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Some Comments on Old Norse-Icelandic Color Terms*

I. It has been argued that the human eye can distinguish no fewer than 7.5 million color differences (Brown and Lenneberg 1954: 457; *Science of Color* 1953: 129). This enormous range of visible colors has three basic components. One is hue, the wavelength of reflected light. Another is luminosity or tone, the amount of white or black that is mixed with a hue. And the third is saturation or chromatic purity, the amount of grey that is mixed with a hue. Since each of the three components constitutes an even continuum, there is no physical foundation for the boundaries between distinct color categories. Nonetheless, distinct color categories are perceived and identified, though languages differ greatly with regard to the number of color terms they possess and with regard to the manner in which they classify the color continuum (Taylor 1995: 3). Bassa, a language of Liberia, has only two terms for classifying colors, *hui* (covering black, purple, blue, and green) and *ziza* (covering white, yellow, orange, and red) (Gleason 1961: 5; McNeill 1972: 21). Zunian, the language of the Zuni (a tribe of North American Indians of western New Mexico), to cite another example, uses the

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Abstract: The article gives an overview of Old Norse-Icelandic color terms. More specifically, it assesses the applicability of the theory of Brent Berlin and Paul Kay (*Basic Color Terms* [Berkeley, 1969]) to Old Norse-Icelandic as an evolutionary stage in the history of the Icelandic language. It is demonstrated that the theory is eminently applicable. The analysis shows that Old Norse-Icelandic has eight basic color terms and may thus be designated a stage VII language. In modern Icelandic, one additional basic color term (for pink) has been added. Icelandic differs from most of the stage VII languages examined by Berlin and Kay in that it has no basic color terms for purple and orange.

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same term for yellow and orange (Brown and Lenneberg 1954: 461). And Homeric Greek (as well as the Greek spoken by the majority of the current inhabitants of Cyprus), to cite a third example, has no word equivalent to brown (Berlin and Kay 1969: 28), whereas French has two: *brun* and *marron*. Several linguists have drawn attention to the fact that each language seems semantically arbitrary relative to every other language in the way it segments the three-dimensional color continuum. Ray (1952), for example, claims that “there is no such thing as a ‘natural’ division of the spectrum. Each culture has taken the spectral continuum and has divided it into units on a quite arbitrary basis” (258). And in what is (or was) one of the most widely used linguistic textbooks, Gleason (1961) writes:

Consider a rainbow or a spectrum from a prism. There is a continuous gradation of color from one end to the other. That is, at any point there is only a small difference in the colors immediately adjacent at either side. Yet an American describing it will list the hues as *red, orange, yellow, green, blue, purple*, or something of the kind. The continuous gradation of color which exists in nature is represented in language by a series of discrete categories. . . . There is nothing inherent either in the spectrum or the human perception of it which would compel its division in this way. (4)

In 1969, however, the linguist-anthropologists Berlin and Kay challenged and contradicted this view with their publication *Basic Color Terms*. In this, they argue that “semantic universals do exist in the domain of color vocabulary”, and that “these universals appear to be related to the historical development of all languages in a way that can properly be termed evolutionary” (1). Berlin and Kay’s theory is based on an experimental study of 20 genetically diverse languages and an investigation of the literature on color-term semantics for 78 additional languages.¹ The analysis focuses on the categorization of terms for focal colors or what Berlin and Kay call “basic color terms”. The characteristic features of a basic color term, according to Berlin and Kay, are that a basic color term

(i) is monolexemic and its meaning is not predictable from the mean-

¹ The 20 languages are: Arabic, Bulgarian, Catalan, Cantonese, Mandarin, English (U.S.), Hebrew, Hungarian, Ibibio (Nigeria), Indonesian, Japanese, Korean, Pomo (California), Spanish (Mexico), Swahili, Tagalog (Philippines), Thai, Tzeltal (Southern Mexico), Urdu, and Vietnamese.

ing of its parts. (Color terms like “reddish”, “yellowish-brown”, and “salmon-colored” are excluded.)

(ii) is not subsumed under another color term. (Color terms like “crimson”, “scarlet”, or “vermilion” are excluded, since they are all hyponyms of red.)

(iii) is not restricted to a narrow class of objects. (A color term like “blond” is contextually restricted, since it is used only about human hair, and so it is excluded.)

(iv) must be of frequent use and psychologically salient for informants. (Rare color terms like “puce” and “mauve” are excluded.)

In Berlin and Kay’s report, a total of eleven basic color terms are identified, located in the color space where English speakers place the most typical examples of black, white, red, orange, yellow, brown, green, blue, purple, pink, and grey. They further determine that the languages do not select randomly from this inventory, but that in the history of a given language, encoding of perceptual categories into basic color terms follows a fixed partial order. The two possible temporal-evolutionary orders are:

black		purple
	> red > green > yellow > blue > brown >	pink
white		orange
		grey
and		
black		purple
	> red > yellow > green > blue > brown >	pink
white		orange
		grey

According to this rather simple rule,

(I) if a language contains only two color terms (and no language supposedly has fewer than two), these are terms for black and white.²

(II) if a language contains three terms, then it contains a term for red.

² Witkowski and Brown (1977: 50–51) argue that glossing these terms by use of “black” and “white” is misleading and that the terms label macrocolors (see n. 34).

(III) if a language contains four terms, then the fourth term will be either yellow or green (but not both).

(IV) if a language contains five terms, then it contains terms for both yellow and green.

(V) if a language contains six terms, then it contains a term for blue.

(VI) if a language contains seven terms, then it contains a term for brown.

(VII) if a language contains eight or more terms, then it contains a term for purple, pink, orange, grey, or some combination of these.

Berlin and Kay conclude that “color lexicons with few terms tend to occur in association with relatively simple cultures and simple technologies, while color lexicons with many terms tend to occur in association with complex cultures and complex technologies (to the extent that complexity of culture and technology can be assessed objectively)” (104).

