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The volume under review originates from a workshop the first editor organized at the 17th International Morphology Meeting that took place in Vienna on 18–21 February 2016. This workshop, which carried the same title as the present volume, was intended as a forum for the discussion of the variety of lexicalization patterns in colour naming attested in a cross-linguistic perspective. The workshop itself was based on results of the EoSS project Evolution of Semantic Systems (2011–2014) carried at Max Planck Institute for Psycholinguistics (Nijmegen) on how meanings vary over space and change (cf. Majid et al 2011). The project included several Slavic languages, Croatian being one of them, among the 50 Indo-European languages included (cf. Raffaelli 2017).

The main title and the subtitle of the book reflect very well its contents. It becomes quite obvious that it takes a genuinely cross-linguistic perspective when we take a look at the number of languages studied as well as their areal distribution and genealogical variation. In addition to Slavic languages (Croatian, Czech, Slovak, Polish, and Russian), Germanic languages (English, German, Danish, Icelandic), Romance languages (French, Italian, Occitan), we also find discussion of colour expressions in a wide variety of other languages, such as Basque, Hungarian,

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Turkish, Ossetic, Korean, Gbaya, Arabic, and Hindi, while some of the chapters offer more synthetic, panoramic overviews of the situation in whole groups of languages (Semitic, Iranian, African, and Indo-Aryan). The multitude of languages and the complexity of colour systems naturally call for a plurality of methodologies and models, so it is not surprising that we find a spectrum ranging from fieldwork and elicitation to corpus linguistic methods, from classical descriptive and typological approaches to cognitive semantics and Natural Semantic Metalanguage on the model side.

Focussing on the main title, we realize how innovative the volume is. The issue of how linguistic communities segment the colour spectrum and match the segments thus identified with particular lexical expressions has been a traditional battlefield for linguistic relativists and universalists (witness some classical works like Berlin & Kay 1969; or more recent contributions like Hardin & Massi 1997, Biggam 2012, or Anderson et al. 2014). However, this volume offers a genuinely fresh perspective because its contributions endeavour to make an inventory of various linguistic structures or mechanisms (phonological, morphological, syntactic, and semantic) that are employed in naming colours (for which the series in which the volume appears seems to be more than a suitable venue). The central notion of the volume—lexicalization patterns—is elaborated on in some detail by the editors in the introduction. As the editors explain, this notion is of course related to Talmy’s (1985; 2001) work on systematic relations in language between meaning and surface expression, but it is not used in the same sense as in Talmy. They are not identical to “regularities in the way conceptual components are encoded in lexical items and hence distributed across the constituents of the clause in particular languages” (Levin & Rappaport Hovav 2019: 396), either. They are rather to be understood as a set of “diverse realizations of linguistic forms that are available to speakers in the process of naming a certain concept” (p. 3), and are thus very close to what Lehrer (1992: 249) calls *lexicalization typology*, i.e. “characteristic ways in which language lexicalizes concepts; that is packages semantic material into words,” or to Blank’s (2001: 1596) *lexicalization*.

The strategies behind these patterns range from grammatical ones (i.e. morphological and syntactic ones) to semantic extensions and borrowing. The list of such devices in the introduction (p. 6) is a bit confusing. The editors first talk about “the main grammatical processes related to word-formation in this volume,” and then enumerate processes and exemplify them. Most conspicuously, sound symbolism, which comes at the end of the list, does not belong to grammatical processes, let alone to main ones in the present context, or in general (its role in Korean will be discussed below). Further, it is not clear what the editors mean by “grammatical



processes related to word-formation.” Derivation (i.e. affixation), reduplication, conversion, and compounding *are* word-formation processes, not processes related to word-formation. Of course, they are part of grammar in the sense that morphology, and derivational morphology (or word-formation) within it, belong to grammar. On the other hand, syntactic constructions (actually they are all phrases of the type “the colour of X”) are entities and not processes.

The editors also mention that the above are often accompanied by two semantic extension processes, viz. metaphor and metonymy. Neither of these is defined in the introduction or in any of the chapters. This is in fact ostensibly dispensed with in Katunar at al., who refer to Sandford (2014) “[f]or more on the theoretical aspects of metonymy and metaphor in color term use and formation.” Sandford (2014), whose name is unfortunately misspelt in the footnote on page 380, is a very insightful account of one type of PART FOR WHOLE metonymy involving colour, but which can hardly be said to deal comprehensively with the role of metaphor and metonymy “in the colour term use and formation.” However, we may assume that metaphor and metonymy are operations understood in the volume under review in a way that is fairly close to what cognitive linguists hold about them. As for the latter, it crops up in several chapters, but talking about metonymy is warranted only in cases of conversion. However, several authors claim that it is operative in adjectival suffixations denoting colours. It is, however, questionable whether it makes sense to assume that there is metonymy if a colour word is derived by means of adding a suffix. This is the stance entertained by Janda (2010a; 2010b; 2011), though basically the same position is also maintained in Colman and Anderson (2004), Colman (2008), Basilio (2006; 2009), as well as Nettet (2010). This is challenged in Brdar and Brdar-Szabó (2013; 2014) as well as Brdar (2017), where a series of specific arguments against analyzing suffixations as being simultaneously metonymies are presented. Put into a nutshell, metonymy can operate on the input of word-formation, or on its output, and, generally, they are complementary phenomena.

