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THE ENCYCLOPAEDIC MEANING OF ERYTHROS IN KOINE GREEK TOPONYMS. A COGNITIVE APPROACH TO THE DEFINITION OF THE ANCIENT COLOUR CARDINAL POINTS SYSTEM

Summary. The cartographic and historiographic traditions interpreting the Greek toponym *Erythra Thalassa* indicate this expression could designate several water basins in classical historiography, though it is usually rendered univocally as the Red Sea. This research applies cognitive semantics to the history of geography to retrieve the *encyclopaedic meaning* of the term *erythros* in relation to its *dictionary meaning* “red”. Computationally generated lists of frequency from about 50 ancient Greek and Latin oeuvres denote a predominant toponymic use of the term and a *fixed collocation* in conjunction with *thalassa* “sea”. Additional statistical data extrapolated from the *Septuagint* and the Greek New Testament reveal the tendency in the biblical tradition to use exclusively the inflected form *erythra* in *fully fixed collocations* with the term *thalassa*. The paper finds out that the specific shade of red denoted by *erythros* has been used since the seventh century BCE in a number of other toponyms and ethnonyms to convey the conceptual meaning of “southern”. To comparatively verify this hypothesis, several Greek toponyms incorporating the term *leukos* – “white” or “western” – are discussed in relation to their relative position in the oikumene. Based on comparative chronologies and diatopic attestations of the phenomenon, the hypothesis that the Turkic colour cardinal points system and the linguistic means to convey it was introduced to Greece during the period of contact with the Scythe people is proposed.

Keywords: Ancient Greek toponymy; colour cardinal points system; *Erythra Thalassa*; *Leukosyroi*.

Introduction

Although the etymology of the modern name of the Red Sea (i.e., the Indian Ocean in the ancient Greek sources) is disputed, there is common agreement on the notion that it is the literal rendition of Ερυθρά Θάλασσα through Latin *Mare Rubrum* (Sidebotham, 2018; Bacic, 1995; Towers, 1959; Hoyt, 1912). However, the author of this study argues that while the translation of *erythros* with “red” is correct in terms of *dictionary meaning*, it fails to identify the Greek term’s peculiar *encyclopaedic meaning* (Langacker, 1987). Expressly, such a translation does not allow to perceive that the conceptual meaning red assumed in the cognitive construction of the Greek oikumene’s boundaries is “southern”.

The analytical tools of cognitive linguistics offer an opportunity to innovatively investigate the multilingual toponymic tradition of classical antiquity focusing on the meaning attributed to place names in relation to the cultural construction of the geographical space (Gallo, 2011). The aim of this study is (a) to understand the conceptual, rather than literal, meaning attributed to numerous place names incorporating the stem *erythr-* supposedly meaning “red”, (b) to grasp the *forma mentis* of the people attributing that specific name to places and, (c) to understand the historical reasons for lexical, semantic, and cognitive modifications of the toponyms. These three points indicate the main tasks of the research the results of which are summarized in this article.

The structure of this paper reflects these three aims. Firstly, reviewing secondary sources, the notion that the Greek oikumene was imagined as land surrounded by four seas is discussed. Secondly, the conceptual meaning of the investigated term is reconstructed by the means of statistical analysis (§ 1.) conducted on two series of primary sources – biblical (§ 1.1.) and non-biblical (§ 1.2.). The diachronic and diatopic attestation of the term *erythros* is discussed at the end of section 1. to define the historical reasons for the semantic transition toward the toponymic use. Finally, the cultural mindset that led to the spread of the semantic calque in the Greek oikumene is comparatively defined by investigating classical Greek toponyms incorporating the term *leukos*, “white” or “western” (§ 2.).

Aims

The aim of this research is to define the *encyclopaedic meaning* of the Koine Greek term *erythros* which carries the *dictionary meaning* “red”. In other words, it is my intention to reconstruct the meaning of this less common Greek term for “red” carried in the Greek oikumene *linguaculture* (Risager, 2007).¹ The hypothesis I investigate is that the signifier *red* carried the culture-specific meaning of “southern” in Koine Greek. To exemplify the concept of

¹ The concept of *linguaculture* is borrowed from Risager (2007), but in this study it is used specifically to describe language as a meaning-making cultural practice peculiar to each sociocultural context. In other words, it is the environment that attributes a culture-specific (*encyclopaedic*) meaning to transcultural signifiers.

encyclopaedic meaning, in Lithuanian a beef steak can be *green* (*žalia*), a fact that would be illogical for speakers not sharing the same encyclopaedic knowledge that associates “raw” products to the signifier *green*, which in no way carries, in this specific context, a meaning related to a reflection of light. The distance in time and space between two *linguacultures* exacerbates the non-intelligibility of culture-related semiotic triangles.

Furthermore, investigating the hypothesis that *red* meant “southern”, this study supports the claim I made in other works that the colour cardinal points system – usually considered an exclusively Turkic-Mongol manner to name cardinal points using colour names – spread across several continents in early antiquity and had its western limit in the meridian passing through the eastern part of the White, Baltic, and Mediterranean Seas.

In turn, the notion that this system was in use in Koine Greek would contribute to explaining ‘unknown’ and ‘until now unexplained’, or at least ‘debated’, meanings of place names and names of ancient people such as *Witland* “White Land” mentioned in the Old English Orosius to refer to the Prussian lands (Mazzella, 2004); the name *Leukosyroi* “White Syrians” in Strabo’s *Geography* (Olshausen, 2006); the name of the Red Sea (i.e. the Indian Ocean) and the name of the Baltic (i.e. “White”) Sea (Dini, 1997). The hypothesis I propose is that the mentioned colour cardinal points system – naming *white* the west, *red* the south, *black* the north, *celestial blue* the east, and *golden* the centre – was known and linguistically productive in a multilingual but culturally united *Sprachbund* which extended from the Pacific to central Europe.

However, the notion that this system was known and understood in ancient Greece has neither been suggested nor investigated. On the contrary, the ignorance of such a system led even specialists to claim that the frequent recourse to colours in Greek toponyms and ethnonyms is ‘still unexplained’ and ‘unclear’ (Olshausen, 2006). To ascertain the hypothetical relation equating *erythros* to “southern” and contextualize it in a cognitive frame constitutes a first step in recognizing the western limits of the colour cardinal points system.

Literature Overview

With reference to the perception and naming of the maritime space in Ancient Greece, Kowalski's assertion that 'there is no specific literature' dedicated to its representation and description was not too radical in 2007 (Kowalski et al., 2007, 48). Yet, in recent years, the interest in how the sea contributed to shaping Ancient Greece's cultural identity has significantly grown. In 2009, an entire chapter of the *Oxford Handbook of Hellenic Studies* was devoted to the cultural dimension of the sea and focused specifically on the relation between space perception and its naming in the process of identity formation (Kim, 2009). The following year, a workshop on 'Water and Identity in the Ancient World' was held at Durham University. The methodological discussion indicated the advantages of interdisciplinary and comparative models for the anthropological and cognitive analysis of 'water as a socio-cultural construct' but also 'as a defining element of communal identity' (Ceccarelli, 2012).

The perception of collective self and otherness has often assumed the tone of the definition of frontiers between the inhabited world and the barbarity. This opposition clearly emerges in the monographic study of Bacic, *Red Sea-Black Russia. Prolegomena to the History of North Central Eurasia in Antiquity and the Middle Ages*, in which the Scythe people represent the almost non-human alterity of two distinct identities: that of the Rus' people and the Byzantine one (Bacic, 1995, 21). In this book, the Red Sea to the south, the White Sea north-west of Black Russia and the Black Sea to the south-west delimit the civilization besieged by the barbarians of inner Asia, until the defeat of the Blue and Golden Hordes. Unfortunately, the study falls short of clarifying the opposition to red-black mentioned in the title as well as the frequent reference to colours to name places and people in the land of the Scythes.