It is the aim of this article to give an overview of Old Norse-Icelandic color terms, which, with the exception of Arthur Laursen’s *The Colour-Sense in the Edda* (1882), have not been the object of comprehensive analysis; more specifically, it seeks to assess the applicability of Berlin and Kay’s theory to Old Norse-Icelandic as an evolutionary stage in the history of the Icelandic language. The data for Old Norse-Icelandic are drawn from Fritzner’s *Ordbog over Det gamle norske sprog*; Hødnebo’s supplement to Fritzner’s *Ordbog*; Cleasby and Vigfusson’s *An Icelandic-English Dictionary*; Heggstad, Hødnebo, and Simensen’s *Norrøn ordbok*; the three volumes of The Arnarnagaeian Commission’s *Ordbog over det norrøne prosasprog* that have appeared so far; the slips of the Arnarnagaeian Commission’s *Ordbog* for color terms identified in Cleasby and Vigfusson’s, Fritzner’s, and Hødnebo’s dictionaries;³ and Finnur Jónsson’s *Lexicon Poeticum*. In the following, translations of the Old Norse-Icelandic color terms into English are given (with the help of the above-mentioned dictionaries), though with the understanding that what is intended is the spectral loci of the range to which the English

³ I am grateful to Eva Rode for making xeroxed copies of these slips available to me.

color term refers and not the English color term as such.⁴

II. Although Old Norse-Icelandic color (*litr*) appears to denote hue alone, the three-dimensionality of human color perception is given verbal expression.

Luminosity or tone is indicated by the adjectives *dökk*/*myrkr* ('dark'), *ljóss* ('light'), and *bleikr* ('pale').⁵ These adjectives qualify adjectives of hue to produce descriptive phrases, such as *dökkblár/myrkeblár* ('dark blue'), *ljósgulr* ('light yellow'), and *rauðbleikr* ('light/pale red'). Old Norse-Icelandic does not have different single lexemes to indicate and differentiate luminosity, and the data suggest that the above adjectives are used only with the following adjectives of hue: blue (*dökkblár*, *myrkeblár*, *ljósblár*), brown (*dökkbrúnn*, *myrkebrúnn*, *dökkjarpr*, *ljósjarpr*), fawn (*ljósbleikr*), green (*dökkgrænn*), red (*dökkrauðr*, *rauðbleikr*, *rauðljóss*, *ljósráuðr*), and yellow (*ljósgulr*). It is likely that also *svartr* ('black') in the compounds *svartblár*, *svartrúnn*, and *svarthjarpr*, *hvítr* ('white') in the compound *bláhvítr* ('bluish white'), and *fagr* ('fair') in the compounds *fagtblár*, *fagrgrænn*, *fagrgulr*, and *fagrrauðr* are indications of luminosity and should, perhaps, be translated as 'dark' (= *svartr*)/'light' (= *hvítr*, *fagr*), respectively.

Saturation or chromatic purity seems less clearly defined. The adjectives *bjartr*/*bjartlitadr*/*litbjartr* ('bright') and *skírr* ('clear/pure') are not used in combination with a hue adjective. The adjective *fagr*, which, as noted above, is used to qualify blue, green, yellow, and red, may be translated as 'bright', but in combination with hue adjectives it is generally believed to translate 'fair' or 'light'. The adjective *heiðr* ('bright'), which is used to qualify blue (*heiðblár*), would seem to indicate a fully saturated hue. The prefix *al-* ('completely'), which is used to qualify black (*alsvartr*), white (*alhvítr*), red (*alrauðr*), green (*algrænn*), and grey (*algrár*), may also indicate a fully saturated hue, though in most cases it seems to imply that no other colors are present. Its use with grey suggests that *al-* does not refer to saturation, but it may possibly refer to other optical variables, such as lustre or texture. Unsaturated hues are expressed by the prefix *í-* ('-ish'), conveying a diminutive notion, which

⁴ As McNeill (1972) points out: "Since colour names in various languages are not easily translatable, non-English colour names should ideally be expressed in terms of some non-linguistic system of notation, e.g., Munsell colour numbers or spectral wavelengths" (23).

⁵ For a discussion of *bleikr*, see below. The adjective *þolr* ('pale') / *þollitadr* ('pale-colored') is not used with adjectives of hue.

is used to qualify the following adjectives of hue: blue (*iblár*), grey (*igrár*), green (*igrænn*), and red (*irauðr*). In the case of *igrænn*, however, the prefix may convey intensity or iteration; Cleasby and Vigfusson, s.v., translate *igrænn* as 'evergreen.'⁶ In the case of blue, an unsaturated hue is also indicated by compounding it with the hue adjective grey: *gráblár* ('greyish blue').

In order to determine the number of basic color terms in Old Norse-Icelandic, the four primary criteria suggested by Berlin and Kay for recognizing focal color terms need to be considered.

(i) One is that the term is monolexemic. This requirement excludes the following color terms (the translations given in parentheses are only approximate):

varieties of black: *alsvartr* ('completely black'), *blásvartr* ('bluish black'), *hrafnsvartr* ('raven-black'; occurs in poetry only), *kolsvartr* ('coal-black'; occurs in poetry only), and *sótsvartr* ('soot-black');

varieties of white: *bláhvitr*, *blikhvitr* ('gleaming white'), *blómhvitr* ('flower-white'), *drifhvitr* ('snow-white'; occurs in poetry only), *fannhvitr* ('snow-white'), *gullhvitr* ('gold-white'; occurs in poetry only), *línhvitr* ('linen-white'; occurs in poetry only), *mjallhvitr* ('snow-white'; occurs in poetry only), *silfrhvitr* ('silver-white'), *skjallhvitr* ('white as the white membrane of an egg'; occurs in poetry only) *snjóhvitr* ('snow-white'), *sólvitr* ('sun-white'; occurs in poetry only), and *svanhvitr* ('swan-white'; occurs in poetry only);