The contents of the volume are organized into three major parts with 16 chapters altogether, preceded by an introduction by the editors. The order in which the editors present what individual chapters do is somewhat unusual as it differs from the order in which these chapters appear in the volume. As the editors’s presentation is perfectly coherent, as it moves from one phenomenon to another, from a more specific problems and more narrow perspective to more general ones, one is left puzzled by the actual order of chapters within the collection.

The first part contains six chapters concentrating on a single language, often

combining the synchronic with the diachronic approach (as reflected in the title of this part: *Lexicalization patterns in and over time*). The second part, with six more chapters, broadens the perspective and considers how colours are named from a genealogical and typological perspective, often involving more than one language, or even groups of languages, although some are devoted to a single language. Finally, in the third part, the remaining four chapters examine how colour naming systems interact with the cultural background and are affected by language contacts.

The first part of the book opens with a chapter by Réka Benczes and Erzsébet Tóth-Czifra, who use Hungarian data to challenge the rigid notion of basic colour terms (BCTs), as originally proposed by Berlin and Kay (1969), and provide evidence in favour of the proposal by Kay and McDaniel (1978), who hypothesized the gradedness of categories, distinguishing between more robustly represented primary BCTs and less robustly represented secondary BCTs. The authors show that Hungarian primary and secondary BCTs can be distinguished along linguistic parameters such as the first occurrence of the BCTs, their frequency and the type ratio of [N/Adj + colour term] constructions with given colour terms. Applying this matrix of parameters to the notorious Hungarian pair of terms for red, *vörös* and *piros*, the authors claim that *vörös* is no longer a BCT of Hungarian, being overtaken by *piros*. *Rozsaszin* ('pink'), *lila* ('purple'), and *narancssarga* ('orange') are apparently only secondary BCTs in Hungarian, while the status of *barna* ('brown') and *szurke* ('grey') seems to be ambiguous. The results of the study by Benczes and Tóth-Cifra bring to light two important aspects of the category of basic colour term, its heterogeneity and its dynamic nature.

The contribution by Katarina Dudová on the lexicalization patterns attested in Slovak colour naming BCTs, which happens to be the shortest in the collection, in addition to mixing diachronic and synchronic perspective, also reports on an experiment in colour term elicitation in an attempt to identify most productive mechanisms of colour naming. It is clear from the data provided that Slovak is very similar to other Slavic languages, e.g. unsurprisingly close to Czech, or to Croatian, in this respect. What one misses in this chapter is a sense of perspective and a clear statement of goals as well of how the individual parts connect to each other in order to produce a genuine synergy. The impression is that the author takes too many things for granted and being self-explanatory instead of acknowledging the links explicitly. The two figures that surprise the reader on the second page of the contribution (p. 46), for example, are not announced on the previous page, on which the chapter begins, or mentioned anywhere else in the text that follows—they show the productivity of derivation and compounding in expressing various semantic catego-



ries before these are introduced. Similarly, she keeps talking about patterns and meanings active “in the dividing of the color spectrum in Slovak” (p. 51) or how patterns and meaning “behave in dividing the color space” (p. 52). Such logical jumps are further compounded by a series of odd formulations like “[w]hat is more, however, is the fact that...” (p. 47), etc.

Maria Grossmann and Paolo D’Achille focus in their chapter on compound colour terms as a mechanism for expanding the inventory of colour terms in Italian. Compared with other productive methods of extending the set of colour terms in Italian, like derivation (deadjectival and denominal adjectives) and conversion (based on the ellipsis of multi-word expressions, which can also be seen as metonymy, as in *abito anthracite* ‘anthracite dress,’ lit. dress anthracite ← *abito (di) color(e) (di) antracite*), compounding is the most important one. As the authors show, this word-formation pattern has been steadily gaining in productivity since the 18th century, and has now assumed the role of the central mechanism of encoding fine distinctions made in this area. The adjectives in question can be of the structure A + A (both coordinative, e.g. *(sciarpa) bianco-nera* ‘black-white scarf,’ lit. scarf white-black) and attributive compounds, e.g. *blu scuro* ‘dark blue,’ lit. blue + dark) and A + N (e.g. *azzurro cielo* ‘sky-blue,’ lit. blue + sky, or *verde smeraldo* ‘emerald-green,’ lit. green + emerald).

