotation (even a healing effect), however, in other contexts, especially in association with black and green colors, it is exclusively negative.

My investigations have also shown that the association of yellow with impurity is neither separable from the similar connotation of another color, black, nor does it stand alone in socio-cultural (i.e. cognitive-linguistic) terms, but is tightly interrelated with its spectral neighbor, green. My paper is thus more strictly about the negative symbolic connotations of yellow: in this sense is a continuation of a former study of mine on the cultural aversion to yellow (Bálizs 2016) in which I have drawn the following conclusions about the Hungarians' negative attitude to the yellow color:

1. The color yellow is missing from the traditional costumes worn by Hungarian peasants in many regions, a circumstance that is only partly attributable to the associated negative symbolism. As regards perception, this absence may infer that, in an aesthetic sense, Hungarians avoided both bright (lemon) yellow and pale hues of yellow. Psychological research has found that the former tones (on large surfaces at least) hurt the eye with their harshness and are psychologically agitating, while the latter are closer to (colorless) white, and as such are associated – in the taste of the peasantry – with seediness or discoloration.
2. Although in modern Hungarian society yellow is primarily the symbol of envy, in both written sources from earlier centuries as well as the phraseology of the language, yellow often symbolized death, illness and physical weakness. As has been pointed out by several scholars, this is partly due to the fact that yellow is in real/physical connection with death and is a symptom of certain pathological conditions. According to my observations, the aforementioned negative connotations are associated with two different yellow tones that also exist as color hues of the human skin: the light/pale yellow of people suffering from certain diseases and the green-tinted shade of yellow that appears in the skin of dead bodies during a phase of decomposition.
3. Yellow used to be related to the notion of impurity in the Hungarian culture. This may be explained by the fact that people perceive broken yellow hues (especially brownish or greenish yellows) as filthy or dirty, including the color of fecal matter earlier subsumed under the cognitive category of yellow, pus, mucus, ear-wax, vaginal secretion, etc. (Common people in olden times consumed relatively little meat, and that explains the presumed lighter color of their feces – similarly to that of

people on vegetarian diet – because excrement gains darker hues from meat, cf. Pieper 1997: 35). Moreover, *sárga* ['yellow'] as both a color term and a symbol designated the hue of (loose, diarrheal) stool in relation to its original, broader linguistic and symbolic meaning. It is therefore no coincidence that in Hungarian, the compound word *bélsár* [lit. 'bowel mud', fig. 'ordure, feces'] evolved with the meaning of excrement (the component *sár* ['mud'] also refers to a meaning of yellow). Additionally, the etymologically different words *sár* and *szar* ['shit'] did not accidentally assume similar meanings. Apart from the phonological similarity, I presume that perceiving the colors of the signified things (mud and feces) as identical led to this conceptualization (Bálizs 2016: 107).

In the following section, I will discuss notions concerning yellow and black bile while concentrating on the question of how the colors yellow and black are related to the concept of impurity. Finally, I will touch upon folk cures for jaundice and point out the close cognitive connection between the colors yellow and green. (I use the adjective *cognitive* to signify knowledge with both linguistic and psychological facets studied by cognitive linguistics, cognitive psychology and cultural anthropology alike).

Bile as "Yellow Mud" in the History of Hungarian Medical Discourse

Although bile is actually greenish-yellow in color, early Hungarian medical books employ a diversity of color attributes to denote *epe* ['bile'] such as yellow, green and black, but also refer to a lemon color, *tikmonyszékszínű* ['yolk color'] (Lázár Színi 1980: 136) or *krispány színű* ['verdigris'] (Milesz 1778: 58). This variety in shades finds its precedent in the fact that from the beginning of medicine, two kinds of bile were recorded, including yellow (which can be both yellowish and greenish) and black. Hippocrates, followed by Galen, developed the "humoral system" to group bodily fluids/secretions (Földényi 2015: 59). Four fluids were identified (blood, yellow bile, black bile, phlegm/saliva/mucus) and sickness was traced to an imbalance of these bodily fluids, i.e., the excessive presence of one or the other. Each of these life-giving bodily fluids was thought to correspond to one of four kinds of colors (red, yellow, black, white), a prime element (air, fire, earth, water), a combination of the dry/wet and cold/warm oppositions (such as warm/wet, warm/dry, etc.) and a personality type displaying specific physical and psychological features (sanguine, choleric, melancholic, phlegmatic). This holistic theory of humors combined physiology, psychic disposition (temperament) and bodily appearance in order to provide an evidential explanation for every illness. The dominant tradition in classical medicine for centuries, the humoral system's legitimacy was not questioned until "natural science and medicine came into possession of direct knowledge about what was going on in the human body, under the skin" (Porter 2003: 49).

This ancient theory of humors holds that yellow bile (out of the four humors or bodily fluids located in the liver) was an indispensable discharge for digestion. A person with a pathological excess of this bile becomes "choleric, i.e. venomous (Hun. *epés* [lit. 'bilious']), or malicious (Hun. *rosszmájú* ['having an evil liver'])", short-tempered and evil-tongued. Externally, an excess of yellow bile is indicated by the patient's yellow complexion and vomit or

by a "thin muck" that displays the greenish-yellowish color of bile. This might also be an indication that earlier the Hungarian word *sár* ['mud'] with connotations of 'yellow, filth, secretion, etc.' signified not only bile: *epesár* [lit. 'bile mud']) but also feces: *bélsár* [lit. 'bowel mud'] and the gastric secretion: *sár, sárvíz* [lit. 'mud water']. Since, according to this theory, the "yellow mud" found in the stomach and feces is a symptom of a disharmonious excess in bile compared to the rest of the body fluids, its removal from the body has a beneficial influence on health. This thought underlies the folk belief (present as late as the nineteenth and twentieth centuries) that when the body produces too much bile, the excess must be removed "up or down" as "vomit or diarrhoea" (Grynaeus 2008: 183, *epét okád* ['vomiting bile'] Ujváry 2002: 202). This popular idea must derive from early, modern-age medicine in which humoral pathology of classical origin "had an obstinately persistent afterlife" (Birtalan 1983: 54).