varieties of red: *blóðrauðr* ('blood-red'), *brandrauðr* ('fire-red'; occurs in poetry only), *dreyrrauðr* ('blood red'), *dökkrauðr* ('dark red'), *fagrrauðr* ('light red'), *glóðrauðr* ('fiery red'; occurs in poetry only), *irauðr* ('reddish'), *mórauðr* ('peat-red'), *mosrauðr* ('moss-red'), *rauðbleikr*, *rauðljóss* ('light red'), *sótrauðr* ('soot-red'; occurs in poetry only), *tandrauðr* ('fiery red'; occurs in poetry only), and *valrauðr* ('blood-red'; occurs in poetry only);

varieties of green: *algrænn* ('completely green'), *dökkgrænn* ('dark green'), *eigrænn* ('ever-green'), *fagrgrænn* ('light green'), *grasgrænn* ('grass-green'), *íðjagrænn* ('ever-green'; occurs in poetry only), *igrænn* (see above), *laufgrænn* ('leaf-green'), *rauðgrænn* ('reddish green'), *sma-ragðligr* ('emerald-like', a non-color lexeme involving color by implication; occurs in poetry only), and *vetrgrænn* ('winter-green'; occurs in poetry only);

⁶ Cf. also Finnur Jónsson in *Lexicon Poeticum* (s.v. *igrænn*).

varieties of yellow: *fagrgulr* ('light yellow'), *fótgulr* ('foot-gold' [that is, with yellow feet]; occurs in poetry only), *ljósgulr*, and *rauðgulr* ('reddish yellow');

varieties of blue: *dökkblár*, *fagrblár* ('light blue'), *gráblár*, *heiðblár*, *helblár* ('Hel-blue'), *himinblár* ('sky-blue'), *hrafnblár* ('raven-blue'; occurs in poetry only), *íblár* ('bluish'), *indíblár* ('indigo'; a dye term), *kolblár* ('coal-blue'), *ljósblár* ('light blue'), *myrkblár*, *rauðblár* ('reddish blue'), and *svartblár* ('blackish blue');

varieties of brown: *dökkbrúnn* ('dark brown'), *gulbrúnn* ('yellowish brown'), *móbrúnn* ('peat-brown'), *myrkbrúnn* ('dark brown'), *rauðbrúnn* ('reddish brown'), *skolbrúnn* (swarthy; literally 'scullery-brown' or 'scalp-brown', see Cleasby and Vigfusson s.v.), *skjölbrúnn* (occurs only twice and is probably an error for *skolbrúnn*),⁷ *sólbrúnn* ('sun-brown') *svartbrúnn* ('blackish brown'), *dökkjarpr* ('dark brown'), *hvitjarpr* ('light brown'; occurs in poetry only), and *svartjarpr* ('blackish brown');

varieties of grey: *algrár* ('completely grey'), *apalgrár* ('dapple-grey'; literally 'apple-grey'), *ígrár* ('greyish'), *járngrár* ('iron-grey'; occurs in poetry only), *kinngrár* ('cheek grey' [that is, pale]; occurs in poetry only), and *úlfrgrár* ('wolf-grey');

and some other color terms compounded with names of objects or substances or feelings that are less easily identified in terms of hue: *blóðslitr* ('blood-color'), *brennusteinslogalitr* ('color of a sulphur flame'), *döggslitr* ('dew-color'; occurs in poetry only), *eirligr* ('copper-like', a non-color lexeme involving color by implication), *eldslitr* ('fire-color'), *fastulitr* ('fasting-color'; translated by Heggstad, Hødnebo, and Simensen as 'facial color during fasting'), *gullslitr* ('gold-color'), *hermðarlitr* ('color of anger'; occurs in poetry only), *hǫrunslitr/hǫrunðarlitr* ('flesh-color'), *járnslitr* ('iron-color'), *sænautilitr* ('sea-cow color'), *váðablár* ('danger-blue'), and *vatnslitr* ('water-color').

(ii) A second requirement is that the color is not subsumed under another color term. Here it is difficult to determine if *rjóðr* is synonymous with the more frequently used *rauðr* ('red'), or if it is a hyponym of red. Certainly, *rjóðr* seems contextually more restricted than *rauðr* in that it is used almost exclusively about facial color as in, for example, the following phrases: "hun var bædi vitur og væn lios og rið j andliti þuilikast sem en rauda rosa væri samtemprad við sniohuita lileam" (*Nítíða saga* [ed. Loth 1962–1965], 5:3.7–9) and "guðs engill stendr æ annan veg riðr ok reiðr af meingiorðum þessa mannz" (*Michaels saga*

⁷ Eva Rode, personal correspondence (19 May 2005).

[ed. Unger 1877], 1: 685.17–18). Indeed, of the 20 occurrences listed by the Arnarnaganaean Commission's *Ordbog*, only one does not refer to facial color or complexion: "allr þeirra búnaðr var rjóðr af gulli" (*Karlamagnúss saga*, 181.2).⁸

(iii) A third requirement is that the term is not collocationally restricted. This excludes *jarpr/jarplitaðr* ('brown') (as well as, of course, *dökkjarpr* and *svartjarpr*), which is used only about hair; *litfjórótr* (translated by Cleasby and Vigfusson, s.v., as 'strawberry-colored' and by Heggstad, Hødnebo, and Simensen as 'dappled, red mixed with white hairs which shed during the summer'), *ljósbleikir* (see below), and *móskjótr* (translated by Cleasby and Vigfusson, s.v., as 'piebald'), which are used about horses only;⁹ *mókollótr* (translated by Cleasby and Vigfusson as 'of dusky colour' and by Heggstad, Hødnebo, and Simensen as 'greyish brown and without horns'), which is used about sheep only;¹⁰ and most likely *rjóðr* (see above). This category also includes some of the terms listed in the previous categories: *apalgrár*, which is used about horses and oxen only; *járnslitr*, which is used about stones only;¹¹ and *skolbrúnn*, which is used about facial color or skin tone only.¹²

(iv) A fourth requirement is that the term is of frequent use. This excludes *hóss* ('grey', especially the color of a wolf), which occurs in poetry only, *purpuralitr* (see below), *blakkr* (in the Arnarnaganaean Commission's *Ordbog* translated as '?pale, tawny'),¹³ as well as several of the terms listed in the above categories, including *brandrauðr*,¹⁴ *brennustein-*

⁸ The occurrences listed in Finnur Jónsson's *Lexicon Poeticum* also suggest that *rjóðr* is used mostly about facial color.