The main impetus of the chapter by Carsten Levisen (“Brightness” in color linguistics: New light from Danish visual semantics), cast within the paradigm of Natural Semantic Metalanguage (NSM) model, is to revive the non-hue based research agenda in visual semantics. In the course of an in-depth case study of Danish *lys* ‘light’ as a premodifier and in compounds in which it is found, with *lys-* and *lyse-* as the first constituent, the author establishes that the three variants exhibit differences with respect to their distribution and meaning. Unlike the compounds with an interfix on the first constituent (*lyse-*), which combines only with core colour words, the shorter first constituent (*lys-*) is also added to non-basic colour words. However, the former occurs with higher frequency in corpora than the latter. They have also developed what Levisen calls ‘post-systemic’ meanings. *Lyserød*, for example, seems to have moved towards gaining a certain degree of independence from *rød* ‘red.’ At the same time, judging by its high-frequency collocates, this variant appears to send a ‘girly signal.’ All this makes what *lys* and its variants in compounds stand for an elusive concept, perhaps not as elusive and esoteric as the notorious word-concept pair *hygge*, but certainly difficult enough to translate. The author claims in conclusion that the high resolution semantics inherent in the NSM model offers an adequate tool for a culture-sensitive ethnotheory of visuality that is free from the bounds of anglocentrism and that can transcend the

constraints of the purely referential.

The chapter that follows (Lexicalization patterns in color naming in Korean) expands on this fluid boundary between the referential and the expressive. Seongha Rhee discusses the mind-boggling inventory of Korean terms lexicalized by means of a number of strategies that often work in tandem. Although the set of Korean colour terms has only five items (*hayah-* ‘be white’, *kkamah-* ‘be black’, *ppalkah-* ‘be red’, *phalah-* ‘be grue’, and *nolah-* ‘be yellow’), it can be expanded to produce a huge number of words (various literature list between 400 and 750 colour words, Yoon 2018 mentions 77 shades of black in the article title, while the chapter by Rhee ends with an appendix containing 127 ‘red’ adjectives, verbs, and adverbs), what is more these numbers are not definitive, as the system seems to be productive and open-ended. This large number of colour words is made possible, not only in this area, but in Korean in general, due to the role of phonological phenomena in its lexicon. A large number of nuances of meaning can be achieved by manipulating phonological features along two dimensions (vowel polarity, i.e. the opposition between “neutral”, “negative”, and “positive” vowels), consonant tensing and aspiration (the opposition between plain, aspirated and tensed consonants). Applied to colour words, this means that, for example, the luminosity of a colour word can be modulated by replacing a so-called positive/*yang* vowel with a negative/*yin* vowel (*ppalkah-* means ‘be red,’ but *ppelkeh-* means ‘be dark red’). Similarly, reduced saturation can be expressed by replacing a tensed consonant (which is spelled as a double consonant) with a detensed one, as in *ppalkah-* ‘be red’ vs. *palkah-* ‘be reddish’. These interact with prefixation and reduplication. When one of the prefixes from a dedicated set is added to a colour word, the resulting word denotes a stronger and often darker hue. Reduplication of a colour word via suffixation does not change visual dimensions of colours as such but specifies their partial distribution of the over a surface. Thus, the reduplicated form of *pwulk-* ‘be red’, *pwulkuspwulkus*, means ‘to be reddish here and there’ or ‘spotty red’. On top of this, there are also ideophones, which assume the form of suffixes. Adding them to colour words, it is possible to express a range of meanings from diminished perception acuity, opacity, purity, etc. to purely evaluative notions, i.e. negative evaluations.

The first part of the volume closes with a chapter by Roulon-Doko on lexicalization patterns in naming colours in Gbaya, an Ubanguian language spoken in the Central African Republic. The chapter begins with an inventory of lexical items and constructions involved in the task of referring to visual perception, including colour. Gbaya has no general word for colour, and only three major colour words for black, white and red: two verbal adjectives, *tú* ‘black’ and ‘red’ *gbé*, as well as



one primary adjective *bu* 'white,' which unlike the first two, has a negative overtone. Another way of referring to colours in that language is to use compounds. In one type of nouns we find the Gbaya counterpart of 'body' (*té*) as the first constituent. There are among these first constituents four animals and three plants that as prototypes evoke the idea of a particular colour, to which we can add two animal names that evoke the idea of a visual pattern (being striped, lengthwise or crosswise). In addition to these there are a number of adjective-adverbs, often realized as reduplications. Out of the total of 82 adjective-adverbs in the colour domain, 67 refer to colour, the remaining 15 to visual patterns. This inventory is followed by an account of the way native speakers of Gbaya, who are hunter-gatherer-cultivators, make use of the opportunities offered by the system in practical life.