The Word *Sár* ['Mud'] and Its Connotations of Bile, Vomit and Stool in Hungarian

Written sources attest that for centuries transition between diverse *sár* types was thought possible; even in the twentieth century, in some places it was even believed that *epesár* ['bile mud'] could easily transform into *sárvíz* [lit. 'mud water'] or *bélsár* ['bowel mud,' i.e. feces]. These manifestations demonstrate the belief in the health-restoring effect of the removal of excess bile. As late as in the eighteenth century, the medicine cabinet of intellectuals also included various emetics to this end (Kósa 1988: 187), while laxatives had dialectal designations: *sárepe pirula/por* ['mud bile pill/powder'] (Hosszú 2002: 820). In the first half of the twentieth century, based upon the meanings of the Udmurt word *voz* ['bile, green/yellow, envy/wrath'] linguist Katalin Bartha concluded that "there are physiological reasons...for yellow to symbolize envy." In her opinion, yellow became the symbol of envy and other negative characteristics because in folk belief "one who has a lot of bile is wrathful, envious, morose or *epés* ['bilious, biting']" (Bartha 1937: 16). Since Bartha's examination, it has been verified that the meaning 'bile' refers to the noun *sár* (documented since the sixteenth century) is indeed related to "the yellowish hue of the bile and of patients suffering from bilious conditions, and also, to tracing cholera to bile disorder," which is also reinforced by the etymological connection between the words for bile and yellow in several languages (e.g. Ger. *gelb* ['yellow'] *Galle* ['gall, bile'] or the figurative meanings of Mong. *sira* ['yellow'] as ['bile, wrath, anger'] Khabtagaeva 2001: 74). Tamás Grynaeus observes that in the Hungarian town of Makó, a person "who is patient, who does not lose his temper or get annoyed by trifles" is termed *galambepéjű* [lit. 'one with the gall of a dove'] as an antonym to a malicious/wrathful person (Grynaeus 2008: 183).

In Andrea Csillag's (1999) view, the implications of the Hungarian phrases *elönti/elfutja az irigység/az epe/a méreg* [lit. 'inundated/be overcome by bile/envy/wrath'] all have the same taste: they are bitter. When the aforementioned sentiments overcome us, "we feel bitterness." To her view, in the organism of an annoyed person some material is genuinely produced which acts as a toxin in the long run: in other words, this material is adrenaline (Csillag 1999: 281). These phrases, however, do not only allude to the feeling of bitterness behaving like a "coloring agent" that brims over the "container" of the body as Csillag thinks (1999: 279). In earlier times it was earnestly believed that someone who had lost their temper was filled with bile and that this fluid could spread to the tiniest particle of the body (see Calepinus' interpretation of bile: "liquid

flowing in the body" Beke 1937: 7). It was presumed that when this bodily fluid becomes excessively accumulated in the liver, blood can transport it to any internal organ, even mixing it with breast milk. With body and soul taken as one entity, this means that it can poison the entire person: the body by causing illnesses (icterus, cholera, etc.), the soul by inducing evil passions (wrath, jealousy, etc.). This holistic approach to the human organism is implied by the following sayings:

(concerning the body surface): *Epe sáppasztotta* ['Bile caused her paleness']

(concerning the inside of the body): *Meg járta az epe tüdejét és máját* ['Bile has spread over his lungs and liver']

(concerning the soul): *Ki teccik szemébül az epe* ['Bile (i.e. ill-will) shows through his eyes'] (Dugonics 1820: 191–192).

It should not be forgotten that envy, bile and wrath are identical in color, too, in addition to taste: they are yellow or green, and bile and feces may also have similar hues. The droppings of geese are clearly yellowish-green, which inspired the designation of a color tone: *lúdszarzöld* ['goose shit green'] (own collection) / *libasárzöld* ['goose mud green'] (Földvári 2009: 386) / *libaszarszín* ['goose shit color'] (Csúry 1936: 36., cf. Fr. *merde-d' oie*). Variants of the latter color terms referring to the excrement and the color of the geese (e.g. *libaszín* ['goose color'] (in Mezőkövesd, cf. Dala 1972: 593, 595); *libazöld* ['goose green'] (in Doroszló, cf. Raj 1994: 38); *libazöld* ['goose green'] (in Piliny, see Nyáry 1909: 129, and in Bába, my collection) were used in several Hungarian settlements to designate varying hues. Yet these descriptions always occur on the spectrum of yellow and green tones. In some places, the color was only associated with the color of goslings (*kislibasárga* e.g. in Kalocsa, cf. Romsics 1998: 409, 410). However, it is quite likely that the latter is a designation of goose dung color and the form and greenish yellow hue of downy goslings just leaving the egg-shells are used with a euphemistic intent. In Hungarian literature, the word *méreg* ['poison, venom, material against life; anger', but in former times also meaning 'accumulated pus' (!)] was sometimes attached to the words *epe* ['bile'] and *irigység* ['envy'], associated with green in some languages and with yellow in others. These words were then combined to form *irigyméreg* ['malice'] and *epe-méreg* ['outburst of wrath']. As was seen earlier, classical humoral theory attributed malevolence and the outbursts of negative sentiments (suddenly lost temper, wrath) to greenish-yellow bile or more precisely, to the anomalous excess of yellow bile. Evidently, this idea must have largely contributed to the association of the color yellow/green with envy/jealousy and anger, and also to the antipathy of some European people to (greenish) yellow even in our days.