⁹ *Litfjórótr* occurs only once: "þat var litforotr hestr med liosum rossvm" (*Gull-Þóris saga* [ed. Kålund 1898], 21.6–7).

¹⁰ The term occurs only once: "Ein ær mókollótt var þar með dilki, sú er honum þótti mest afþragð i vera fyrir vaxtar sakar" (*Grettis saga*, 200.6–9).

¹¹ The term occurs only twice: "Par finnz ok sa steinn sem abeston heitir hann hefir iarns lit" (*Stjórn* [ed. Unger 1862], 86.1–2) and "Hann [adamas] er af kyne kristallo, iarns litr er æ honum" (*Alfræði islenzk* 3 [ed. Kålund 1917–18], 84.7–8).

¹² As Biggam (1997) points out: "The most common semantic areas in which colour sub-sets occur are human hair, human skin, and economically important animals such as horses and cattle" (19). Cf. also Barley (1974), 21–22.

¹³ The *Ordbog* lists eleven occurrences. Several of these are by-names, two describe the color of horses, one describes the color of vellum, and one describes the color of brass. Finnur Jónsson (*Lexicon Poeticum*) notes that in poetry it is once used about a horse, once about a wolf, once about a ship, and once about blood.

¹⁴ The term occurs only once: "ilt er i borghlið baugi / brandrauðum framm standa" (*Ragnars saga loðbrókar* VI: 1 / *Skjaldedigting* [ed. Finnur Jónsson 1912–1915], B: 2, 257).

slogalitr,¹⁵ *doggliotr*,¹⁶ *eigrænn*,¹⁷ *eldslitr*, *føstulitr*,¹⁸ *indiblár*,¹⁹ *járnslitr*, *lit-fjórótt*, *ljósbleikr*, *mjallhvitr*, *mókollótt*, *móskjóttr*, *smaragðligr*, *sólhvitr*, *sótrauðr*, *svanhvitr*, *sænautalitr*,²⁰ *váðablár*,²¹ and *vatnslitr* (see n. 15).

Having eliminated all secondary or non-basic color terms according to Berlin and Kay's definitions,²² we are left with the following eight color terms:

(1) *svartr*. The term is monolexic and not subsumed under another color term. It is of frequent use and not contextually restricted. The approximately 180 occurrences listed by the Arnarnagnaean Commission's *Ordbog* cover a very wide range of objects, including animals (in particular horses, but also cows and bears),²³ birds (ravens), fish, supernatural beings (especially devils, but also elves, giants, and spirits), eyes, shields, water, clothing, sails, tents, and textiles in general, and it is also used about the sun and the darkness of the night. It is frequently used about human hair and complexion, as in, for example, "Manna var hann svartastr bæði á brýnn ok hár" (*Svarfdæla saga* [ed. Jónas Kristjánsson 1956], 162.16–17) and "Eysteinn konungur var svartr maðr ok dökkliðaðr" [*Heimskringla* [ed. Finnur Jónsson 1893–1901]: 3:379.12]. It is probably for this reason that it often appears as a by-name. *Svartr* is equated with

¹⁵ The term occurs only once: "A Regn boga ero þrir litir. vatnz litr oc ældz litr oc brenno steins loga litr" (*Hauksbók* [ed. Eiríkur Jónsson and Finnur Jónsson 1892–1896], 174.30–31). Cf. *Edda Snorra Sturlusonar* (ed. Finnur Jónsson 1931), in which the rainbow is also said to have three colors: "Hon er með .iii. litvm."

¹⁶ The term occurs only once: "Nú em ec svá feigin fundi ocrom / sem átfrejur Óðins haucar, / er val vito, varmar bráðir, / eða dogglitir dags brún síá" (*Helgakvíða Hundingsbana II* (ed. Neckel 1962), st. 43).

¹⁷ The term occurs only once: "þar falla hunangsflíotande loker. a éi grønom vællom" (*Old Icelandic Homily Book* [ed. de Leeuw van Weenen 1993], 66r11).

¹⁸ The term occurs only once: "Ðeir ryggvasc sva sem skimenn er fyrir manna augliti syna fæsto lit a sér. til þes at þær róse goð-gerninge sinum fyrir mænnum" (*Old Norwegian Homily Book* [ed. Indrebø 1931], 76.27–77.1).

¹⁹ The term occurs only once: "pund sinopur fyrir 6 aura, meniu fyrri 2 aura ok brunt ok indiblatt, hvit fyrri 5 aura, gult 3 aurum" (*Alfræði íslensk* 3 [ed. Kälund 1917–18], 74.5–8).

²⁰ The term occurs only once: "Þá reis upp í Krossavík þjórr nökkurr, ok var sænautalitr á" (*Vápnfirðinga saga* [ed. Jón Jóhannesson 1950], 48.26–27).

²¹ The term occurs only once: "þeir verða hræddir og felmz fullir, og villdi huer giarnan leita sier lijfz; enn þad er þó ecki hoglegt, þuiad vötn voru tueimmeigin, en vöda blár síór fjirir framann" (*Þjalar-Jóns saga* [ed. Tan-Haverhorst 1939], 29.20–22).

²² No doubt, more secondary color terms will emerge with the publication of the remaining volumes of the Arnarnagnaean Commission's *Ordbog*, and the above list does not presume to be exhaustive.