The second part of the volume collects six chapters taking a genealogical and typological perspective on colour naming. In the first of these Maria Bulakh is interested in the origins of Semitic terms for yellow, blue, and green, categories missing from the reconstructions of the Proto-Semitic colour terms system, where this conceptual space is occupied with what can be described as yellow-with-green. However, in most of Semitic daughter languages, separate terms for yellow, blue and green have been introduced in the course of history, coming from different sources. In some cases they are derivations from lexemes denoting objects typically displaying a certain colour. To give a couple of examples, a number of Aramaic dialects have a word for yellow that is derived from the word for wax, while in Geez the word for green was derived by reduplication from the word for vegetation. Tigre and Tigrinya, which do not exhibit reduplication, have similar words, which indicates a high probability of borrowing from Geez. It is interesting that the same root is also found in the East Gurage dialects of Selti and Wolane in the collocation *aml dänä* and *ʔaməl dänä*, lit. cabbage + aspect/appearance/colour, indicating a metonymy-like path of semantic change (narrowing) from vegetation to vegetable to cabbage-like vegetable to green. However, the source for a number of items is uncertain.

Andrea Drocco and Orsola Risato concentrate in their chapter on lexicalization patterns in naming colours in Modern Standard Hindī. According to their abstract they intend to start "from basic color terms and include[e] the lexicalization strategies which are employed to describe different shades." In actuality, they do not start from basic colour terms in Hindī (we do not even get to know how many BCTs are there and how they are named, where they come from—interestingly the word for white, *saphed*, is borrowed from Persian, where it is realized as *safed*), but immediately plunge into a description of strategies used to form complex lexemes denoting shades of colours, all of which are word-formation strategies. Based

on the semantic effect of these strategies the authors discuss them in two sections. They first discuss the type of suffixation in which the suffix *-ī* is added to nouns to form colour adjectives whose meaning can roughly be paraphrased as ‘the colour of X,’ where X is the object that the noun in question refers to. The suffix in question is of course not a dedicated one, it is apparently as polysemous as the English suffix *-y* in *rainy*, *dirty*, *noisy*, *sticky*, *baggy*, *foxy*, etc. A number of words denoting colours and ending in *-ī* are borrowed from Persian or Arabic, so it unclear whether the majority of colour denoting words ending in *-ī* are genuine results of morphological process of Hindī (e.g. *bādāmī* ‘light brown’, lit. ‘of almond’ is clearly borrowed from Persian *bādām*, borrowed as *badem* into Turkish, and then into Croatian). The authors commit the fallacy mentioned above as they say that “[t]he function of this suffix is exactly to realize the metonymic shift OBJECT COLOR FOR COLOR, as the suffix leads to the creation of a color term starting from the noun of the object that is characterized by the very same color.” A correct description of what goes on here is in the second part of the sentence: suffixation results in the creation of a colour term, not metonymy. The precise meaning of the suffixation is not the result of metonymy, but of the context (the meaning of the base word) coercing the right interpretation of the suffix and then of the whole complex lexeme. The fact that the term *metonymy* is enclosed in quotation marks by the authors (as in the above quotation, or in the section title in the expression “*metonymy*”-type) may indicate that they do not firmly believe that this is a genuine case of metonymy but only resembles the effect of metonymy. The other section deals with the approximation-type of word-formation strategies in colour-naming. There are two possibilities here, the first is to use the suffix *-sā* ‘like’, the other is reduplication, which can be used to express a range more specific meanings, such as softening, emphasizing, change of colour, etc.

Xavier Bach, Anetta Kopecka and Benjamin Fagard are intent in their chapter on complex colour denomination in French and Occitan on determining whether the differences with respect how analytical or grammaticalized these languages are (despite their being genealogically and areally very closely related) are reflected in the preferences for certain strategies in naming secondary colours. The two languages are similar in that primary colour terms are used with high frequency and that both are also furnished with secondary terms derived by suffixes (cf. Fr. *-âtre* and Occ. *-astre*, both cognate with English *-ish* when used with bases denoting colours). On the basis of responses by 20 native speakers of both languages, interesting differences could be established. The expectation was that French would use more analytic strategies, and Occitan more synthetic ones, but the magnitude of differences was not as large as expected. Occitan speakers used a variety of suffixa-



tions, but this strategy was used less frequently than expected. On the other hand, their frequency was expected to be low in French, but it turned out that it was not used at all by respondents.