"White" urine, "black" dirt

In his study on universal comparative color symbolism, Victor Turner links the negative connotations of the color black to feces he defines as "dark" colored (166: 58), but concedes that mainly Far Eastern philosophies – possessing a high regard for the color yellow – associate the excrement with black. Additionally, in other cultures urine is often ranged among positive/white symbols (1966: 80). My own research substantiates the fact that, once also encompassing part of the brownish tones, in the Hungarian language yellow became attached to the concept of

excrement (Bálizs 2016: 107). As regards urine, starting out from the case of the actually yellow-colored wine termed "white," we may pose the question of whether our ancestors subsumed the color of urine – similarly to white wine – to (positive) whites, or to yellows symbolizing impurity including the hue of feces.

According to Michel Pastoureau (2012: 51) calling the yellow-toned white wine "is simply part of the etiquette" (2012: 51). In my opinion, several things had an effect on this state of the "etiquette." On the one hand, it may derive from the history of the development of color classification. In the famous hypothesis of Berlin and Kay (1991), color systems that only divide the physical spectrum into three parts (e.g. the Ndembu studied by Turner) classify a part of the fainter colors – including some fainter hues of yellow – under the category of white/light. This categorization was probably the case in the early phase of the history of every "advanced" language (having more color terms than three) including the European languages. (The dark/black category presumably included the dark and cold hues, while the darker yellows, orange, red, pink, purple and brown belonged to the warm/red category, see Kay et al. 2009: 3). Another factor in support of the evolution of the name for "white wine" is that, traditionally, early Hungarians must have associated white with water. As was mentioned earlier, humoralism also attached colors to the four bodily humors, thereby associating transparent saliva with white. During my research, I have also found that in Gyimesközéplök, Transylvania, for example, *fehér* ['white'] still expresses the notion of colorlessness. This color term is used in at least four meanings here: 1. "snow white;" 2. "silver color;" 3. 'nature-given, natural color' (denoting a light color like that of undyed hemp, flax, wool, or freshly cleft wood); 4. "transparent." The latter meaning refers to the color of water, saliva. I deem it likely that, given its paleness and transparency in comparison to the majority of red wines, the color of white wine was therefore compared to the "whiteness" of water. Thirdly, the association of this noble drink to white is not surprising since this color has positive symbolic connotation, whereas (light) yellow mainly has negative meanings. With this fact as the point of departure and presuming that the choice between colors was fundamentally determined by value judgment: wine was associated with white because both the drink and the color were judged positively, then it is not sure that the same white – meaning goodness, clarity, etc. – was associated with urine. If these linkages were basically determined by the cognitive classification of color, light-hued urine – similarly to wine – was perhaps more likely attached to white (see the following: "Yellow is placed next to white on the Aristotelian spectrum, and is therefore close to the clarity and pure perfection of white" Hickey 2015: 16). After all, it is as transparent as "white" water/saliva, and also, when diverse tones of yellow were not yet grouped in a separate category, its color could only fit into the white/light color category.

As my investigations have revealed, new light might be shed on the tighter association of urine with white or yellow color by the fact that in Europe urine is not unambiguously deemed impure, particularly in comparison with the filthiness of the other excreted matter, feces. This perspective is supported by the fact that, beginning in antiquity, the medical use of urine was prevalent worldwide: "from Mexico to Japan, and from Tahiti to Hungary" (Magyar 2009: 20).

Always available to even the poorest, this remedy was most often used by the Hungarian peasantry to heal fractures, sprains, the shakes, illnesses of the eye (gum, stye) and earache (Hoppál–Törő 1975: 47). Similarly to nails, umbilical cord, menstrual blood, etc., fecal matter had a far smaller role in healing: “rather, a generally acting magic influence was attributed to it” (48). In the few cases in which excrement was used in lay medicine, it was used externally. By contrast, urine was not only used externally, to wash or compress the sick body part, but also internally, by drinking it (Hoppál–Törő 1975: 47). The following case was recorded in the 1950s: “an extremely clever peasant was being cured at a clinic, and he recovered perfectly...once he was asked whether he was to go on taking some medicine. His answer was: ‘I’m taking the medicament prescribed in Pest, but I still drink a deciliter of still warm urine every morning’” (Bencze 1957: 228). Due to the trust in its positive effect, urine was consumed as late as the twentieth century. Excrement, however, was not consumed in earlier times either: “eating shit” (according to a nineteenth-century Hungarian source, too, see Moravcsik–Zohfál 1885: 226) could only happen among the mentally deranged. This leads to the conclusion that (normally) transparent and light urine, which could therefore be deemed “pure” and “white” as water, did not generate the same aversion or disgust in our predecessors as we would expect today. This finding supports the hypothesis that the urine deemed beneficial for health was associated with white (or the category of light colors) rather than with yellow, a shade believed not only to be more impure, but also associated with the color of feces.

Impure Black

Darkness is the “natural” opposite of light, and parallel with that, the “cultural” counterpole of white is black (Pastoureau 2012: 506). In Europe, the white/light category is usually tied to the notion of purity, hence its antonym black/dark is regarded as impure. Similarly to the Far East (Turner 1966: 80), in the European cultural sphere the concept of “filth” and “pollution” is primarily linked to hues in the category of black and dark tones. The history of black mourning also verifies the early understanding of black as impure. Research has found that this color of mourning comes from garments “worn dirty,” that is, from the dark tone of smudged, undyed fabric. In the beginning, black mourning meant the use of black wool and “unadorned, shabby, often dirty clothes”, and later the garments “blackened to ash color” (Flórián 1994: 347) instead of the raven black lustrous fabrics of later times (Fél 1935: 6). It may of course be related to the fact that for a long time deep black as a dye could not be produced (Pastoureau 2012: 31).