²³ Cf. Viðar Hreinsson *et al.* (1997): "the Icelandic word *svartur* which nowadays means 'black' seems at this period to have referred mainly to a brown-black colour, as when it is used to describe horses" (5:406).

tar in, for example, “honum sýndisk hann svartr sem bik” (*Njáls saga* [ed. Einar Ól. Sveinsson 1954], 321.2); with soil in, for example, “hvi ertu svá bleikr, en stundum svartr sem jörð” (*Heimskringla* [ed. Finnur Jónsson 1893–1901], 1:353.16–17); with coal in, for example, “hann uar suartur sem kol” (*Hektors saga* [ed. Loth 1962–1965], 1:107.10); with ravens in, for example, “þat it boluada kuikendi uar suart sem hrafn” (*Duggals leiðsla* [ed. Cahill 1983], 75.6–7), and with the darkness in a house on a midwinter night in “myrkr sua mikit enn fyrsta dag vti sem þa er suartazst er i husum a hævetri vm nærtr” (*Flateyjarbók* [ed. Guðbrandur Vigfusson and Unger 1860–1868], 3:559.20–22). It is contrasted with *bjartr*, *bleikr*, *hvitr*, *rauðr*, *grœnn*, *gulr*, *blár*, and *brúnn*.

(2) *hvitr*. Like *svartr*, the term is monolexic and not subsumed under another color term. The roughly 200 occurrences listed by the Arnarnaganaean Commission’s *Ordbog* cover a wide range of objects, including human hair, teeth, eyes, and skin, horses, sheep, clothing, fur, armor, weapons, wine, flowers, and bread. It is used about silver to designate that it is pure (as opposed to grey silver) and about food (*matr*) to describe religious fasting, that is, a diet of milk, curds, and the like (as opposed to a diet that includes meat). The term is commonly used as a by-name, and Christ is often referred to as “Hvítakristr”. It is equated with snow in, for example, “hann [hestrinn] var huitr sem snior” (*Strengleikar* [ed. Cook and Tveitane 1979], 224.12) and “þær systr satu a þverpalli, ok la linklæþi nysaummat a meþal þeira, hvitt sem faunn” (*Orkneyinga saga* [ed. Sigurður Nordal 1913–1916], 126.6–7)); with a dove in, for example, “Mikill er hann oc gamall hvitr sem dvfa með langv hari oc siðv skeggi” (*Piðriks saga af Bern* [ed. Bertelsen 1905–1911], 223.9–11); with the white membrane of an egg in “allir lvtir, þeir er þar koma ibrvninn, verþa sva hvitir sem hina sv, er skiall h(eitir)” (*Edda Snorra Sturlusonar* [ed. Finnur Jónsson 1931], 24.24–26); with costly stuff in “grausin huit sem purpuri” (*Eiriks saga viðförla* [ed. Jensen 1983], 74.3); and with quartz in “sæ uar þedi har og digur. hofudit þuijlijct sem hraunklettur. augun huijt sem hiegeitlar” (*Hektors saga* [ed. Loth 1962–1967], 1:111.15–17). It is contrasted with *svartr*, *rauðr*, *grœnn*, *gulr*, *blár*, and *grár*.

(3) *rauðr*. The term is monolexic and not subsumed under another term. The roughly 210 occurrences listed by the Arnarnaganaean Commission’s *Ordbog* show that it is used to describe facial color, hair color, as well as, for example, the color of blood, honey, silk, cows, horses, fire, weapons, clothing, fabric, gold, wine, and the color of the sun and

the rose. It is commonly used as a by-name. It is frequently equated with blood, as in, for example, “Erlingr var þá rauðr sem blód í andliti” and “var þá rauðr sem dreyri” (*Heimskringla* [ed. Finnur Jónsson 1893–1901], 2:259.13 and 3:27.16), and once it is equated with the color of a carp: “hon sá á honum mikla reiði fyrir því at hann var rauðr sem karfi” (*Flóress saga ok Blankiflúr* [ed. Kölbing 1896], 11.2–3). It is contrasted with *svartr*, *bleikr*, *hvítr*, *grœnn*, *gulr*, *blár*, and *grár*.

(4) *grœnn*. The term takes Old Norse-Icelandic beyond a stage II language, according to Berlin and Kay's definitions. The approximately 65 occurrences listed by the Arnarnagnaean Commission's *Ordbog* shows that it covers a wide range of objects, including grass, trees, fruit, fields, fabric (silk), clothing, tents, swords, helmets, ale, and bodily fluid and wounds. It is also used about meat and fish, but obviously in the meaning “fresh”. *Grœnn* is equated with grass in, for example, “hjálmr þinn er grœnn sem gras, gerr af inu bezta stáli ok settr gimsteinum” (*Karlamagnúss saga* [ed. Unger 1860], 311.8–9), with the sea in “vm haustet er hann grœn sem sior” (*Hauksbók* [ed. Eiríkur Jónsson and Finnur Jónsson 1892–1896], 151.25), and with leeks in “var sú hin auma [sála] grœn sem graslaucr” (*Old Norwegian Homily Book* [ed. Indrebø 1931], 148.21–22]). However, it seems that emerald is the ultimate representative of *grœnn*: “gimsteiN, er smaragdvs heitir, ok sigrar með sini fegrd alan bloma grasa, þeirra er grenst erv ok fegrst” (*Konráðs saga keisarasonar* [ed. Cederschiöld 1884], 78.35–37). The term is contrasted with *svartr*, *hvítr*, *rauðr*, *gulr*, *blár*, and *brúnn*.

(5) *gulr*. The term is monolexic and not subsumed under another color term. The roughly three dozen occurrences listed by the Arnarnagnaean Commission's *Ordbog* show that *gulr* is used especially to describe human hair color, and in this connection it is often likened to silk, as in “hann var allra manna fríðastr, hárit mikit ok gult sem silki” (*Orkneyinga saga* [ed. Sigurður Nordal 1913–1916], 41.5–6). It is also used about, for example, shields, clothing, stones, tents, chapels, teeth, and eyes.²⁴ It is contrasted with *svartr*, *hvítr*, *rauðr*, *grœnn*, and *blár*.