The Scythes had indeed been elected as the model of the unworldly people of Gog and Magog of the ancient world: since the times of Herodotus, this *topos* permeated the Greek and Byzantine historiography as suggested by Dan in her study on 'the history of the perceptions and representations of the Black Sea in antiquity' (Dan, 2013, 40). This research, while investigating

the 'invention and transformation of its [the Black Sea] comparison to the Scythian bow', sanctions modern scholars' interest in 'how huge and remote spaces on the edges of the inhabited world were mentally constructed, communicated and reinterpreted in pre-modern geography' indicating a new interest for language and communication in the mental representation of space (Dan, 2013, 39).

Dan's article, together with her study on the *Peoples of the Indian Ocean in Western Travel Literature*, points at a theoretical and methodological aspect relevant to the cultural and linguistical investigation of historical geography. It indicates that an analysis of the perception and representation of identities and their borders is necessarily an interdisciplinary study: the anthropological construction of the alterity is achieved through (a) the definition of culturally determined geographical boundaries; (b) the naming — a linguistic and cognitive act — of both the identity and the alterity in order to make them recognizable and invariable in time; and (c) the selection of the cultural parameters defining the intrinsic nature of the identity, that is, the inner boundaries of the community. Accordingly, in the investigation of identity formation, the ancient science of geography is interrelated with the modern parameters of anthropology, but it is the language — the naming of borders, identities, and cultures — that frames and structures the process (Remotti, 2018).

Research Methodology

The secondary sources discussed in the above section contributed to the definition of a historiographic and cognitive context validating the notion Greek, Hellenistic and Byzantine civilizations perceived the boundaries of their oikumene as cultural and geographic limits, not as national borders. This thesis is coherent with the perception of a civilized world surrounded by four seas symbolically placed in the four cardinal directions theorized in the *Historical Library* of Diodorus the Sicilian and in Agatharchides of Cnidus' *Peri ten Erythran Thalassan*. As noted above, the naming of borders, that is, the naming of these four seas might contribute to a better understanding of the symbolic representation of space in classical antiquity. The precise understanding of

Erythra, the designation of the southern border, is part of this endeavour.

Investigating the cultural and linguistic act of naming, cognitive semantics provides the analytical tools capable of retrieving the ancient Greek *accessory meaning* of the toponym *erythros* in a comparative frame of investigation (Taylor, 2003, 118). According to the cognitive approach elaborated by Langacker and its implementation in the field of semantics, language itself does not encode meaning. On the contrary, linguistic units serve as accesses to repositories of knowledge. Hence, a word has a *dictionary meaning* — ‘what that word means basing on the user’s mental lexicon’ — and an accessory meaning or a ‘broader cognitive domain’ (Langacker, 1987, 71). This second concept, named *encyclopaedic meaning*, is particularly relevant in a study about the mental representation of the space and its naming. It defines the meaning as subjective, culturally related, dependant on personal knowledge and variable in time (Taylor, 2003, 118).

Conscious of the advantages of interdisciplinary approaches, in this research the empirical tools of cognitive semantics are employed to retrieve the (supposedly toponymic) *encyclopaedic meaning* of *erythros*. While historical linguistics and lexicology tend to prefer analytical approaches, cognitive linguistics ‘cares more about empirical methods’ (Gonzalez-Marquez et al. 2007, 2) and prioritizes the analysis of corpora to retrieve the meaning of linguistic units as it emerges from the usage in the context, rather than from vocabulary definitions. Accordingly, two sets of texts, representing the usage context of almost all written mentions of the stem *erythr-*, are statistically investigated in this study: a biblical corpus consisting of the Greek books of the Scriptures (both Old and New Testament), and a non-biblical corpus of over 50 literary, historical, and geographical works attesting the erudite Koine Greek usage. These corpora offer the opportunity to investigate a large quantity of textual discourse which is especially advantageous for studying ‘linguistic phenomena whose frequency of occurrence or range of instantiations is the issue’ (Gonzalez-Marquez et al., 2007, xviii).

The parameter of frequency is of primary importance to verify the hypothesis discussed in this article, although rather than the morpheme-level investigation semantic is the relevant aspect. The statistical scrutiny of the two corpora aims at revealing whether *erythros* was used more frequently

in contexts indicating shades of the red colour or to designate a relative position in a geographical discussion. Moreover, when chronologically sequenced, the texts in the two corpora display an increase in the frequency of the toponymic use of *erythros* until the third century BCE. Covering a period of about nine centuries (from the Homeric texts to Strabo geographical oeuvres) the works constituting the corpora permit to obtain a distribution of frequency of the toponymic use that points at changes largely too slow for being appreciated if investigated by other means or selecting other primary sources.

Furthermore, frequency assessments permit to recognise the co-occurrence of *erythros* with other terms thus yielding specific patterns, rather than 'an approximate sense for the naturalness of certain collocations' (Gonzalez-Marquez et al. 2007, xviii).² In this study, the statistical analysis of the computationally generated lists of frequencies certainly points to the existence, since the third century BCE, of patterns such as the *fixed collocation* of *erythra* in connection with the term "sea", a word pertaining to geography and the cultural and cognitive construction of the limits of the oikumene.

Primary Sources

Greek *peripli* — accounts of the circumnavigation of seas, or simply descriptions of portal cities around a sea — and geographical treatises were surveyed to preliminary confirm the non-coincidence between the modern Red Sea and the *Erythra Thalassa* of classical sources. With the same intention, the anonymous *Periplus of the Erythraean Sea*, Arrian's *Periplus* and other Hellenistic seafarers' descriptions were confronted with Greek and Latin geographical works such as Strabo's *Geography* and Pomponius Mela's *De situ Orbis*. This preliminary investigation confirmed the fact – well known to specialists in historical geography – that the name Red Sea was used in classical sources either to refer to the Indian Ocean or to its inlets.

² Collocation is intended as the co-occurrence, in a standardized and eventually fixed order, of two or more lexical units in a way that the order of the units contributes to the definition of an accessory meaning different from that carried by the two units separately.

For the semantic investigation aimed at retrieving the cultural meaning of *erythros*, and determining the type of collocations in which the term occurred, lists of frequencies were generated using the computational tool developed by the Perseus Digital Library of the Tuft University. Specifically, the Perseus 4.0 "Hopper" was used to survey the Greek and Roman collection. It contains about 250 oeuvres consisting of 24,000,000 Greek and Latin words. A smaller corpus of 52, mainly Greek, works (detailed in *Table 1*) was selected to include only oeuvres where the investigated term was attested. A relatively small number of texts included in this *ad hoc* corpus consists of Latin compositions in which the Greek loanword *erythros* (usually in the inflected form *Erythraei*) is attested.

The *ad hoc* corpus is sufficiently large – about 4,500,00 words – to be representative of Koine Greek. It contains 262 occurrences of the stem *erythr-*, which is close to the totality of attestations in written sources. The statistical analysis took into consideration the natural form ἐρυθρός, -ά, -όν, (as in Aristophanes, *Acharnians*, 787) as well as the comparative and superlative -ώτερος, -ώτατος (as in Plato, *Timeus*, 83). Different forms dictated by metrical requirements, such as -ότερος, have been equally accounted for. The automatically generated lists of frequencies were used as a first reference and then refined by manually checking each occurrence. Finally, it should be noted that Greek papyri and inscriptions were not reviewed because they are of marginal quantitative relevance; it is not possible to systematically survey the whole corpus, and they usually represent local Greek languages rather than Koine Greek.