The chapter by Iraide Ibarretxe-Antuñano deals with colour terms in Basque. It begins with a broad descriptive overview of the colour system of Basque, followed by an empirical study on categorization based on elicitation tasks with native speakers. The colour system of Basque is extremely complex due its unique position as language with rich morphological possibilities, spoken in several distinctive dialects surrounded by Romance languages (from Latin to Spanish and French) from which Basque has extensively borrowed in the course of history. It is believed by a number of researchers that its present colour system developed out a set of three basic categories, *zuri/txuri* covering the concepts of ‘white and colourless’ (with metaphorical associations that are more negative than positive), *beltz/blatz/beltx* for both ‘black’ and ‘dark’, but also meaning ‘dirty’ and ‘sad’, while *gorri* generally meant ‘with colour’, and including colours such as red, rose, pink, yellow, blond, orange, and brown. In addition to these, there were specific words for ‘grue’ (covering gray, blue and bluish green), for yellow, for purple/violetish/dark grey, two words for shades of brown/dun, as well as words expressing the idea of multicolority or mixed colours (some of them of ideophonic nature) and word for colours present in particular dialects. This system was further enriched by borrowings from Romance-Latin, French, and Spanish, which inevitably led to the restructuring of the system, so that nowadays *gorri* has been narrowed down to ‘red’ (like blood), while *urdin*, originally ‘grue’, is nowadays reduced to ‘grey’, but survives only in a handful of specific complex expressions like *ileurdin* ‘grey hair’ or *urdindu* ‘to go grey,’ the normal word for ‘grey’ being the loanword *grisa*. There are even fairly recent loans, like *marroi* ‘brown’, which only appeared towards the end of the 20th century. The system is open in the sense that word-formation strategies may be employed to enrich it, primarily by means of compounding as a fairly productive process in Basque, suffixation and reduplication. There are of course the usual coordinative (colour₁-colour₂(-colour₃)) and modifying attentuative compounds (colour₁ish-colour₂), what is often called determinative compounds like *belar berde* (lit. grass green) ‘grass-green’, compounds with *kolore*, e.g. *urre kolore* ‘gold coloured’, or *begi* ‘eye’, e.g. *zuri begi* (lit. white eye) ‘a little bit white’. There are also a number of suffixes, like *-kara* ‘colour’, e.g. *lurkara* ‘earth colour’, or *-xka/-ska* and *-xko/-sko* ‘approximative colour’, e.g. *gorrixka* ‘reddish.’ The suffixes *-tsu* ‘approximation’ and *-tso* ‘small’ can be used in a similar fashion, e.g. *gorritxo* ‘reddish’. Finally, the intensification of colour can be expressed by reduplication, e.g. *urdin urdin* ‘very blue’. Even the words for the

lightness (*argi*) and darkness (*ilun*) or intensifiers (*oso* ‘very’) can be reduplicated, e.g. *urdin ilun-iluna/urdin oso-osu iluna*, both meaning ‘very dark blue’.

Using the methodology of the EoSS project, Ibarretxe-Antuñano also examined how Basque speakers exploit the above possibilities in actual usage events. Generally, they availed themselves of all the above patterns, but there were differences. When talking about hues of primary and secondary colours, they frequently use monomorphemic native or borrowed words, but compounds with *kolore* for the rest. The suffixes *-xka/-ska*, *-xko/-sko*, and *-tsu* and *-tso* were hardly ever used. Some native words appear to be losing ground to recent loanwords, as cross-generational comparisons show. It seems that two colour systems are in existence, a romanized, and an ancient one, the latter can be predominantly associated with older speakers. The gradual romanization is indicated by the increase in the use of calqued left-headed compounds (typical of Spanish) rather than the use of the typical Basque pattern that is right-headed.

The theoretical and methodological framework for the chapter by Ida Raffaelli, Jan Chromý, and Anetta Kopecka is the article by Raffaelli (2017). The authors compare chiefly morphological but also some syntactic constructions in the process elicited from native speakers when naming colours in Croatian, Czech, and Polish. As might have been expected, the three languages are very similar, but there are also some differences that are puzzling to account for. One of the puzzling similarities is the almost total absence of syntactic constructions, i.e. multi-word expressions, in naming colours in these three languages, which may be an artefact produced by the elicitation design. Let us just point out that the crucial question in the EoSS procedure was “What colour is this?” We do not get to know how this was translated into various languages involved, but in the case of Croatian it might have been rendered as “Koja je to boja?” or as “Koje je to boje?” The former would almost naturally prime the subjects to supply a single, simple or complex, lexeme, thus suppressing multi-word responses, whereas the latter may have been more open-ended. This is true of at least one more language reported on in the volume, viz. Hungarian (*Melyik szín ez?* vs. *Milyen színű ez?*).

But the way the differences are explained by the authors may be even more puzzling. First of all, it is not clear why simple adjectives are taken into account here, as these certainly do not fit into the definition of lexicalization patterns as used throughout the volume. Obviously, eliminating these from the statistics would skew the proportions to a degree (38.2% for Croatian, 30% for Czech and 37.9% for Polish). However, working with more informants (unfortunately, EoSS seems to have restricted itself to 20 per language), would yield more responses, from



which simple lexemes could be eliminated, while still leaving enough for analysis. The remaining data could be normalized, or randomized, so that they adequately reflect proportions between lexicalizations proper. Further, the proportion between suffixation and compounding is really surprising and requires some explanation in view of the fact that its representation is very similar across languages (19.7% for Croatian, 23.8% for Czech, and 33.2% for Polish), which is very different from Slovak, as reported by Dudová in this volume (40.8%). It is not clear either why levels of generality are mixed, as for example when it is said that derivation, i.e. suffixation, is said to be less productively used in the formation of colour terms in Croatian than the compounds of the type [adj + o adj], i.e. the whole of suffixation is compared with just one type of compounding. Another general problem is that we do not get to know what is understood under “productively used” in the chapter or throughout the volume. In a later chapter, the term morphosemantic productivity is introduced, but as will become clear below, this is something different.