As was mentioned earlier, in ancient times a black-colored bile was also known in Europe. The presence of such a designation completes the idea that, in the wake of the humoral theory established during classical antiquity, European societies believed that a person who had an excess of the “saddening” black bile (per the occurrence of the attribute *szomorító* [‘saddening’], see Beke 1937: 73) refers to the melancholic (Gr. *melaina chole* [‘black bile’]) personality type. Other than a predisposition toward melancholy or spleen, the main trait of this type is an inclination to evil thoughts caused by “the fumes of black bile rising to the brains.” Albeit originally associated with yellow, with the passing of time, wrath, envy, etc. were also included in the beliefs about black bile, thereby ascribing irascibility to black bile in addition to

depression and being suicidal (cf. Slo. *črna zavist* ['black envy, gnawed by black envy'] Gadányi 1983: 120). The nature of this black bile was already questioned in antiquity. Some researchers presume that its presence was deduced from clotted blood in vomit or excrement, while others think it was only added to the set of bodily fluids to complete the classical systems of four represented by the elements, the cardinal points, etc. (Groák 2008: 112). The former assumption may be supported by several occurrences of black bile and black blood in the same text in Hungarian sources. Like black bile, black blood usually indicated an abnormality; not very long ago, in some villages it was still believed that when the blood obtained from the leech applied to a person was not "nice red" but "thick black," this shade indicated that the person was ill (Grynaeus 1962: 145).

The Hungarian word *vér* ['blood'] not only appears with the word 'black bile'/'bile mud'/'mud' in sources. As a seventeenth-century source demonstrates, some Hungarian authors conceived of all four bodily fluids as blood: "*Négy vérből áll az embernek teste: tiszta veres, sárga, nyálás és fekete*" ['A man's body consists of four kinds of blood: pure red, yellow, mucous and black'] (Szlacky 1983: 345). It is also certain that Hungarian sources more frequently mention black bile in connection with constipation, that is, with darker-hued feces. Yet this interpretation does not mean that the existence of black bile was originally conceptualized based upon the darkness of excrement caused by blood. Instead, all it means is that this black (actually non-existent) bile could be used in both early and later centuries to explain the pathological origin of the darkness of blood, feces, vomit or even skin, as the "blackening" of these materials could easily be blamed on a dark secretion (see Porter 2003: 46). As it was originally imagined, this dark bile was dark and thick as its main characteristics, was linked to spleen among the internal organs and to the earth among the prime elements. It is dry and cold, "like iron: from ice cold it can turn hot red all at once, as Aristotle noted" (Starobinski 2013: 6). Its excess chiefly causes headache, epilepsy, disorders of the liver and digestion and skin diseases, apart from the aforementioned psychological illnesses (Starobinski 2013; Földényi 2015: 16). "Some of Hippocrates' writings clearly reveal that black bile was conceived of as a sort of concentration" as if it were "the sediment from the evaporation...of other fluids" (Starobinski 2013: 6). In Galen's view, black bile is so strong that it even corrodes the earth (6), and therefore it is never found in the organism in a condensed form but only diluted (Porter 2003: 46). Thus, black bile contains all potential evil in the rest of the bodily fluids, first of all yellow bile, in high concentration. In effect, black bile may be interpreted as a "dual compound" in which the ominous powers of the color black mix with the really biting, bitter, irritating characteristics of bile, as Starobinski concludes (2003: 6).

Classical medicine thus included consideration of a highly dangerous black bodily fluid. The question, however, remains, of why it was not possible to subsume all harmful features under a single bile. Although the Greeks used a single word (*chole*) to designate discharged bile (even Hippocrates himself spoke of one bile at the beginning and the "blackening of bile," and not of two, "as in his later works," see Földényi 2015: 15), in humoralism two different fluids became fixed, perhaps due to the constraint of adjusting to the system of four, or for another, unknown reason. One of the two kinds of bile was regarded as much more harmful, a belief expressed by the attribute dark/black (*melaina*), a color that – far from incidentally – was

registered as a premonitory sign of death. At least in Hippocrates' works (more precisely, in the works attributed to him) the color black is a portent of death. For instance, in his work discussing diagnosis says that when the excrement displays this color it is "surely lethal" (see Sattler 1964: 66). Black-hued vomit is a similarly bad sign, and the following is mentioned in reference to dark-yellow urine, a symptom of illness: if "its quality [i.e. color] remains the same, you must be prepared that the patient will not recover. Even more deadly is the stinking, black and dense urine" (67). In the Middle Ages, black was unambiguously an impure color: "black bile was also dubbed the bath of the devil (*balneum diaboli*)" (Földényi 2015: 80. (It is worth noting that the Hungarian words *fürdő* ['bath'] and *fertő* ['filth, slough'] derive from the same root, as will be discussed later.) It is possible that this ancient, classical black that predicted death was compared to harmful impurity from the very beginning. Based upon this, it may also be possible that black bile was added to yellow bile and the rest of the body fluids so that they should include one which (whose anomalous excess) was scientifically responsible for the gravest or lethal diseases precisely because its color symbolized death/impurity. If the concept of a lethal black was not created to provide a medical explanation for the patient's death, it was still endowed with a negative force that was primarily detrimental to the psyche and with the color black (a shade not characteristic of bile) which was suitable for expressing danger to human life and mind. In fact, black must be the synonym of harmful/polluting in the context of this bodily fluid, which is also verified – according to Starobinski – by the fact that the color had been entwined with the concept of danger (dangerous matter, poison) causing grave illnesses or death already "prior to the formulation of the medical doctrine" on bodily fluids (Starobinski 2013: 6; Földényi 2015: 15).