To confirm the reliability, relevance and pertinence of the collected data, critical editions, concordances and specialized lexica were used. The analysis of collocations in the books of the Bible was conducted on digital texts of the *Septuagint* (*Codex Vaticanus*) and the *Vulgata*. Printed editions were used to verify the translators' attitudes toward relevant passages (Weber & Gryson, 2007; Rahlfs & Hanhart, 2006). Strong's *Concordances of the Bible* were the source for computing the occurrences of the investigated toponym in the Holy Writ (Strong, 1890). The etymological dictionaries of the Greek language edited by Chantraine and Beekes are the sources for all the Greek etymologies mentioned in this study, if not otherwise indicated (Chantraine,

2012; Beekes, 2009). The historical referent of toponyms, as well as toponyms' etymologies, are retrieved from the *Barrington Atlas of the Greek and Roman World* and *Smith's Dictionary of Greek and Roman Geography* (Talbert, 2000; Smith, 1854).

Findings and Discussion

1. Dictionary and Encyclopaedic Meanings of the Terms *Erythra* and *Erythros*. Etymological and Statistical Analysis

There are no doubts that the primary, or dictionary, meaning of the Greek *erythr-os* (with the prosthetic *e-*) is "red" since red is 'the only colour for which a definite common Proto Indo-European root word has been found' (Klein, 1971, sub voce 'Red'). However, there are several reasons to further explore the possibility of an accessory encyclopaedic meaning, that is, a culture-specific connotation attributed to the term *red*.

Firstly, both New Testament and Koine Greek had several different terms to indicate "red" such as *πυρρός* (*purros*) "red", "fire coloured" and *κόκκινος* (*kokkinos*) "red", "scarlet", but *erythros* was generally rare and unproductive in Koine Greek (Strong, 1890, sub voce 'ἔρυθρός', sub voce 'πυρρός' and sub voce 'Ροῦφος'). Secondly, etymological dictionaries and Greek literature concordances, next to the relative entry, provide just a single, and always identical, example of usage: 'ἔρυθρός red "πόντω τ' ἔρυθρῶ" the Red Sea'. The fact that only one, always identical, example is cited in all dictionaries points to a possible *collocation* in conjunction with *sea* (Slater 1969, 42). Finally, some scholars have cast doubt on the true meaning of Greek *erythros* and the renowned Strong's concordances of the bible point at *erythra* 'uncertain affinity [with] "red", i.e. (with θάλασσα) the Red Sea' (Strong, 1890, sub voce 'Erythra').

This uncertainty is possibly the result of the overlapping traditions mentioned by the linguist Thayer: 'ἔρυθρῶ, ἔρυθρον, red from Homer down; in the N. T. only in the phrase ἡ ἔρυθρῶ θάλασσα the Red Sea; from Herodotus down [...] the Indian Ocean' (Thayer, 1889, sub voce 'Erythra'). Beside confirming the fact that the ancient called the Red Sea the Indian Ocean 'from

Herodotus down', Thayer's *Greek-English Lexicon of the New Testament* tells of at least three distinct linguistic and historical conventions. Firstly, there is a tradition originating before or with Homer which attests to the use of this qualitative adjective exclusively in a chromatic sense. Secondly, the Greek New Testament testifies of a *fully fixed collocation* in which the root *erythr-* appears 'only in the phrase [...] "the Red Sea"' (Thayer 1889, sub voce 'Erythra'). A third, less systematically explored, tradition attests to a toponymic rather than chromatic use of *erythros*.

1.1. The biblical tradition. The translation of the Torah into Greek, completed in Alexandria of Egypt by a group of scholars of the third century BCE and known as the *Septuagint*, is largely considered the model for the Hellenistic interpretation of the Hebrew doctrine and the base for the Latin Vulgate. It influenced the Western interpretation of biblical books and, together with the *Greek New Testament*, formed the foundation of Christian theology. For centuries, these books constituted the cognitive space to frame other, non-theological, forms of knowledge including geography.

However, the *Septuagint* translation of the Hebrew *yam suph* with "Red Sea" was dictated by a theological necessity which did not pay attention to the fact that 'there does not appear to be any explanation why [...] the Hebrew [...] *Yam Suph* should be rendered in the various translations as Red Sea' (Towers 1959, 150.). '*Yam Suph* was perhaps the name given [...] correctly [to a] Sea of Reeds', that is, a wide expanse of reeds (Scullard, 1930, 57). The meaning of the two terms separately is undisputed: the word *yam* means "sea" or, in a metaphorical sense, a "large expanse", while the word *suph* means unequivocally "reed" (see, as an unambiguous example, *Exodus* 2,3). The Greek translators of the Hebrew books — translators who were based in the deeply Hellenised Alexandria — intended to divulge a theological treatise compatible with the Greek transcendent conception of the divine, thus needed to artificially introduce miracles in the material historical accounts of the Hebrew books: the mundane crossing of a large expanse of reeds was clearly not suitable for this purpose.

Nonetheless, in at least three instances, the Seventy showed hesitation in rendering the original *Yam Suph* with *Red Sea* hinting at their knowledge of

the unfortunate equation. In *Judges* 11,16 the Hebrew יָם סוּפִי , *yam suph*, is rendered with the Greek $\text{\u0395\u03c9\u03c3 \u03b8\u03b1\u03bb\u03b1\u03c3\u03c3\u03b7\u03c3 \u03a3\u03b9\u03c6}$ 'indicating that the translator [...] was unwilling to use the term $\text{\u0395\u03c1\u03b8\u03c1\u03b1}$, "red", but rather preferred to transliterate \u0399\u03c9 as $\text{\u03a3\u03b9\u03c6}$ ' (Scullard, 1930, 57).

Notably, in the *Septuagint*, the term *erythros* is much more frequent in comparison with the rest of the Greek literary and historiographic tradition with 68 occurrences, including inflected and derivate forms. *Purros*, the other Koine Greek term for "red", is attested in the translation of the Seventy, although it is generally typical of the coat of horses (*Zechariah* 1,8) and relatively rare with only three occurrences. This contrast suggests that "red" in the *Septuagint* is predominantly *erythros* in a variety of contexts and not only, or mainly, as a toponym.

On the contrary, rarely does the Greek New Testament use *erythr-*, if not in the collocation *Red Sea*. Rather, the colour red is often indicated by the root word \u03bd\u03c6 - "fire" or "red like fire" (see *Revelation* 6,4 and 12,3). Strong's *Concordances* indicate $\text{\u03bd\u03c6\u03c1\u03cc\u03c3}$ as the most frequent term to mean the colour red in the Greek New Testament: it is used 54 times, including inflected and derived forms (Strong, 1890, sub voce '\u03bd\u03c6\u03c1\u03cc\u03c3'). The more specific $\text{\u03ba\u03ba\u03b9\u03bd\u03cc\u03c3}$ "scarlet", sometimes used as a substantive indicating "scarlet clothing" is attested to too – six occurrences (Thayer, 1889, sub voce '\u03ba\u03ba\u03b9\u03bd\u03cc\u03c3'). The form $\text{\u03a1\u03cc\u03c6\u03cc\u03c3}$ should be mentioned as well since it carries the meaning of "red", though the two occurrences of *Rufus* are just proper names vaguely indicating red hair, at least etymologically (Strong, 1890, sub voce '\u03a1\u03cc\u03c6\u03cc\u03c3').