The second part of the collection closes with the chapter by Guillaume Segerer and Martine Vanhove, an amazing large-scale typological exploration of ways of expressing colour-related concepts in over 350 African languages by means of semantic resources, borrowing, and morphosyntactic strategies. As we have shown before, the cognitive process of metonymy is overstretched in some of the chapters, but in this chapter, we see the opposite. What is more, the semantic extension that Katunar et al. in a later chapter identify as the OBJECT FOR COLOUR metonymy (as when the word denoting the locust tree, *parkia biglobosia*, or its fruit, the pulp, the dry pod, etc., is found in 74 languages to also denote the yellow colour). This strategy (not named as such but described in Bulakh’s chapter), is pronounced by Segerer and Vanhove to be metaphorical. After a brief overview of various cases of borrowings (mainly terms for blue, green and yellow), the authors return to semantic processes by discussing instances of colexification. They use this term coined by François (2008) as a neutral designation to refer to cases where two or more senses are lexified by a single term but where it was difficult to establish which semantic domain was the source, and which was the target of the extension (e.g. when a word simultaneously means ‘ripe’ and ‘red’, or when words for ‘pure’ or ‘clean’ also mean ‘white’). This is followed by an overview of reduplication, compounding, affixation, ideophones, and various syntactic phrase used to denote colours. The authors conclude that there is not much that can be considered specifically African as far as strategies for colour naming are concerned. As a check on their conclusions, they suggest that it might be fruitful to examine actual texts in languages for which big corpora are available and compare these data with those extracted from the dictionaries.

The third part of the volume contains four chapters singled out as shedding light on the influence of culture and linguistic contacts on colour naming patterns, although this is, as we have seen so far, inextricable in the case of any language. The chapter by Þórhalla Guðmundsdóttir Beck and Matthew Whelpton is a comparison of colour naming strategies in Icelandic, Icelandic Sign Language, and North American Icelandic, using standardized methodologies developed in the EoSS project to provide linguistic and cultural context. Data is also provided from the North American English spoken in the same heritage communities as North American Icelandic, as well as British English. The authors identify contrasts in colour naming strategies between European Icelandic, on the one hand, which developed in relative isolation and in an atmosphere of strong nationalist and purist tradition, and North American Icelandic, on the other, which developed in a predominantly English-speaking environment. The difference here is cultural rather than typological (cultural, in a broad sense, encompasses social, political, and shared linguistic aspects of community life, as opposed to formal typological aspects of the linguistic systems and inherited conventions of linguistic usage). The statistical analysis of colour naming patterns in the five languages supports the results reported for Germanic languages in the course of work in the EoSS project, showing strong universal tendencies in colour naming, but also some interesting contrasts. Both English and Icelandic rely heavily on object-oriented colour terms, but differ in the formal mechanisms employed: while object names are simply used metonymically in English, i.e. as zero derivations (*salmon, lemon, orange*), the object name must be compounded in Icelandic either with a basic colour term (*sitronugulur* ‘lemon yellow’) or the word for *colour/coloured* (*hudlitadur* ‘skin-coloured’). Another point of difference has to do with colour-oriented adjectives such as *light, dark, and pale*. These are used in English as adjectival modifiers, whereas in Icelandic they usually function as first constituents in compounds, e.g., *dokkgulur* ‘dark-yellow’. Overall, although the initial picture suggested “nearly monolithic uniformity” (p. 352), it turns out that there are also “dramatic differences in naming strategies”, with Icelandic Sign Language, which uses a mix of strategies, sitting between the varieties of English and Icelandic. The amount of microvariation that can be observed suggests sensitivity to both cultural and structural linguistic factors.

Branka Barčot and Anita Hrnjak start their chapter on symbolic and cultural meaning of colours in phraseology in German and Russian by making an inventory of the figurative units in these two languages, and then set out to determine how colour terms, as components of phraseological units, contribute to the meaning of the whole figurative unit in two ways. This can happen either through the denotative lexical meaning of colour terms, or through their symbolic and/or cultural po-



tential. The analysis confirmed the hypothesis of partial overlap concerning “the phraseological linguistic worldview” of the Russian- and German-speaking communities. On the other hand, there are also numerous specific phraseological units involving colour terms, the so-called culturemes, that call for further detailed studies.