(6) *blár*. The term takes Old Norse-Icelandic to a stage V language in which, according to Berlin and Kay, “the focus of blue emerges from the GREEN area” (19). In the Arnarnagnaean Commission's *Ordbog*, it

²⁴ Yellow eyes are likened to the eyes of a cat in, for example, “augun gul sem i ketti” (*Sprla saga sterka* [ed. Rafn 1829–1830], 3:411.9).

is translated as “blue, blue-black, black” with the comment that “a distinction between the two can often not be drawn”.²⁵ The approximately 90 occurrences listed by the *Ordbog* cover a wide range of objects, including eyes, bruised flesh, skin color, clothing and tapestries, stones and marble, armor and weapons, smoke and flames. The flower Iris is described as blue in “Yris hefir blann lit” (*Medicalia* [ed. Larsen 1931], 95.12), and the term is equated with Hel in, for example, “Hann var dauðr ok blár sem hel, en digr sem naut” (*Grettis saga* [ed. Guðni Jónsson, 1936], 112.9–10), with cold iron in “tennr bláar sem nætrkalt jarn” (*Blómstrvalla saga* [ed. Möbius 1855], 20.22–23), and with a flame in “sam ver elld brenna . . . hann var blar sem einn logi” (*Hemings þátrr Áslákssonar* [ed. Fellows Jensen 1962], 41.18–20). It is contrasted with *svartr*, *bleikr*, *hvitr*, *rauðr*, *grœnn*, *gulr*, and *brúnn*.

(7) *brúnn*. The term takes Old Norse-Icelandic to a stage VI language, the last at which a single focus appears.²⁶ In the Arnarnaganaean Commission’s *Ordbog*, it is translated as “brown, dark brown, ?brownish-violet”. The 40 occurrences listed by the *Ordbog* concern mostly the color of horses and clothing, but *brúnn* is also used about human hair, weapons, and armor. The term is further used to describe the color of flowers in, for example, “Uiola . . . ma kenna af sino blome. firir því ath sumar ero brunar. sumar hvitar. enn sumar svartar” (*Medicalia* [ed. Larsen 1931], 93.5–7) and “Napaver er svefn gras. valmuga frær æ nor-rænu . . . þat er þrenna kyns. eitt hefir hvit blomstr. enn annath rautt. hit þridia er minst ok vex j okrum. ok hefir bruntt blomstur” (*Medicalia* [ed. Larsen 1931], 84.18–20). It is contrasted with *svartr*, *hvitr*, *rauðr*, *grœnn*, *gulr*, and *indiblár*.

²⁵ Cf. Viðar Hreinsson *et al.* (1997): “Nowadays, the Icelandic word *blár* means ‘blue’. However, it is clear that the sense of the word has changed over time. The closest translation for *blár* as it was used at the time of the sagas is ‘black’, as can be seen from the fact that the word was used to describe, amongst other things, the colour of ravens. It should be borne in mind that at this time it was impossible to create a dye that was jet-black. The nearest thing was a very dark blue-black colour, and it is clearly this colour that *blár* refers to. Translating this with the word ‘blue’ would create the wrong impression, especially in those cases in the sagas when a man intending to slay somebody deliberately dressed in *blá* clothes” (5:406). Cf. also Finnur Jónsson (*Lexicon Poeticum*), s.v., *blár*. My study of *blár/svartr* in Old Norse-Icelandic literature is forthcoming in *Scripta Islandica*.

²⁶ Interestingly, in his study of the color terms in the *Poetic Edda*, Laurensen (1882) makes the observation that brown appears only in the younger poems: “In the Elder Edda we find mention of the following specific colours: – (1) black; (2) white; (3) red; (4) gray; (5) blue; (6) green; (7) golden; and (8) (in one or two instances only, and these in poems of the later period) brown” (2–3).

(8) *grár*.²⁷ With *grár*, representing, according to Berlin and Kay, “simply the encoding of mid-brightness neutral hues between black and white” (22), the Old Norse-Icelandic color lexicon has expanded beyond stage VI. The approximately five dozen occurrences listed by the Arnsmagnæan Commission’s *Ordbog* show that it is used about a fairly wide range of objects, including skin, cloth, clothing, human hair, cats, oxen, horses, steel (armor), silver (see above), stones, and boulders. The term is used as a by-name, and it is contrasted with *svartr*, *hvitr*, *bleikr*, and *rauðr*.

Berlin and Kay argue that “[w]hen the color lexicon expands beyond Stage VI, there is a rapid expansion to the full roster of eleven basic color categories . . . Apparently, at Stage VII, the remaining basic categories, purple, pink, orange, and grey are quickly added to the lexicon and . . . in no particular order” (20, 22). In the case of Old Norse-Icelandic, it seems safe to maintain that purple (*purpuralitr*), which, according to Berlin and Kay, arises from red and occasionally black, succeeds grey (*grár*) in the temporal-evolutionary order proposed by Berlin and Kay (see, however, n. 27), although, as argued below, *purpuralitr* does not fit the criteria for a basic color term. *Purpuralitr* is a Latin (ultimately Greek) loan word,²⁸ and Berlin and Kay argue that “[c]olor terms that can be shown on linguistic grounds to be loan words are likely to be more recent additions than native color terms” (37). They further maintain that “[c]olor terms that are analyzable are likely to be more recent additions than unanalyzable terms” (37). Analyzability can, in their view, take five forms, four of which apply to *purpuralitr*. One is that the term contains more than one stem (which makes it a more recent addition than a color term containing a single stem). Another

²⁷ Witkowski and Brown (1977) emend Berlin and Kay’s evolutionary sequence. They alter it so that grey, the only achromatic basic color term added from stage II onwards, is made a ‘wild card’ that can be placed at any point after the early stages.