In the Greek New Testament, the inflected form *Erythra* is used exclusively as a toponym indicating the Red Sea as in *Acts* 7,36 and *Hebrews* 11,29 (Strong, 1890, sub voce '\u0395\u03c1\u03b8\u03c1\u03cc\u03c3'). Accordingly, the data indicates in the Greek New Testament a *fully fixed collocation* in conjunction with the noun *thalassa* "sea": the two terms appear only in this specific order and are never substituted by synonyms.

Summing up the argument, from a linguistic perspective, it seems *erythros* was the standard term for "red" in the Greek language of Egypt, while in other parts of the oikumene it was certainly less common – *purros* and *kokkinos* were preferred. In later biblical traditions, both Greek and Latin,

the lexeme was preserved almost exclusively in the rendition of the Red Sea confirming both the unfamiliarity with the term and the necessity to preserve a miraculous and transcendental reading of the Hebrew accounts.

1.2. The toponymic tradition in non-biblical sources. According to Greek and Latin scholars, the name ἐρυθρὰ θάλασσα comes from '*Erythreus, seu Erythras, filius Persei & Andromedae, qui in confinio rubri maris regnum habuit*' (MacBean, 1773, sub voce '*Erythraeum Mare*'). Therefore, the Southern Sea bears the name of Erythreus, the "red" king that mastered the use of ships and the art of sailing 'among the islands of the southern sea' and there drowned (Pausanias I,5; I,10; I,12. Pliny. VI,23. Herodotus I,180; I,189. Mela II,8) (Lemprière, 1826, sub voce '*Erythraeum Mare*'). Quite eloquently, in this myth, the Southern Sea is referred to as the Red Sea. This etiological belief, in some versions, tells also of the island of Ogyris (Strabo XVI, passim) where the king Erythras "The Red" is buried. The island is itself loosely identified with islands and archipelagos of the Indian Ocean (Smith, 1854, sub voce '*Ogyris*').

In this context, the attribution of the primary meaning of "southern" to the Greek term *erythros* seems coherent with the Greek and Hellenistic conception of boundaries: the limits of the oikumene were consistently defined by large water basins, not by the perception of political or administrative borders. As an example, this concept is clearly expounded in the Historical Library of Diodorus the Sicilian (the first century BCE) when the author affirms that Ἀραβίας παρὰ τὴν Ἐρυθρὰν θάλατταν ἕως Ἰνδῶν καὶ τοῦ πέρατος τῆς οἰκουμένης: the sea lapping against the Arabian and Indian coasts, the '*Erythran Thalattan*', constitutes 'the limit of the oikumene' (II, 35). Diodorus frequently mentions water bodies to indicate the perimeter of geographical or even political entities. Accordingly, the territory of the Scythians occupied an area between 'the ocean and the Lake Maeotis' that is the Sea of Azov (II, 43). Then, when mentioning that the Scythians extended their domains 'on the one side as far as the ocean to the east, and on the other side to the Caspian Sea and Lake Maeotis', Diodorus again refers to seas in order to indicate the north-east direction and its opposite, the south-western one, that is the ocean he named in many other episodes *Erythra Thalatta* (II,43).

A possible cognitive bound connecting the specific shade of red represented by the root *erythr-* and the cardinal direction south has not been adequately examined in academic studies. To contribute with exhaustive data, I produced a list of frequencies indicating the rate of occurrence of the term in Greek literature collecting and comparing virtually all known mentions of the stem. I then cross-referenced the data with Greek literature concordances to put to test the hypothesis that in the pre-*Septuagint* tradition *erythros* was mainly a toponym, not a lexeme carrying a chromatic meaning.

Table 1.

List of frequency of the root erythr- and its non-toponymic occurrences in literary, geographical, and historical works of the period eighth century BCE—early third century CE. The list has been computationally generated by the Perseus Digital Library of the Tuft University; it has been manually refined by the author to individuate the non-toponymic occurrences

Words in Corpus	Occurrences of the Stem <i>eryth-</i>	Non-toponymic Use	Corpus Name
399409	4	0	Cassius Dio Cocceianus, <i>Historiae Romanae</i>
305870	7	0	Flavius Josephus, <i>Antiquitates Judaicae</i>
298102	9	0	Aristides, Aelius, <i>Orationes</i>
288825	7	0*	Strabo, <i>Geography</i>
284417	3	0	Dionysius of Halicarnassus, <i>Antiquitates Romanae</i>
279736	24	16	Athenaeus, <i>Deipnosophistae</i>
218450	9	0	Pausanias, <i>Description of Greece</i>
184947	5	1	Herodotus, <i>The Histories</i>
125221	2	0	
111862	6	1*	Homer, <i>Iliad</i>
103320	6	2	Aelian, <i>De Natura Animalium</i>
99674	4	0	Eusebius of Caesarea, <i>Historia ecclesiastica</i>

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Words in Corpus	Occurrences of the Stem <i>eryth-</i>	Non-toponymic Use	Corpus Name
87185	8	8	Homer, <i>Odyssey</i>
83898	2	0	Philostratus the Athenian, <i>Vita Apollonii</i>
78707	4	0*	Arrian, <i>Anabasis</i>
78666	9	5	Hippocrates, <i>Oeuvres</i>
75633	2	0	Plutarch, <i>Quaestiones Convivales</i>
70422	2	0	Demosthenes, <i>Speeches</i>
61711	9	6	Plato, <i>Hippias Major</i> , <i>Hippias Minor</i> , <i>Ion</i> , <i>Menexenus</i> , <i>Cleitophon</i> , <i>Timaeus</i> , <i>Critias</i> , <i>Minos</i> , <i>Epinomis</i>
60598	16	6	Aretaeus, <i>The Extant Works of Aretaeus the Cappadocian</i>
43345	1	1	Aristotle, <i>Rhetoric</i>
38686	2	0	Aelian, <i>Varia Historia</i>
38023	4	0	Claudius Ptolemy, <i>Tetrabiblos</i>
35842	1	0	Xenophon, <i>Memorabilia</i>
31804	4	4	Galen, <i>On the Natural Faculties</i>
29370	1	0	Xenophon, <i>Works on Socrates</i>
26801	9	2	Hippocrates, <i>Collected Works</i>
23101	3	1	Philostratus Major, <i>Imagines</i>
21518	2	0	Theocritus, <i>Idylls</i>
21294	1	1	Pindar, <i>Odes</i>
20233	4	0	Plutarch, <i>Pompey</i>
18505	4	1	Plutarch, <i>Antony</i>
16912	2	0	Plutarch, <i>Cato the Younger</i>

Words in Corpus	Occurrences of the Stem <i>eryth-</i>	Non-toponymic Use	Corpus Name
16061	3	1	Pseudo-Plutarch, <i>Placita Philosophorum</i>
16020	2	2	<i>Homeric Hymns</i>
11528	2	2*	Aristophanes, <i>Birds</i>
11188	2	0	Lucian, <i>Verae Historiae</i>
10406	1	1	Aristophanes, <i>Clouds</i>
9487	2	2*	Aristophanes, <i>Knights</i>
8094	2	1	Lucian, <i>Dialogi meretricii</i>
7708	2	1	Aristophanes, <i>Acharnians</i>
6710	1	0	Julian the Emperor, <i>The Caesars</i>
5514	1	1	Aeschylus, <i>Eumenides</i>
4071	2	0	Lucian, <i>Dialogi Marini</i>
999	2	0	Philostratus the Athenian, <i>Nero</i>
988	2	0	Plutarch, <i>Comparison of Lucullus and Cimon</i>

Note. *There is a disagreement in the transcription and translation of modern editions of the texts. In some modern editions of the oeuvres, the publishers interpolate both the Greek and the translated texts adding *Erythra* or *Red next to Sea*; in other editions, the term *sea* is not preceded by the specification; in certain cases, the translation "red" of the Greek *oinopa* is disputed. It is not possible to distinguish modern interpolations from the supposedly original text.