Hungarian Sources Linking Defamation to Black Bile and Mud/Shit

Since Galen's teachings and the humoral theory he elaborated dominated medicine for some 1,500 years, it is no wonder that even in eighteenth-century Hungarian sources the gravest physical or mental problems were connected to black bile. The following quotation aptly illustrates that the most harmful and impure things were connected to black bile in therapeutic books from this period: "the meat of the bear has a disgusting smell, and it is indigestible: even if a hungry stomach could squeeze some moisture out of it, it would be full of mucous, impure, coarse, black mud" (Mátyus 1787: 157). The bear of the text was looked upon as the king of the beasts in most parts of Europe until the twelfth century, but was later repositioned by Christianity as a devilish beast (Pastoureau 2012: 73). It is not surprising then that the author quoted above considered the consumption of bear meat as detrimental to humans and therefore gravely polluting. To quote another example: in an 1837 issue of the periodical *Tudományos Gyűjtemény* ['Scientific Collection'], yellow facial color is attributed to bile deposited in the skin, while green denotes a sign of hepatic disease. The yellowish-black color is alleged to indicate "incurable jaundice and stoppage" (L. I. 1837: 41). These views were registered among the common people in simplified form even at the end of the nineteenth century. To quote Bálint Csúry, "folk belief knows of two kinds of jaundice: black and yellow. Black jaundice is more dangerous, usually claiming the patient's life" (1936: 286). If jaundice is substituted with filth in the quotation above, just as valid a statement is reached. As regards the analogy of pathological

ideas connected to black and yellow bile, black foulness was probably thought to be worse than yellow foulness. If so, then, e.g., throwing (yellow) mud and literally throwing (certainly solid, hence darker) fecal matter at somebody must have been judged differently, even though both meant defamation by means of "filth." At the time of the Austro-Hungarian Monarchy, Maria Theresa's decrees include – to mention some forms of punishment – being pelted with mud. Court documents contain a possibly graver variant: obviously wishing to mortify his adversary, the defendant "cast mud with dung at him." In other cases, the property of the enemy was defiled with fecal matter (Szenti 2009: 476). The following was a particularly drastic communal punishment for a person found guilty of calumny: "the executioner smeared human dung, feces from a pail onto the [culprit]'s mouth, face and stuffer her/his mouth with it" (553).

As regards filthiness, the meanings of the colors yellow and black merge in spite of the fact that, psychologically, yellow is light and black is dark. Based upon chromatics these colors are not related to each other, whereas their symbolic connotations – at least in the designation of the notion of impurity – are similar. At least in Hungarian, this connection is also manifest in the joining of the two color terms: *fekete-sárga* ['black-yellow'] or *sárga-fekete* ['yellow-black']. This attribute most often appears in connection with skin color and exclusively in negative contexts in the sources: *feketesárga* is a "sickly color, blackish-yellowish" (Penavin 1968: 231). Also, villagers in Átány say that the skin of those who starved a lot in winter became *fekete-sárga* (Fél–Hofer 1997: 192). It can be presumed that the black-yellow attribute used in the context of skin is to be traced to the previously mentioned concepts regarding bodily fluid: as was noted earlier, the black or dark color of the sick person's skin was taken as a visible sign of a pathological excess of black bile. In fact, no illness turns skin black, although there are some conditions that change skin to a yellowish-grey. Maybe the black attribute of the deleterious bile was added to yellow, the real tone of the abnormal skin, and this combination survived into twentieth-century dialects. Independently of the latter "sickly color," the association between yellow and black can be found in folklore, too, and appear in an archaic prayer side by side: "Where was our Lord Jesus Christ? On the yellow shore of the Black Sea...." (Erdélyi 1999, 307). The still common saying *jön a fekete leves* [lit. 'now comes the black soup'] means that "the worst is yet to come" originally took the form of *hátra van még a' sárga leves* ['the yellow soup is to yet to come'] in the eighteenth century (Szabó–Kósa–Vámszer 2003: 645.) Toward the end of a meal some sort of a dark soup was indeed served which acquired its dark color from cooked blood (see Grétsy 2016).

In addition to the two kinds of bile, the association of yellow and black – of all colors – with impurity might also be related with the color of the earth surface we tread: mud is yellow, the soil is black. In reality, the color of the ground (both soft and hard) is a blend that is greyish, yellowish or brownish (or even reddish) in color. Within the realm of Hungarian symbols, these two colors are associated with mud and earth. As the painter, Dénes Gulyás, states regarding associations with ochre, "The toning down, the deepening of yellow, binds this color, and calls to life corporeal, dry, earthly and palpable images." In the 1970s, Gulyás made experiments of color patterns with students from the Academy of Applied Arts. Ochre yellow color patterns elicited images of leaves, loess, the desert and a river of turbid water. The association of mixed, brownish-yellow tones with dryness probably arose from dry, autumnal leaves and the desert,

while the muddy river is a clear indication of the attachment of yellow to moisture and verifies the notion of yellow mud. This relationship is further reinforced by some answers given to broken yellows and olive greens which were associated to quagmire, swamp (Gulyás 1979: 228).

The Impurity of "Low" Compared to the Purity of "High"