The chapter by Daniela Katunar, Barbara Kerovec, and Nawar Ghanim Murad deals with lexicalization patterns of colour terms and lexical units derived from colour terms in Croatian, Turkish, and Arabic, three languages that are different typologically and socio-culturally, with special emphasis on the relationship between natural objects and colour terms. The goal of the chapter is, on the one hand, to determine what lexicalization processes are at work in these languages when it comes to colour naming based on natural objects, and on the other to outline the main tendencies for the extension of colour terms. All three languages are found to have a similar inventory of basic colour terms (11 for Turkish and Arabic, and 13 for Croatian), but they differ in the number of simplex vs. complex basic colour terms as well as regarding the productivity of particular lexicalization patterns used to form secondary colour terms. The authors note two main tendencies in colour naming. Objects used by all three languages are generally plants and flowers, and to some extent the main features of the environment, such as sky, sea, vegetation, etc. (thus establishing a parallel with the chapter by Segerer and Vanhove). Secondly, animals and cultural artefacts are rarely used in Croatian and Arabic, but they appear to be more frequent as the source domain in Turkish. When discussing the relationship between object and colour the authors talk about two lexicalization strategies, OBJECT FOR COLOUR and its reverse, COLOUR FOR OBJECT. They claim in footnote on p. 380 that this is a cover term for both metaphor and metonymy. There is actually nothing metaphorical about these, neither the facts of the semantic shift, nor the way they are spelled out (X FOR Y being a typical formula for conceptual metonymies). However, the authors are right in not claiming that these are metonymies proper because in a number of cases in all the three languages suffixation or a compound-like construction is involved in the derivation of colour terms.

In the last chapter in the volume Arseniy Vydrin is concerned with modern (Iron) Ossetic colour terms, pointing out the peculiarities of the system and attempting to place it on the evolutionary sequence of the development of basic colour terms. It is based on fieldwork involving two specific tasks: the colour-naming task and the focal-colour test. The analysis of responses by native speakers revealed that most of the basic colours are focal, the most striking example being *urš* ‘white’, which was described using the same circle by all participants, while most diffused basic colour is *cʹʒx* (most likely of Caucasian origin) with practically all

participants describing it in a different way, as ‘green’, ‘blue’, or ‘grey’ hues with varying degree of brightness. This sort of colour syncretism of green, blue, and grey is also attested in some Northwest Caucasian languages, e.g., Adyghe *sxwante* ‘green, blue, grey’. Such syncretism can be useful when referring to certain objects, for example, a body of water, or grass and leaves. With its six basic colour terms, Ossetic is claimed to be located at Stage VI on the evolutionary sequence of basic colour terms, having extended the Old Iranian three-term system by adding a term for yellow and borrowing terms for green, blue, grey, and more recently for brown.

As for non-basic colour terms, Ossetic forms them by compounding and suffixation. Compounds typically consist of a noun denoting an object as the first constituent and a word denoting a basic colour as the second component, but there are other patterns as well. The latter process is most active in the case of the suffix, *-x* *ʷəž* ‘colour, look, appearance’, which can be used to derive a colour term from practically any object denoting noun that has a specific colour. In addition, there is a set of five suffixes for marking different degrees of saturation and brightness. Two of these are markers for the intensive degree, while the other three are diminutives.

Just in case someone expected a volume on colours to be literally colourful, it is not that much colourful. There are just a handful of tables and figures, except for more systematic demonstrations in chapters by Ibarretxe-Antuñano and Vydrin. Another thing that a reader might have found useful would be a summarizing table in the introduction or in an epilogue that would give us an overview of particular strategies exploited in various languages and for naming various colours and shades of colours across languages. There are also some items that are missing in the index, like *basic colour term*, *World Color Survey*, *Munsell Colour Scale/System*, or *corpus linguistics*, but these minor problems and, like occasional typos, do not detract at all.

In another sense of the word, this collection is, however, indeed colourful. Due to its wealth of data and the freshness of its approach, it opens our eyes for the rich and colourful spectrum of resources that can be exploited to express similar concepts in human languages, taking the reader on a tangent of reflection on almost every page, as also witnessed by some of our critical remarks. Although some of the chapters are not an easy read, the volume as a whole is well produced and certainly worth the effort of reading. Overall, this impressive volume fills a gap by providing exceptionally stimulating and methodologically robust discussions in its 16 chapters. We have no doubts that it will serve as a springboard for further research in this exciting and colourful field.