The statistical analysis took into consideration the natural form ἐρυθρός, -ᾶ, -ὸν, (as in Aristophanes, *Acharnians*, 787) as well as the comparative and superlative -ώτερος, -ώτατος (as in Plato, *Timeus*, 83). Different forms dictated by metrical requirements, such as -ότερος have been equally accounted for. The occurrences of inflected forms were detected by the computational tool developed by the Perseus Digital Library of Tuft University. The Latin *Erythreus*, as well as derived and inflected forms, though marginally relevant since treated

as borrowings or calques of the Greek, have been equally included in the statistics. The automatically generated lists of frequencies were used as a first reference and then refined by manually checking each occurrence. Finally, since the aim of this paper is to suggest a geographical use of the term, non-toponymic occurrences have been highlighted in a separate column which, therefore, excludes collocations as *Erythra Thalassa* and other usages where the context indicates *erythr-* might refer to a direction, a region, a relative position or a cardinal point.

To exemplify the concept of a non-toponymic use, consider Cassius Dio Cocceianus' (155–235 CE) *Historiae Romanae* in which the stem *erythr-* occurs four times in total. However, three times it is a reference to the Red Sea and once it is used to name the city of Erythra. Therefore, the non-toponymic frequency of the stem *erythr-* in this historical oeuvre is zero, since it is never used in a sense different from a place name. Notably, never in this work does it indicate the colour red.

Such a tendency is evident in the whole list. In Josephus Flavius' (37–100 CE) *Antiquitates Judaicae*, the term *Erythrean* can refer almost exclusively to the sea. In the seventeen books of Strabo's *Geography* (written c. 14–23 CE), the stem *erythr-* is used seven times and 100% of the occurrences appear in a *fully fixed* collocation with *sea*. To specify, the term *Erythra* is used exclusively in the *idiomatic collocation* Red Sea and does not present capabilities of different compositional or substitutability possibilities. With reference to the oeuvres listed in the table, no other terms for "red" are used in connection with *sea*.

The oeuvres considered above are mainly representative of the first and second centuries CE, but a comparable tendency is evident in later centuries as well (cf. Plutarch, 46–119 CE and the ecclesiastical works of Eusebius of Caesarea, c. 260–339 CE). When more ancient literary works are statistically analysed, the non-toponymic frequency is remarkably higher, while the number of occurrences of the stem investigated is significantly lower. In other terms, *erythr-* is rarely used and generally, in contrast with the data from more recent works, it does not refer to a place.

As an example, in the four Aristophanes' plays considered in the statistical table — *The Knights* (424 BCE), *The Clouds* (419 or 416 BCE),

The Acharnians (425 BCE) and *The Birds* (414 BCE) — the stem *erythr-* is used only six times and it generally indicates a shade of red. Twice Aristophanes refers to the Indian Ocean adopting the formula ἡπάρ τήν ἐρυθράν θάλατταν; however, it should be noted that *erithran* is sometimes added by the modern editors of the texts. As an example, in *The Knights*, the Sausage-Seller refers generically to the sea in almost all Italian translations while the English versions, mainly based on O'Neill Jr. edition, add the specification *Red* both in the Greek and English versions by conjecturing the location from the context. Similarly, editors evidently acted in the tradition of *The Birds* when the character Epos refers to the same sea. As mentioned in the note to *Table 1*, the Greek texts preserved and published are often the results of interpretations. Accordingly, together with the original words and meanings, they also preserve the editors' interpolations, and it is sometimes arduous to distinguish the two. Finally, it should be noted that in these Aristophanes' plays, the names of some birds which in English carry the specification *red* and in the Latin binomial taxonomic classification use the roots *erith-* and *rub-*, in the Greek of Aristophanes are named using the more common *kokkinos* as for the redbreast, *erithacus rubecula*, κοκκινολαίμηξ. The habit to use *erythros* to refer to the colour red is undoubtedly modern and not representative of the pre-*Septuagint* Greek animal taxonomy.

In the *Histories* of Herodotus (c. 484—c. 425 BCE), the stem is used in connection with the term *sea* indicating the Red Sea proper only in II,8. Curiously, the historian writes of 'a sea that they call Red Sea' possibly pointing at an expression unfamiliar to him and his readers. Often in the *Histories* the same expression is also used to refer to the Indian Ocean or its inlets (Thayer, 1889, sub voce 'Erythra'). As an example, in I,1 the author claims the Phoenicians arrived at 'our sea' from the Red Sea, but the context clarifies that they had to cross Persia to do so, thus confirming Herodotus wrote 'Red Sea' to refer to the Persian Gulf or, generally, the Indian Ocean. In chapters 180 and 189 of book I, the reference to the Persian Gulf is clear beyond doubt: according to the Greek historian, the Euphrates and the Tigris 'empty in the Red Sea'. On the contrary, the modern Red Sea is generally indicated by Herodotus with the specific expression *Arabios Kolpos*. Finally, it should be noted that in Herodotus the more common terms for red are

purros — to indicate something “red like fire” as for the ‘red-hot stones’ the Scythians use to make water evaporate like in a sauna (book IV passim) and ‘red-hot irons’ (book VII passim) — and *kokkinos*. Notably, in this oeuvre, the root *erythr-* is used once (in II,73) to describe the ‘plumage partly gold and partly red’ of the mythological phoenix. Apparently, in the earliest Greek literature, when used in a chromatic sense, the investigated stem was often employed to describe the coat of horses, the skin of dragons and the plumage of birds, habitually indicating a “red-gold” shade as confirmed by Homeric usage.

The Homeric texts are the most illustrative corpus of the ancient Greek language. Preliminary, it should be noted that in Homer *erythros* is mainly the colour of wine (seven times in the *Odyssey*, once in the *Homeric Hymns*). The colour of blood, on the other hand, is generally *melas* which is conventionally translated as “black”, but probably (see the discussion about the perception of colours in Plato’s *Timaeus*) it was perceived as “dark red”. Rarely, *erythros* is a substantive indicating the egg’s yolk (twice in *Iliad*). Once in *Iliad* it is the colour of copper, which is often the colour of the sky too (XVII, 424). Once in *Iliad* it is the colour of gold (XI, 28) (Dumbar, 1880). The possibility to assimilate black and dark red with the term *melas* caused puzzlement among translators and philologists. To further complicate the modern rendering, in Homer the colour of water, and especially of drinking water, is *melas* “black” (*Iliad* II, 625; XXI, 202; *Odyssey* IV, 359; V, 353; VI, 91).

With specific reference to the sea, Homer’s *Odyssey* frequently repeats the obscure expression *epi Oinopa Ponton* which, because of the ambiguity mentioned above, has been rendered as *Winedark Sea*, that is, Black or Red Sea, depending on the modern interpretation. The renowned commentator of the *Odyssey* West famously defined this expression as ‘puzzling’ (Heubeck et al., 1990, 90); other scholars, such as Rutherford-Dyer and Gordon, had previously debated Homer’s *Winedark Sea* disagreeing about the modern geographical reference, but conceding it is certainly not a reference to the Red Sea (Rutherford-Dyer, 1983 125–128; cf. Gordon, 1978 51–52).

Summing up, the statistics relative to oeuvres supposedly produced between the eighth and the sixth century BCE show that *erythros* was never

employed to refer to the Red Sea. Only once *erythr-* is used as a toponym: in the catalogue of ships of *Iliad* II, 499 the Boeotian city of Erythra is mentioned.