Through the opposition of dirty ground/earth (and the devils' world below) and the clean air-space above it (together with the firmament/God's abode), the dichotomy between purity vs impurity is also connected to the high–low opposition, the latter, negative element of which is represented by the colors yellow and black. Regarding the human body, research has mainly found the opposition of the upper and lower body (or head and foot, see Vargyas 2008: 125) in terms of purity and impurity prevalent in eastern cultures, for example this interpretation of the body found among the Roma may be rooted in their Indian origin. A similar phenomenon can be documented among European peoples, too. In the Christian cultural sphere, it is the sole/foot which is the dividing line in the human body, while among the Roma the hipline is the divide (see Fábiánné Andrónyi 2015: 92). Below this divide fall the filthy (external) things, above which everything is pure (internal) human, or more precisely, adequate or worthy of human existence. This interpretation also implies that the European concept of the dirtiness of the ground may lead to the opposition of nature vs culture, so often encountered in anthropological research. Jesus' demonstration of self-humility by washing the dust of the earth off his disciples' feet offers one example of the sole/foot being the border between pure and impure parts of the human body. Another indication is the Hungarian overstatement that someone loves another person so much that he even kisses the prints of her foot (i.e. of her sole). In older times, it was a custom to kiss the footprints of monarchs and other high dignitaries, thereby expressing that even the dirty footprints of these sublime persons were precious. In contrast, when someone breeches a rule or law – figuratively speaking, *lábával tiportja/sárba tapossa* ['treads it underfoot/into the mud' (with his soles)], or, to use a phrase of the Szeged dialect of the Hungarian language, *sárba ránt* [lit. 'drags it into the mud', fig. 'humiliate, shame sy'] (Bálint 1957: 387). A drunk person is said to have drunk himself down to the yellow earth: *leitta magát a sárga földig* in which phrase yellow earth means 'filthy ground' and not clay (see *mocskos részeg* ['dirty drunk'] *holtrészeg* ['dead drunk']). At the same time, it is clear that in the previous sayings the dirty, polluted – or metaphorically speaking, muddy and shitty – ground is important, not the actor. (The *sárga* actually incorporates all the mentioned adjectives, but the word *sáros* ['muddy'] also used to have a 'yellow' connotation, see Kiss 2012: 360). The sole/foot is brought into the picture because man normally only touches the impure ground with this body part, which is also polluted by the decomposing droppings of animals. For Jews and Christians, reptiles or worms are repellent because these beings come in touch with the contaminated earth with their entire body surface. Islamic teachings place special stress on cleanliness, ritual washing and cleaning the whole body with water (taking a bath), but on exceptional occasions it permits ablution with the dust/earth that was just qualified as impure. As is found in the Quran, "If you are in a state of impurity, purify yourselves. If you are ill or on a journey... and you find no water, then perform tayammum with clean earth and rub therewith your faces and hand, at a high place" (*Kurán The Holy Quran* Transl. Dr. B. Miháffy New York n. d.:106). The Surah makes it clear that the

sand/dust used for this purpose must not be dirty, while only the mentioned Hungarian translation of the Quran includes the requirement of an elevated place, which would be in keeping with the high vs low, pure vs impure opposition.

Wet Mud, Yellow Desert Versus Fertile Black Earth

While this paper has so far discussed the symbolic meanings of earth and mud as interchangeable elements, it is possible that in earlier times wet mud had more adverse negative connotation than dry earth due to the fact that mud is soft, boggy, sticky and smudges passers-by more than dry earth (compare to *sár* ['mud'] also meaning ['swamp'] ['marshland']). This assumption is supported by the Hungarian word *fertő* ['depravity'] (connected to the verb *fertőz* ['infect']). Originally, *sár* denoted a boggy marsh or slough (Kiss 2012: 116). In older times, it also referred to a muddy place in which some *fertelmes* ['loathsome'] animals like pigs bathed or wallowed. Today, it mostly means *erkölcsi fertő* ['moral sunkennesess' 'moral slough']. (This metaphoric meaning evolved similarly in other languages, including English, German, French and Russian; see Benkő 1967: 896). Qualifying the fluidity of mud as something bad or polluting must have contributed significantly to the meaning of 'secretion' for the word *sár* ['mud, bile, feces']. While (wet, swampy) *sár* ['mud'] and *sárga sár* ['yellow mud' (with its primary meaning and not meaning 'bile' and 'feces')] is clearly a negative symbol, black earth is not necessarily negative, for black soil is synonymous with fertile soil. (In Slovenian the noun formed from the adjective *črn* ['black'] designates fertile soil: *srnica*, see Gadányi 1983: 112.) Black is the color of good arable land with a rich yield of crop; soil of this hue is often the symbol of the mother/the womb in Hungarian folklore (Erdélyi 1961: 592). Already extant in ancient Egyptian mythology, this "fertile black" (Pastoureau 2012: 23) is positive and life-asserting as profusion/life arises from it (*él* ['remain alive'] when they *él* ['live on, consume'] *élet* ['wheat, bread'] amply grown in the black soil). Over the centuries, this positive connotation of black was overshadowed by the harmful/fatal black of the Greeks (discussed earlier) and the black of Christian tenets that symbolize dark night, sin, death and the devil. The Graeco-Christian influence upon European culture is why black came to express impurity, yet also become polysemous by preserving its earlier "pagan" associations. In contrast, yellow is the color of bleak and barren wasteland/desert and sandy, poor-quality soil, hence it expresses sterility and, as such, represents the obvious negative counter-pole to fertile black. These findings suggest that the association of yellow with filth (and death) is really based on empirical experiences, compared to the association of black with impurity, which partially relies upon reality (white textiles greyed by dust, materials turning greyish black with must, mildew, things stained with smoke/soot), but is in a great part ideological, imaginary. Bile, in fact, is not black, but yellowish green. Poor/barren/marshy soil and even the corpse – believed to be pestilent in most cultures – is not black, but rather yellowish. As Michel Pastoureau describes it, "death-heralding black" is not necessarily, *par excellence*, bad/impure, nor is it, as doctors believed from classical antiquity, the deadly color indicating a fatal illness. The color yellow is (or can be) the genuine property of thin mud, secretions (pus, mucous, ear-wax, bile, etc.), metabolic end products (primarily feces) and the decomposing carcass, which Hungarians thought to be most pestilent in early times.

Since the tone of mud, secretions, etc. is not identical to the bright, yellow color of wild flowers (e.g., dandelions), it is not these bright pure hues, but rather blended yellows that lead to unpleasant psychological impression that are primarily associated with filth/foulness. These

blended shades are the greenish, greyish, brownish blended tones that correspond to the real colors of the bodily secretions and – in an earlier color system which included light browns in the category of yellow – of mud (wet soil). These equivocal yellow tones of diverse color components may evoke the concept of filth through the (archaic, maybe “archetypical”) experience of their physical connection with reality on the one hand and the (disquieting) psychological impact of their perception on the other hand. Yellow and green, however, are close not only because of the greenish-yellowish hue of bile or the color of the surface of sick or dead bodies, but also in the cognitive classification of colors. Reviewing some folk cures for jaundice will cast further light on the connection between yellow and green.