References

- Anderson, Wendy, Biggam, Carole P., Hough, Carole, & Kay, Christian. 2014. *Colour studies: A broad spectrum*. Amsterdam: John Benjamins. <https://doi.org/10.1075/z.191>
- Basilio, Margarida. 2006. Metaphor and metonymy in word formation. *DELTA: Documentação de Estudos em Lingüística Teórica e Aplicada*. 22. 67–80.
- Basilio, Margarida. 2009. The role of metonymy in word formation: Brazilian Portuguese agent noun constructions In Panther, Klaus-Uwe & Thornburg, Linda L. & Barcelona, Antonio (eds.), *Metonymy and metaphor in grammar*, 99–109. Amsterdam: John Benjamins.
- Berlin, Brent & Kay, Paul. 1969. *Basic color terms: Their universality and evolution*. Berkeley: University of California Press.
- Biggam, Carole Patricia. 2012. *The semantics of colour: A historical approach*. Cambridge: Cambridge University Press.
- Blank, Andreas. 2001. Pathways of lexicalization. In Haspelmath, Martin & König, Ekkehard & Oesterreicher, Wulf & Raible, Wolfgang (eds.), *Language typology and language universals/Sprachtypologie und sprachliche Universalien/La Typologie des langues et les universaux linguistiques: An international handbook/Ein internationales Handbuch/Manuel international*, 1596–1608. Berlin: de Gruyter.
- Brdar, Mario. 2017. *Metonymy and word-formation: Their interactions and complementation*. Newcastle upon Tyne: Cambridge Scholars Publishing.
- Brdar, Mario & Brdar-Szabo, Rita. 2013. Some reflections on metonymy and word-formation. *ExELL. Explorations in English Language and Linguistics* 1(1). 40–62.
- Brdar, Mario & Brdar-Szabó, Rita. 2014. Where does metonymy begin? Some comments on Janda. 2011. *Cognitive Linguistics* 25(2). 313–340. <https://doi.org/10.1515/cog-2014-0013>
- Colman, Fran. 2008. Names, derivational morphology, and Old English gender. *Studia Anglica Posnaniensia* 44. 29–52.
- Colman, Fran & Anderson, John. 2004. On metonymy as word-formation: With special reference to Old English. *English Studies* 85(6). 547–565.
- François, Alexandre. 2008. Semantic maps and the typology of colexification: Intertwining polysemous networks across languages. In Vanhove, Martina (ed.), *From polysemy to semantic change*, 163–215. Amsterdam: John Benjamins. <https://doi.org/10.1075/slcs.106.09fra>
- Hardin, C. Larry & Maffi, Luisa (eds.). 1997. *Color categories in thought and language*. Cambridge: Cambridge University Press.
- Janda, Laura A. 2010. The role of metonymy in Czech word-formation. *Slovo a slovesnos*, 71. 260–274.
- Janda Laura, A. 2010b. Russian word-formation in contrast with Czech and Norwegian. *Oslo Studies in Language* 2(2). 243–259.

- Janda, Laura A. 2011. Metonymy in word-formation. *Cognitive Linguistics* 22(2). 359–392. <https://doi.org/10.1515/cogl.2011.014>
- Kay, Paul & McDaniel, Chad K. 1978. The linguistic significance of the meanings of basic color terms. *Language* 54(3). 610–646. <https://doi.org/10.2307/412789>
- Lehrer, Adrienne. 1992. A theory of vocabulary structure: Retrospectives and prospectives. In Pütz, Martin (ed.), *Thirty years of linguistics evolution*, 243–256. Amsterdam: John Benjamins.
- Levin, Beth & Rappaport Hovav, Malka. 2019. Lexicalization patterns. In Truswell, Robert (ed.), *The Oxford handbook of event structure*, 395–425. Oxford: Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780199685318.013.18>
- Majid, Asifa & Jordan, Fiona & Dunn, Michael, 2011. *Evolution of semantic systems: Procedures manual*. Nijmegen: Max Planck Institute for Psycholinguistics.
- Nesset, Tore. 2010. The art of being negative: Metonymical morphological constructions in contrast. *Oslo Studies in Language*, 2(2). 261–279.
- Raffaelli, Ida. 2017. Conventionalized patterns of colour naming in Croatian. In Cergol Kovačević, Kristina & Udier, Sanda Lucija (eds.), *Applied linguistics research and methodology: Proceedings from the 2015 CALS conference*, 171–186. Frankfurt: Peter Lang.
- Sandford, Jodi L. 2014. Her blue eyes are red. In Anderson, Wendy & Biggam, Carole P. & Hough, Carole & Kay, Christian (eds.), *Colour studies: A broad spectrum*, 109–125. Amsterdam: John Benjamins.
- Talmy, Leonard. 1985. Lexicalization patterns: Semantic structure in lexical forms. In Shopen, Timothy (ed.), *Language typology and syntactic description, I: Clause structure; II: Complex constructions; III: Grammatical categories and the lexicon*, III: 57–149. Cambridge: Cambridge University Press.
- Talmy, Leonard. 2000. *Toward a cognitive semantics. Volume 1: Concept structuring systems*. Cambridge: The MIT Press.
- Yoon, Suwon. 2018. 77 shades of black: the pragmatics of emotive color terms in Korean. *Journal of East Asian Linguistics*, 27(1). 33–66. <https://doi.org/10.1007/s10831-018-9167-3>