There is, as illustrated in the table above, a statistical anomaly. In the *Deipnosophists* of the Greek-Egyptian writer Athenaeus of Naucratis (late second century—early third century CE) the root *erythr-* is unusually frequent: 24 times in a corpus comparable in size with the average length of the texts listed in the table. Moreover, most of the time — 16 occurrences out of 24 — it is used to convey a chromatic meaning such as “becoming redder” or “red-skinned” (book III, *passim*). Evidently, for this Egyptian writer of the Greek language, the term for “red” was primarily *erythros* unlike for most Greek scholars born in other territories of the oikumene. These statistical data seem to support the concept expressed above when I proposed the same conclusion commenting on the choice of the translators of the *Septuagint*, which, like the *Deipnosophists*, was edited in Egypt: for them, likewise for the Egyptian Athenaeus of Naucratis, *erythros* was more common than other terms such as *purros* or *kokkinos* to refer to the red colour. Nonetheless, even in Athenaeus of Naucratis, one third of the times *erythros* is used to refer to place names, though not exclusively to the Red Sea; in the third book, as an example, Arcestratus tells of the city of Erythra, which is known for grapes.

In conclusion, the analysis of the lists of frequencies points to the existence of several distinct traditions. Firstly, it has been noted that in the ancient Homeric tradition the term *erythros* is generally a substantive indicating the egg’s yolk; sometimes it is used as an adjective ambiguously indicating a colour; it is never used as a toponym except for one mention of the city of Erythra. Secondly, the non-biblical ancient Greek literature shows that since the sixth century BCE the term has become rare and of scholarly use; it was sometimes employed to form toponyms while other uses were less common; the terms *purros* and *kokkinos* to indicate the colour red or scarlet were more frequent. Since the third century BCE, in conjunction with the word “sea” *Erythra* has formed a fixed collocation. Finally, completely different is the approach exhibited by the translators of the *Septuagint*: the preferred term to render the Hebrew *edom* was, in contrast with the literary and popular traditions, *erythros*. In this biblical version, *erythros* is the standard term to indicate the colour red. *Erythra* becomes a *fully fixed collocation* with *Thalassa*

in other biblical texts that elected the *Septuagint* as their model. As a consequence, in the later Roman and Greek literary production, the influence of the theological interpretation determined the identification of the *Erythraeum Mare* with the modern basin called the Red Sea.

Extrapolating the chronological data implied in the table, we notice that the toponymic use of *red* emerged consistently just before the third century BCE and it became a fully fixed collocation around the second century CE in a manner that suggests a process of assimilation and integration of a borrowed concept, a *semantic calque*. It is possible to extend this time window to the fifth century BCE if ancient myths mainly connected to the Minoan, rather than Greek, civilization are considered. Such is the tale of the sailor king Erythras "The Red". Feeble traces of the toponymic use of *red* can be found outside the Greek oikumene in the Hebrew and Egyptian world before the fourth century BCE. However, the statistical and cognitive analysis of the most ancient Greek literature, such as the Homeric texts or Aristophanes' plays, demonstrates that *erythr-* had in classical Greek — before the presumed contact with the lending culture — exclusively the chromatic (non-toponymic) meaning of "red" in the specific shades typical of gold and copper or, alternatively, indicated the egg's yolk. A period of transition could be demarcated by Hippocrates' *Oeuvres* for which the statistical table shows a certain equilibrium between toponymic and chromatic usage. This transition coincides with the first decade of the fourth century BCE.

This chronology strongly indicates a process of borrowing and progressive integration of a foreign encyclopaedic meaning to the already existing term *red*, but it also allows to sketch a map of the progressive territorial spread of the new usage. The geographical diffusion of the toponymic use can be inferred from the territories where the works mentioned in *Table 1* were written. (a) The toponymic use is almost absent before the eighth century; (b) small traces can be found in the east and south-east of the Greek territories before Alexander's expedition; (c) it is frequent in the Greek territories of the Hellenistic period; (d) a complete integration is visible in Greek and Latin between the late third century BCE and the first century CE in the territories of the Pontus Euxinus and Asia Minor, that is, mainly in the works of Strabo.

Such a chronological and territorial map permits to formulate a hypothesis that it was the nomadic Scythe people of the Eurasian steppe to lend the cognitive nexus “red equal south” to the peoples of the eastern Mediterranean, especially considering the undoubted and marked attestation of the colour cardinal points system in Turkic and Mongol cultures, that is, in the territories inhabited by the Scythians. There are chronological and territorial coincidences between the migration of nomadic Scythian peoples and the attestation of increasing toponymic use of *erythros* in the Hellenic world which are strong enough to justify a further cognitive investigation.

The migrations of the Scythians from inner Asia toward the Pontic steppe and Assyria are commonly dated to the eighth-third centuries BCE (Jacobson, 1995). They possibly reached the northern part of this western area, the Pontic steppe, around the eighth century BCE and were established in modern days Ukraine and southern Russia. In the period 650–630 BCE, Scythians briefly dominated the areas of the Median empire (north-western modern days Iran up to the Zagros Mountains) and played a role in the fall of the Assyrian empire and the Sack of Nineveh in 612 BCE. Until the end of the fifth century BCE, they extended their influence reaching the borders of Egypt. However, since the fourth century BCE, the Scythians suffered defeats and underwent a process of integration by the Macedonians, the Achaemenids and the Sarmatians in the different areas they had previously occupied. Between the third century BCE and the third century CE, their assimilation was complete, especially in the region of the Greek, and later Roman, the Black Sea and particularly in the Scythes Crimean capital city Scythian Neapolis, in the vicinity of the modern Simferopol. This fortified polis, in the third and second centuries BCE, represented a remarkable example of Greek-Scythian ethnic, cultural, architectonic and linguistic mingling.

2. The *Leukosyroi* or “White Syrians”: Ancient Greek Toponyms and Ethnonyms Attesting the Existence of a Colour Cardinal Points System

The thesis that *red*, when used in toponyms, carried the accessory meaning of “south-eastern” is supported by the attestation, in the Hellenic historiography

and toponymy, of a colour cardinal points system. Besides the *red* direction, at least another colour cardinal point coincidence is largely attested: *white* indicated the west or possibly north-west.

The mention of the White Syrians people in Strabo's *Geography* (XII,3), specifically with reference to the geographical area they inhabited compared to the Syrians proper, indicates that the supposed equation *white* "west" was rooted in a very ancient, pervasive and widespread tradition:

As for the Paphlagonians, they are bounded on the east by the Halys River, which, according to Herodotus, 'flows from the south between the Syrians and the Paphlagonians and empties into the Euxine Sea, as it is called'; by 'Syrians', however, it means the 'Cappadocians' and, in fact, today they are still called "White Syrians", while those outside the Taurus are called "Syrians" (XII,3).

Strabo, defining the lexical choices of Herodotus, distinguishes between two types of Syrians separated by a river that flows from south-east to north-west and empties into the Black Sea. Then the historian names the *Leukosyroi* "White Syrians" as the Syrians living in Cappadocia and Anatolia. These regions are located in the area north-west of those inhabited by the Syrians and the specification *White* occurs in an undoubtedly geographical context. Olshausen, the professor of classical history at the University of Stuttgart, in his 2006 scientific article *Leukosyroi* stated that the 'meaning and origin of the term are unclear', but indirectly confirmed the geographic value carried by this expression which is used to indicate 'an ethnic entity of the Anatolian northern part of the region of Assyria' (Olshausen, 2006).