Jaundice: The Unity of the Colors, Yellow and Green

In Hungarian folk belief, *sárgaság* [lit. ‘yellowness’] or jaundice is caused by the yellowness of a dead body, transferred from the corpse to the living by objects or actions that were in physical contact with the corpse (e.g. the water used to wash a corpse). According to folk beliefs, when a newborn baby is jaundiced, its mother must have looked into a grave or seen a corpse (Vajkai 1943: 109). To contract jaundice, no direct physical contact is absolutely necessary, a concept also supported by the belief found in some villages that one who glances through the window of a dead person’s home may get infected with the disease (Pápay n.d. 244; see also Grynaeus 1974: 230; Bálint 1957: 388). Avoiding jaundice was why it was forbidden to go to a house of mourning unwashed, to eat there (Balogh 1986: 102, 119) or pick flowers from a grave (Vajkai 1943: 35). Accounts regarding the practices utilized to cure jaundice frequently include the application of diverse, metabolic products. A cure documenting the use of human excreta in Kalotaszeg was recorded in the late nineteenth century: “It also helps against jaundice if the sick person drills a hole in a living tree and puts his/her feces in it, reciting: Three misses went walking, one was yellow, the other white, the third red, the yellow climbed the white, the white climbed the red: let all three go now to their green father (Wlislockiné Dörkler 1892: 364). The same work includes a magic charm or incantation in which yellow, when encountering red, wants to kill the latter, positive color (red), therefore the color green slays the negative color, yellow. In a cure recorded in the Borsa Valley, animal dung appears in this context; a jaundiced patient was also to drink “a bottle of beer previously placed in a dunghill” (Vajkai 1943: 49). Further practices against jaundice include: urinating on stinging nettle (Bosnyák 1990: 437, see also Hoppál 1981: 264); on the grave of a deceased person bearing an identical Christian name (Bálint 1979: 181); into an unglazed mug (Csűry 1936: 286); into the scooped out middle of a carrot (Bálint 1979: 181; cf. Sinkovics 1958: 91; Vasas 2009: 108; Penavin 1978: 51). It was believed in several regions that drinking water from a gold object in a carrot is an effective treatment (Lenkey 1993: 200; Erdős 1959: 26; Csűry 1936: 286). Drinking from a gold object was also known in Sztána, but instead of water and carrot, wine and a wax cup were used while “a bit of goose manure” was also put into the wine (Vasas 2009: 108). The color analogy clearly connected beer, mugs made of yellow materials, carrots, gold and beeswax (in other cases lemons, pumpkins, egg yolks, chamomile tea, cornmeal, or simply a yellow ribbon) into these beliefs. I presume that the (grave) of a deceased person and human/animal excrement appear in this category not because their color once belonged to the category of yellow, but because they

are impure. Since apparently the illness is caused by impurity/yellowish green corpse, on the basis of the principle of *similia similibus curantur* ['similar cures similar'], only things of yellow color (various yellow objects/plants) can help restore failing health and do away with a yellowish skin color (see Schubert 1989: 353). It is harder to explain the involvement of green here, i.e. the "green father" as the living tree and the green striking the color yellow dead in the Kalotaszeg magic incantations, or the role of the green nettle (in urinating on stinging nettle).

The Contiguous Category of Yellow-Green

In the past, several languages used the same color term to signify the color ranges of yellow and green, a phenomenon which may be connected to the universal history of color classification. Berlin and Kay opine that when a community with its own language/culture is advanced enough to divide all the colors of the color spectrum into four categories, the meaning of these four color categories (basic color terms) is universally identical: white (cold colors); black (dark colors); red/yellow (warm colors); green/blue (cold colors) (Berlin – Kay 1991: 22–23). The last one of these compound categories was later labeled *grue* (gr/een+bl/ue) (Kay-McDaniel 1978: 630). After analyzing the results garnered by the World Color Survey (WCS) research program which explored the color terms of 110 non-literate languages, in the 2000s, Kay and his colleagues believed *grue* still to be a universally important category while simultaneously admitting that a six languages out of the examined 110 possess color terms that jointly cover the yellow/blue/green section of the spectrum. Native to Canada, the Cree language was also found in which yellow and green hues are ranged in a joint category. Kay additionally points out that some languages not studied under WCS utilize a compound yellow/green category, such as the Australian Arrernte or Salish spoken on the border of Canada and USA (Kay et al. 2009: 38–39). (Regarding the linguistic categories of yellow and green in languages outside of Europe see also the *World Map of Semantic Color Identities* in Borstein 1975: 790.) Among the non-written languages of our time (at least those studied in WCS) few subsume the green and yellow color fields into one cognitive category; in several cultures and languages possessing written historical documents (mainly found in Europe and Asia), a color term implying yellow and green jointly can be reconstructed. As was mentioned earlier, Katalin Bartha discussed this category in the Udmurt language (1937: 16). Katalin Sipőcz (1994) claims that the Mansi language used to have a "color name meaning 'green' and 'yellow.'" As for European languages, Kay also notes that ancient Greek used one designation for yellow and green (Kay et al. 2009: 41). Within Hungarian scholarship on the topic, in 1876, the noted orientalist, Ignác Goldziher, published in his volume written in German that "in Semitic languages" a certain word "was used to designate both green and yellow color" (Goldziher 2003: 177). In the first half of the twentieth century, Edit Fél demonstrated that "in German yellow *gelb* and green *grün* go back to a common *ghel* root" (Fél 1935: 12). Most recently, Gabriella Schubert has stressed that, "in Slavic languages the terms of the yellow, green and gold colors belong to a common word group" (Schubert 2013: 15).