²⁸ Cf. McNeill (1969): “Originally, purple derived from shells (*Purpura*) found on the coast of the eastern Mediterranean Sea. The animals gathered into shoals in spring time; abrasion produced a milky white fluid from which purple dye was obtained. When the shells were broken, the white substance oozed out. Upon exposure to the air and light this substance passed through a series of colours: first citron-yellow, then greenish yellow, then green, and finally, purple or scarlet. The juice obtained from *Murex brandaris*, a kind of *Purpura*, changed photochemically into a deep blue-violet, but that of *Murex trunculus*, another kind of *Purpura*, gave a scarlet red hue . . . According to *O[ld] E[nglish] D[ictionary]*, in the middle ages *purple* applied vaguely to various shades of red but now it applies to ‘mixture of red and blue in various proportions’. The purple dye industry goes back into the preclassical period. However, its heyday was reached during the classical period” (27–28). It is difficult to know when *purpuri* was adopted and if the meaning “purple” precedes the meaning “costly stuff”.

is that the term has an analyzable stem and/or affix (which makes it a more recent addition than a color term containing an unanalyzable stem and/or affix). A third is that the term contains an affix whose gloss is “color/colored/color of” (which makes it a more recent addition than a term not containing such an affix). And a fourth is that the term is also the name (or contains the name) of an object characteristically having the color in question (which makes it a more recent addition than a color term which is not or does not contain such a name).²⁹ *Purpuralitr* appears not to have been widely used; it is not listed in Finnur Jónsson’s *Lexicon Poeticum*, and the Arnarnagnaean Commission’s *Orðbog* has only five occurrences. In three of these, the term is used about precious stones, all non-native objects. One concerns the jacinth: “margar huitar byflugur sem snior flugu ok foru utan af seiminum. enn sumar af þeim hófdu raudan purpura lit sem iacinctus” (*Stjórn* [ed. Unger 1862], 210.117–19). Two concern the amethyst, and in both *purpuralitr* is equated with the color of a drop of wine, also a non-native item: “Ematistvs hefir pvrpvralit sem vindropi” (*Hauksbók* [ed. Eiríkur Jónsson and Finnur Jónsson 1892–1896], 227.1) and “Amatistus hefir purpura lit sem vin-dropi” (*Alfræði Íslenzk* [ed. Kålund 1908], 1:81.1). Although *purpuralitr* still exists as a color term, it is archaic and rare; *Orðabók Háskólans* lists only six occurrences dating from the mid-eighteenth century to the mid-twentieth century.³⁰ The current term for purple in modern Icelandic is *fjólublár* (‘violet-blue’), a secondary color term, which first occurs in the late eighteenth century.

Orange, according to Berlin and Kay, “usually becomes isolated from YELLOW but there is some evidence to indicate that in some cases it may have arisen from RED” (22). In Old Norse-Icelandic, it appears that this isolation did not take place; there is no basic color term for orange. The term *raudgulr* appears not to have been widely used; indeed, the Arnarnagnaean Commission’s *Orðbog* lists only three occurrences.³¹ The term still exists in Icelandic, but, like *purpuralitr*, it is now rarely used. The current term for orange in modern Icelandic is *appelsínugulur* (‘orange-yellow’), a secondary color term, which, like *purpuralitr* and *fjólublár*, is derived from a concrete object, here

²⁹ The fifth criterion for analyzability is that “color terms containing derivational affixes are more recent additions than color terms not containing derivational affixes” (37).

³⁰ Here and in the following, the references to *Orðabók Háskólans* are to the dictionary’s website: <http://www.lexis.hi.is/cgi-bin/ritmal/leitord>.

³¹ In one of these, *raudgulr* is used to describe the color of cloth; in the other two, the term is used to describe human hair color.

a (non-native) fruit. According to *Orðabók Háskólans*, *appelsínugulur* first occurs in the mid-twentieth century.

The modern Icelandic term for pink is *bleikur*. Old Norse-Icelandic has no term for pink; yet *bleikr* certainly exists but denotes different colors according to its context. Although the term appears most frequently in the meaning “pale (♁: of weak or reduced color), wan, ?bleached” (the Arnarnagnaean Commission’s *Ordbog*, s.v., *bleikr*), as in, for example, “gevr hon [sólin] af ser litit lios oc bendir firir með bleikum lit margs mannz feigð” (*Alexanders saga* [ed. Finnur Jónsson 1925], 70.32–71.1) and “stundum var hann raudr sem blod en stundum bleikr sem bast edr blarr sem hel edr fölr sem nárr suo at ymsir þessir litir færduzt j hann suo bra honum vid” (*Flateyjarbók* [ed. Guðbrandur Vigfusson and Unger [1860–1868], 2:136.35–37), the term appears not uncommonly in the meaning “blond, fair, light-coloured” (translation offered by the *Ordbog*) as in, for example, “Alexannder s(on) Priami var huitr ahaurunnd hær madr herdimikill. sterkr oc storradr harid bleikt oc bla augun” (*Trójumanna saga* [ed. Louis-Jensen 1963], 66.11–12) and “Føgr er hliðin, svá at mér hefir hon aldri jafnføgr sýnzkr, bleikir akrar ok slegin tún” (*Njáls saga* [ed. Einar Ól. Sveinsson 1954], 182.20–22). When used to describe the color of horses and cows, the term seems to mean “light-coloured, ?fawn, ?pale yellow, ?dappled” (translation offered by the *Ordbog*) as in, for example, “Því næst riðu fram or konungs fylking Riker ok Marant, annarr á bleikum hesti en annarr á grám” (*Karlamagnúss saga* [ed. Unger 1860], 302.38–39) and “ek sá hér upp risa at Hofi uxa bleikan, mikinn ok skrautligan” (*Vápnfirðinga saga* [ed. Jón Jóhannesson 1950], 48.18–19).³² In two instances (both in *Stjórn*), *bleikr* may, according to the Arnarnagnaean Commission’s *Ordbog*, denote “?(light) red”: “fyrir þann skyllt er ertrnar þær sem hann keypti uaru raudar edr bleikar. þa uar hann þar af kalladr Edom” and “Hafdi hann .iii. nófn . . . hann het Esau sua sem raudr. ok Seyr þat er lodinn. ok Edom þat er bleikr edr blodligr” (*Stjórn* [ed. Unger 1862], 161.4–6 and 161.7–9).³³ It is quite possible that *bleikr* should be regarded as a macrocolor covering, at least partly, the category of pale or light colors.³⁴ Evidently, the term lost some of its semantic portfolio in the

³² Cf. Barley (1974), 22–23.