Further validation of the geographic interpretation of the colour emerges in the *Scholia vetera in Apollonium Rhodium* (a tenth-century manuscript preserving Theon of Alexandria's – c. the first century BCE – commentary on Apollonius of Rhodes' *Argonautica*, the third century BCE): the region inhabited by the *Assyrioi*, another term to indicate the White Syrians, is named *Leukosyria* (196,9; 198,10; 201,6) that is "White Syria". In the same oeuvre, derived forms like *Leukosyriake* (200,1) and *Leukosyrike* (198,3) confirm the lexical productivity of this nexus at least in

the period between the composition of the *Argonautica* and its commentary, that is, between the third and the first century BCE (Olshausen, 2020, 1. See also Cattaneo, 2017, 238). Likewise, the periplus of the *Pseudo-Scylax* – fourth century BCE – refers to the territory of the *Assyrioi* in relation to the land inhabited by the Syrians confirming they occupied the region of the Thermodon (the Turkish Terme river), north-west of the Syrians (Olshausen, 2006, 2).

Indicatively, the expression *White Syrians* is attested neither in the source of Strabo, Herodotus, nor in any other source dating prior to the fourth century. Apparently, in Herodotus times (c. 484–c. 425 BCE), the Cappadocians were not identified by the colour cardinal points system. On the contrary, the use of the toponym *white* to indicate north-west is attested at the time of Apollonius of Rhodes (the first half of the third century BCE), in the works of Theon of Alexandria (the first century BCE) and in Strabo (64 BCE–c. 24 CE). The remarkable chronological coincidence with the attestation of the toponymic use of *red* corroborates the hypothesis of a loan translation, that is a semantic calque borrowed from another language and culture. Moreover, the time frame defined by the earliest and latest attestation of *Leukósyroi* and *Leukosyria* – before the first half of the third century BCE and until the early first century CE – coincides with the period of contact with the Scythian people as proposed for the borrowing of the accessory meaning “south” associated with *erythra*.

In the defined period, the attribute *white* is remarkably common in the place names of north-western regions of the Greek oikumene. The region of Acarnania was described already in Homer’s *Odyssey*, but it is only Strabo who calls it *Leucas*, recurring to the root *λευκ-* (*leuk-*) “white”. Likewise, the same attribute appears in the naming of the western region of *Λευκάνια* (*Leukania*), the Lucania of modern southern Italy. This region was part of the western colonies of the Magna Grecia founded during the fifth century BCE. The name of the area – *Leukania* – was attributed during the period of conflict with the local population, which was named in Greek *Leukani* “whites” in a manner closely resembling the cognitive frame that generated the ethnonym *Leukosyroi* and the toponym *Leukosyria*. Finally, in the same north-western direction, in front of the coast of the Ionian Sea, the island of *Λευκάδα* (*Leukada*, modern Greek Lefkada) reinforces the impression of a north-western

border of the Greek oikumene rich in “white toponyms”.

The system, however, appears to be subjective and relative to the position of the observer. This is probably the reason why it was the Syrians, not the Greeks, who were the first to refer to the city of Nicosia as *Leucotheon* “the white estate” in the clay prism of the Assyrian king Esarhaddon in 672 BCE (Luckenbill, 1925). From the Assyrian perspective, Cyprus lies to the west of their motherland. In the Greek sources, the city-state name is *Ledra* or *Lidir* and was never related to the colour white (Mirbagheri, 2010, sub voce ‘Nicosia’).

Notably, the most archaic attestation of the toponymic use of the Greek term for *white* comes from a culture at the eastern border of the Greek world of that time. Apparently, in this case, the hypothetical contact with the lending culture occurred in the seventh century. This geographical and chronological frame further reinforces the possibility the borrowing came from the contact with the Scythians, who descended from north-east and interacted with the New Assyrian Kingdom and Persia precisely from the seventh century BCE.

Conclusions

While there are no doubts the *dictionary meaning* of the Koine Greek word *erythros* was “red”, the statistical and usage analyses conducted on more than 50 geographical and historiographical treatises, as well as literary works, dating from the eighth century BCE to the second century CE, indicate the word stem was rare, learned and unproductive in lexical terms when used in a chromatic sense.

On the contrary, the primary sources consisting of computationally generated lists of frequency demonstrate that the term’s *encyclopaedic meaning* could have been of geographic or cartographic nature. Apart from Homeric texts and the literature produced prior to the fifth century BCE, the root *erythr-* occurs almost exclusively in toponyms. Furthermore, the toponyms considered in this study are generally distributed along the progressively extending south-eastern border of the Hellenic oikumene: the city of Erythra; the Minoan Crete — homeland of the king Erythreus; the Erythrean or the Red Sea, an expression used in Koine Greek to indicate

the Indian Ocean and its inlets.

The statistical data produced shows that the habit to translate *Erythra Thalassa* with the Red Sea emerged only in the third century BCE for religious and ideological reasons connected with the translation of the Hebrew books of the Bible into the Greek language of Alexandria, Egypt. In the *Septuagint* the root *erythr-* is exceptionally frequent, as it is in other literary works written in the same area, such as the *Deipnosophistae*. In the *Septuagint*, *Erythra* forms a *fixed collocation* together with *Thalassa*. This attitude influenced later religious traditions and in the Greek New Testament *Erythra Thalassa* is a *fully fixed collocation*, meaning *Erythra* carries a semantic value exclusively when used as the name of that specific sea.

The validity of the thesis proposing the culturally specific meaning “southern” for the term *erythros* is supported by the attestation, in the same Greek sources, of numerous toponyms and ethnonyms defined by the word stem *leuk-* “white” undoubtedly referring to regions and people of the north-western border of the same oikumene: the island of Leukada in the Ionian Sea; the Greek colonies of Lucania in the Italian Peninsula; the *Leukosyroi* mentioned in Strabo’s *Geography* to indicate the Syrians settled north-west of Syria proper.

In conclusion, the cognitive analysis suggests the proper rendition of Koine Greek *Erythra Thalassa* should be the “Southern Sea” with reference to the Indian Ocean. The review of secondary sources that confirmed this thesis is coherent with the Greek perception of a civilized world surrounded by four seas, symbolically placed in the four cardinal directions as theorized in the *Historical Library* of Diodorus the Sicilian and in Agatharchides of Cnidus’ *Peri ten Erythran Thalassan*.

The chronological and geographical distribution of the attestation of the accessory meaning “southern” points to a possible *semantic calque* from a lending *linguaculture*. Specifically, the toponymic use of *red* and *white* is not attested before the eighth century BCE; it emerges in Assyrian sources in the seventh century BCE; it is more frequent in Greek oeuvres of the fourth and early third centuries BCE while it is extensively attested in the period between the third century BCE and the first century CE, especially in the Pontus. Such a chronological and territorial spread permits to formulate

a hypothesis that it was the nomadic Scythe people of the Eurasian steppe to lend the cognitive nexus “red equal south” to the people of the eastern Mediterranean, especially considering the undoubted and marked attestation of the colour cardinal points system in Turkic, Mongol, Slavic and Chinese cultures, that is, in the territories inhabited by the Scythians.