Language	Word(root)	Meaning
Ancient Greek	χλωρός (khloros)	pale/dim, yellow, green
Indo-Germanic	<i>ghel-</i> from it: Old Slav žltъ and zelenъ	lustrous, yellow, green, bile; yellow; green
Uralic	<i>piša-</i>	yellow, green, bile
Semitic	<i>waraq-</i>	yellow, green, leaf

Although human perception differentiates between yellow and green, it is conceivable that in earlier stages of cognitive color classification these colors were interpreted as a contiguous color domain, a phenomenon closely connected to the fact that these shades neighbor one another in the physical spectrum (or its manifestation in the rainbow), meaning that the boundary between them is blurred. At least in Europe, these two colors are differentiated today. If we hypothesize that traces of this ancient or possibly medieval European custom of subdividing the color spectrum into larger units may have survived in some archaic cultural elements (including Hungarians, as seen in healing rites), the lingering presence of this ancient conceptualization may explain why green could overcome yellow in the ritual texts from Kalotaszeg. As was discussed earlier, at the time it was thought that jaundice was contracted from the yellowish-green hue of a corpse that mimicked the shade of a jaundiced patient's skin. At the end of the nineteenth century, inhabitants of Kalotaszeg probably no longer knew why the excrement they identified as yellow had to be placed into a living (green) tree in order to promote recovery. From the external/etic viewpoint, the return of yellow to green (or, per the other variant, the destruction of yellow by green) is based on the same analogical thinking as the internal/emic explanation of jaundice that was derived from the skin color of a corpse. When a jaundiced person urinates on the grave of a deceased person, he actually sends the illness (skin color) back to its origin (i.e., the impure corpse). When he simply urinates on nettles or puts "his muck in a live tree," the same act is committed in that yellow is returned to its place of origin ("its father"), the color green. If indeed in the European cultural sphere yellow and green were conceived as a unity (a concept present in several languages, i.e., ancient Greek, Semitic, Germanic and Slavic languages in which the same color term was used for the two colors), then here, too, the logic of *similia similibus curantur* is in effect. Similar is once again expected to cure similar: only in these cases, it is not the yellow color (as in the rest of the listed cures), but the green that is expected to do away with the yellow skin color of jaundice via this magic act and the accompanying magic incantation.

For European peoples, there must be some cognitive merge of yellow and green beneath the broadly overlapping symbolism of the two colors. Diverse European languages illustrate this overlap well. While in Hungarian envy or jealousy is associated with yellow, this sentiment is tied to green in Anglo-Saxon areas and Polish (Csillag 1999: 278; Sobczak 2014: 107). Although nowadays jealousy is exclusively known to English as the *green-eyed monster*, in Shakespeare's works yellow, moreover, orange was also associated with this emotion (Hickey 2015: 21). In Hungarian, the color of envy is yellow (or as it was written in 1849: "rút fekete-sárga irigység" ['ugly black-yellow envy'] Bolyai 2003: 237), just as in Romanian (*a fi galben de invidie* ['to be

yellow from envy’]; *a râde galben* [‘to laugh yellow’]). In Czech, however, green plays the same role instead of yellow: *zelená závist* [‘green envy’]; *zelený závisti/zlosti* [‘to be green in envy’] while in Russian green is used in an other expression: *позеленеть от злости* [‘to be green because of anger’]. In French, green is associated with fear: *être vert de peur* [‘to be green because of fear’] (Burešová–Golovantina 2012: 92), while for Hungarians *valaki holtsápadtá válik* [‘someone becomes as pale as a ghost’ lit. ‘become pale as the dead’] because of fright or fear while death and corpses are associated with yellow (*sárga halál* [‘yellow death’]).

Although today Hungarian and French refers to the sick complexion of people as yellow (a Frenchman would say: *vous êtes tout jaune* [‘you are quite yellow or pale’]); Hungarian also use *viaszsárga* [‘waxen yellow’] for such cases (Bálizs 2016: 105), in archaic Hungarian and even today in France green can be found in this context, too: Hung. *zöld* [‘very pale’] (Kiss 2012: 471). (Fr. *il a le teint vert* [‘his face color is green’] or *son visage est vert* [‘his face is green’]). The Burgenland Croatian tongue and Polish apply green to express a sickly looking face or “the facial color changed by wrath or anger” (Sobczak 2014: 109; Zádrovich 2009: 67). In some European languages, an inexperienced/immature person or rookie is labeled as “green:” *zöldfülű* [‘green-eared’] in Hungarian, *Gelbschnabel* [‘green-beaked’] in German and: *żółtodziób* in Polish. I refrain from adding more examples as this topic constitutes the subject of another focussed study.

Conclusion

To return to Pastoureau’s statement regarding the view that a color always acquires its specific meaning in relation to other colors, it must also be mentioned that this relationship can be both a “connection” and an “opposition” (Pastoureau 2012: 11). In addition to Pastoureau’s observations, this paper has demonstrated that the link between two colors may be very different based upon the relation’s nature. Black is solely associated with yellow via its symbolism, or, more precisely, via a definite aspect of its symbolism: both colors may indicate varying degrees of squalor. In the symbolic relationship of these two colors, both – contrasted – forms of relatedness as defined by Pastoureau can be seen. Although the association of black to impurity and death merges with the similar connotations surrounding yellow, in the context of arable soil, for example, an opposition arises between the meanings of the two colors with black expressing fertility while yellow signifies barren soil. In addition to black, green is also an “associate” of yellow. However, it is not primarily the symbolic, but rather the psychological and cognitive plane that links green to yellow. In light of the fact that no distinct line divides yellow and green on the physical color spectrum, there must have been a European (Eurasian?) color conception – partly verifiable linguistically – in which these two colors belonged to the same category. In earlier times, Hungarians may have viewed yellow and green as related (or equivalent in some cases), although today both constitute different categories. Today, these two colors are only understood as closely related by those who regard yellow as a component element of green, taking the subtractive mixing of the colors or pigments as the basis. The discussion of the latter subject would, however, exceed the scope of this paper.

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