³³ For a discussion of the meaning of *bleikr* in this passage, see Wolf (2005).

³⁴ Biggam (1997) describes macrocolors as follows: “Not every language has a single colour lexeme per colour category, that is, a word such as N[ew] E[nglish] *green* for the green category. To Modern English speakers, red, orange, brown and purple are separate categories with separate lexemes denoting them, but speakers of other languages, although perfectly capable of seeing these four colours, may denote them with a single

course of the history of the Icelandic language. It is difficult to determine when the semantic change took place. The 88 occurrences listed by *Orðabók Háskólans* suggest that it was not until the mid-twentieth century that *bleikur* appears in the meaning pink and that it continued to denote also pale until the late twentieth century, though here it is, of course, important to bear in mind that writers — and especially Icelandic writers — often have a tendency to archaize. Certainly in the spoken language, *bleikur* is no longer used in the meaning pale, but it continues to be used to describe the color of horses and cows.

III. Berlin and Kay's groundbreaking study has not been immune to criticism. McNeill (1972), for example, outright rejects the implicational hierarchy, arguing that "there is no universal sequence in which colour terms arise, because this order is determined by the function of colour terms in a culture" (22). Using the linguistic communities of Navaho, Pukapuka, and Japanese, she maintains that "the development of colour names and their foci are specific to the culture in which the name developed and have much to do with the available natural resources and the range of colours they provide" (28–29).³⁵ Kay and McDaniel (1978) are less severe in their judgement; they call for a reinterpretation of the evolutionary sequence of basic colors and view "the development of basic color-term lexicon not as the successive encoding of foci, but as the successive differentiation of previous existing basic color categories" (640). Similarly, Crawford (1982), who maintains that "Berlin and Kay's criteria for defining basic color terms pose insoluble problems for scholars trying to apply their model", only goes so far as to propose a new definition of the basic color term concept "in order to eliminate contradictory and ambiguous criteria" (338). He suggests the following definition:

A basic color term occurs in the idiolects of all informants. It has stability of reference across informants and across occasions of use. Its signification is not included in that of another color term. Its application is not restricted to a narrow class of objects. (342).

Wylar (1984) is one of the scholars for whom Berlin and Kay's criteria pose problems. He examines "whether Berlin and Kay's theory of basic colour terms can be verified in the case of Old English" and con-

lexeme. Such a colour concept is a macrocolour" (18).

³⁵ Cf. Sampson (1980): 100.

cludes that the formula is only “partly applicable” (55).³⁶ Finally, Taylor (1995), who is favorably disposed towards Berlin and Kay’s study, argues that the proposal that all languages in the world select from a universal inventory of just eleven focal colors needs “relaxing” (12).³⁷ He also notes that there are languages whose inventory of color terms do not conform to Berlin and Kay’s generalizations about the distributional restrictions of color terms. He mentions, for example, that “[l]anguages which do not have separate terms for blue and green, but which nevertheless have terms to the right of blue [i.e., brown, grey, orange, purple, or pink], are by no means infrequent” (13).

Despite these and other criticisms, which have led to some modifications of Berlin and Kay’s two basic claims, subsequent research has largely substantiated their findings and supported their arguments. Indeed, as demonstrated above, Berlin and Kay’s theory is eminently applicable to Old Norse-Icelandic as an evolutionary stage in the history of the Icelandic language, and it seems unnecessary to turn to Crawford’s revised definition of “basic color term” as, for example, Biggam (1997) chose to do in her study of the color blue in Old English. The analysis reveals that Old Norse-Icelandic has eight basic color terms: *svartr*, *hvítr*, *rauðr*, *grœnn*, *gulr*, *blár*, *brúnn*, and *grár*. For lack of data, it is, of course, impossible to assess the evolutionary sequence of these terms. With its eight basic color terms, Old Norse-Icelandic may be designated a stage VII language, which in Berlin and Kay’s study is represented by 20 of the 98 languages in their sample. The most frequently occurring stage VII systems exhibit all eleven basic color terms, but at least two of the languages in the experimental sample, Urdu and Cantonese, possess, like Old Norse-Icelandic, only eight basic color terms.³⁸ Urdu has terms for black, white, red, green, yellow, blue, brown, and purple, but lacks terms for orange, pink, and grey, and Cantonese has yet to add brown, purple, and orange to its basic inventory. Berlin and Kay treat these languages as early stage VII systems,

³⁶ He claims that “the absence of a generic term for blue and the position of grey and the existence of non-specified abstract colour terms make it much less strong a rule than it might be supposed to be” (55). In his view “[i]t is therefore doubtful whether basic colour terms can be semantic universals or are a reliable means to characterize the evolutionary processes in the history of a language or of civilizations” (55). Cf., however, Biggam (1977), who maintains that “Wyler shows evidence of major misunderstandings of Berlin and Kay’s theories” (71).

³⁷ He draws attention to Russian, which, with its terms for light and dark blue, has twelve basic color terms.

³⁸ Berlin and Kay further note that “Tagalog lacks a term for orange as does Vietnamese” and that “Catalan lacks pink and orange terms” (35).

noting that most of the stage VII languages tend to possess all of the four remaining color terms, that is, purple, pink, orange, and grey. In modern Icelandic, one additional basic color term — *bleikr* — has been added. With its nine basic color terms, Icelandic therefore differs from most of the stage VII languages examined by Berlin and Kay, which have basic color terms also for orange and purple.

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