References

- Bacic, J. (1995). *Red Sea-Black Russia: Prolegomena to the History of North Central Eurasia in Antiquity and the Middle Ages*. Columbia university press.
- Beekes, R. (2009). *Etymological Dictionary of Greek*. Brill.
- Cattaneo, G. (2017). Angelo Poliziano e gli scholia vetera ad Apollonio Rodio. *Medioevo e Rinascimento*, 28, 236–242.
- Chantraine, P. (2007). *Ετυμολογικό λεξικό της αρχαίας ελληνικής* [Etymological dictionary of Ancient Greek]. Aristotle University of Thessaloniki.
- Ceccarelli, P. (2012). Water and identity in the ancient Mediterranean, *Mediterranean Historical Review*, 27(1), 1–3.
- Dan, A. (2013). The Black Sea as a Scythian bow. In M. Manoledakis (Ed.), *Exploring the Hospitable Sea* (pp. 39–58). Archaeopress.
- Dini, P. U. (1997). *Le lingue baltiche*. La nuova Italia.
- Dunbar, H. (1880). *A Complete Concordance to the Odyssey and Hymns of Homer to Which is Added a Concordance to the Parallel Passages in the Iliad, Odyssey, and Hymns*. Clarendon.
- Gallo, L. (2011). Appunti per un riesame di Agatarchide di Cnido. *Ricerche di Storia Antica*, 3, 68–71.
- Gonzalez-Marquez, M., Coulson, S., Spivey, M. J., & Mittelberg, I. (Eds.) (2007). *Methods in cognitive linguistics*. John Benjamins Publishing Company.
- Heubeck, A., & Hoekstra, A. (1990). *Commentary on Homer's Odyssey: Introduction and Books I-VIII*, vol. I. Clarendon.
- Hoyt, S. F. (1912). The name of the Red Sea. *Journal of the American Oriental Society*, 32(2), 115–119.
- Jacobson, E. (1995). *The Art of the Scythians: The Interpenetration of Cultures*

- at the Edge of the Hellenic World*. Brill.
- Kim, A. (2009). Maritime Identities. In B. Graziosi, P. Vasunia, & G. Boys-Stones (Eds.), *Oxford Handbook of Hellenic Studies*. Oxford university press. <https://doi.org/10.1093/oxfordhb/9780199286140.013.0030>
- Klein, E. (1971). *A Comprehensive Etymological Dictionary of the English Language*. Elsevier Scientific Publishing.
- Kowalski, J.-M., Claramunt, C., & Zucker, A. (2007). Thalassographiein: representing maritime spaces in ancient Greece. In W. Stephan, M. Duckham, L. Kulik, & B. Kuipers (Eds.), *Spatial Information Theory, 8th International Conference, COSIT 2007, Melbourne, Australia, September 19–23, Melbourne*.
- Lemprière, J. (1826). *A Classical Dictionary Containing a Copious Account of All the Proper Names Mentioned in Ancient Authors, with the Value of Coins, Weights, and Measures, Used Among the Greeks and Romans, and a Chronological Table*. G. Routledge.
- Langacker, R. W. (1987). *Foundations of Cognitive Grammar*, vol. 1. Stanford University Press.
- Luckenbill, D. D. (1925). The Black Stone of Esarhaddon. *The American Journal of Semitic Languages and Literatures*, 41(3), 165–173.
- MacBean, A. (1773). *A Dictionary of Ancient Geography: Explaining the Local Appellations in Sacred, Grecian, and Roman History*. London.
- Mazzella, F. (2004). Dal Wessex all'Estland. La Baltia antica nell'Orosio anglosassone. In Dolcetti Corazza, V. (Ed.), *I Germani e gli altri. Edizioni dell'Orso* (pp. 253–268).
- Mirbagheri, F. (2010). *Historical Dictionary of Cyprus*. Lanham (MD); Toronto: Scarecrow.
- Olshausen, E. (2006). Leucosyri. In: H. Cancik, H. Schneider (Eds.), *Brill's New Pauly*. http://dx.doi.org/10.1163/1574-9347_bnp_e702980.
- Rahlf, A., & Hanhart, R. (Eds.) (2007). *LXX*, Stuttgart.
- Remotti, F. (2018). *Contro l'identità*. Il Mulino.
- Risager, K. (2007). *Language and culture pedagogy*. Multilingual Matters.
- Rutherford-Dyer, R. (1983). Homer's Wine-Dark Sea. *Greece & Rome*, 30, 125–128.
- Scullard, H. (1930). The passage of the Red Sea. *The Expository Times*, 42,

55–61.

- Sidebotham, S.E. (2018). *Roman Economic Policy in the Erythra Thalassa 30 B.C.-A.D.* 217. Brill.
- Slater, W. J. (1969). *Lexicon to Pindar*. De Gruyter.
- Smith, W. (1854). *Dictionary of Greek and Roman Geography*. John Murray.
- Strong, J. (1890). *The Exhaustive Concordance of the Bible*. Thomas Nelson.
- Talbert, R. J. A. (Ed.) (2000). *Atlas of the Greek and Roman World*. Princeton University Press.
- Taylor, J. R. (2003). *Cognitive Grammar*. Oxford University Press.
- Thayer, J. H. (1889). *Greek-English Lexicon of the New Testament*, n.p.
- Towers, J. R. (1959). The Red Sea. *Journal of Near Eastern Studies*, 18 (2), 150–153.
- Weber, R., & Gryson, R. A. (Eds.). (2006). *Biblia Sacra Iuxta Vulgatam Versionem*. Berlin.

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KOINĖS GRAIKŲ KALBOS ŽODŽIO *ERYTHROS* ENCIKLOPEDINĖ REIKŠMĖ: BANDYMAS APIBRĖŽTI SENOVINĘ SPALVŲ – PASAULIO ŠALIŲ SISTEMĄ

Santrauka. Kartografinė ir istoriografinė tradicijos rodo, kad graikų vietovardis *Erythra Thalassa* antikoje galėjo nurodyti keletą skirtingų vandens telkinių, tačiau šiuolaikiniuose veikaluose jis visada verčiamas kaip *Raudonoji jūra*. Šios straipsnio autorius, kognityvinės semantikos principus taikydamas istorinės geografijos tyrimams, siekia aptarti termino *erythros* „raudonas“ žodyninę reikšmę ir rekonstruoti enciklopedinę (t. y. kognityvinę) reikšmę. Preliminari geografinių ir istoriografinių veikalų analizė patvirtina termino ryšį su keliais skirtingais denotatais. Skaitmeniniu būdu (*Perseus* įrankiais) sugeneruoti dažniniai sąrašai iš apytiksliai 50 graikų ir lotynų kalbų tekstynų nurodo, kad terminas buvo dažnai vartojamas sudarant vietovardžius ir beveik niekada nurodant spalvų. Taip pat paminėtina, kad terminas dažniausiai aptinkamas kolokacijose (angl. *fixed collocations*) su daiktavardžiu *thalassa* „jūra“. Papildomi statistiniai duomenys iš Septuagintos ir graikų Naujojo Testamento nurodo biblinę tradiciją vartoti terminą išskirtinai pastoviuosiuose junginiuose (angl. *fully-fixed collocations*) su terminu „jūra“. Tyrimas parodė, kad specifinis raudonos spalvos atspalvis, kurį apibūdina žodis *erythros*, vartojamas nuo VII a. pr. m. e. įvairiuose vietovardžiuose nurodant, kad vieta yra „pietryčiuose“; taip kituose vietovardžiuose vartojamas terminas *leukos* „baltas“, reiškiantis „šiaurės vakaruose“ (plg. etnonimą *Leukosyroi*). Remiantis lyginamąja chronologija ir diatopiniais reiškinių patvirtinimais, siūloma hipotezė, kad terminas *erythra* yra suprantamas tik kaip vertinys, atspindintis skitų genčių spalvų kaip keturių pasaulio šalių sistemą.

Pagrindinės sąvokos: senovės graikų toponimija; spalvų kaip keturių pasaulio šalių sistema; *Erythra Thalassa*; *Leukosyroi*.