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Cultural unit blue in the Old Testament

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Abstract: The paper describes and analyzes the full presence of blue in the Old Testament – in Hebrew and translations. The interdisciplinary approach includes the treatment of color as a cultural unit according to of Eco’s idea, lexical and contextual semantics, distinguishing visual and verbal color languages. The interface between verbal and visual color language is the prototype. Prototypes are universal natural visual objects – sky, sea, fire, blood, the sun at noon, all plants, light, milk, snow, darkness, and coal and have evolved into cultural units (Eco 1996 [1985]) in all cultures and languages. Basic Color Terms (BCT – *blue*), Prototype Terms (PT – *sky* and *sea*), Rivals Terms of prototypes (RT – *sapphire*, *blue skins*), Terms for Basic Features of the Prototypes (TBFP – *breadth*, *infinite*, *boundless*) are examined. Translation is a criterion for semiotic value, cultural and linguistic context. Norm of Test of Free Word-Associations is a source of non-color (secondary) meanings of verbal colors. Test results allow us to flesh out the hidden links ‘prototype color–most typical feature of the prototype–secondary meanings of color’ in text and visual culture. The secondary cultural meanings of BCTs and RTs are specified in color compounds. The color blue *tehèlet* is used in most cases in synergy (not in opposition) with the other three colors in a tetrad: purple *argamàn*–scarlet *tolàat shanì*–linen *shesh*. Analysis on the synergic relations is performed. The same applies to duads blue-linen, blue-purple, blue skins-scarlet, blue skins-red skins. Color compounds are elements of the Priestly Code, therefore a hypothesis on compounds at semiotic axes is developed. The PT *sky* is involved in religious heritage. Themes as Hebrew substitute *shamàim* for the Tetragrammaton, the Hierarchy of heavens complete the areas of cultural unit blue in the Old Testament.

Keywords: color; compounds; cultural unit; duad; Hebrew; tetrad; Tetragrammaton

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1 Introduction

1.1 The method

The method is Linguo-semiotic. It includes the basic color terms (BCT *blue, white, black, red*, etc.); the prototype terms (PT). According to Rosch (1972, 1973) and Wierzbicka (1990), the prototypes of colors are *light, darkness, sun at noon, fire, blood, sky, sea, all plants*. The rival terms of prototype (RT *linen, cherry, duckling, ruby, sapphire*, etc.), and terms for the basic features of the prototypes (TBFP *clean, pure* for light; *hot, warm* for fire; *fresh* for plants etc.).

BCT, PT, RT and TBFP are the verbal colors. They are part of a cultural unit, in the sense of Eco (1996 [1985]). Cultural unit color includes verbal colors and visual colors (Almalech 1996, 2011, 2021).

Important element of the method is the development of Berlin and Kay (B&K) tradition for BCT (Berlin and Kay 1969; Kay and Maffi 1999), World Color Survey. The visual part of their method are Munsell' (2008 [1905]) color chips and color tree.¹ Translation as a criterion and semiotic value, Interlanguage symmetry, asymmetry and dissymmetry. Biblical colors are a text within a text (Lotman 1994). Statistics for different color words have semantic and semiotic values. Some additional approaches are given in Almalech 2017a, 2021.

The structuralist thinking and semiotics serve for a better understanding of the object therefore their application has hermeneutical significance.

Contrastive linguistics serves two significant types of studies: 1. Identification of universal and unique phenomena (well-known structuralist and semiotic case); 2. The survey of worldview woven into Hebrew, Bulgarian, and other Indo-European languages according to the original terms and concepts of Humboldt (1971 [1836], 1999 [1836]), and (Underhill 2009).

1.2 Unique parameters of the cultural unit blue

The cultural unit blue has several unique parameters compared to other colors in the Old Testament. Hebrew BCT for *blue* is תְּכֵלֶת [tehelet]. The term covers all shades of blue – from light to dark blue in Biblical Hebrew. The frequency of תְּכֵלֶת [tehelet] is the highest among all BCTs in the Old Testament. The total uses of תְּכֵלֶת [tehelet] are 50, Hartley (2011) points out 49. BCT *blue* is used within color compounds much more often than alone. It is used alone, in groups of two, three (Ex 39:1), or of four colors.

¹ Munsell's Color theory (2008 [1905]) corresponds to Herring's (1964 [1892]) idea for salient (foci) colors.

Since many of the uses (23 times) are together with three other colors in Sacred synergy, they should be considered the tetrad color. God instructed Moses to use four colors *blue* תְּכֵלֶת [tehèlet], *purple* אֲרָגָמָן [argamàn], *scarlet* תּוֹלַעַת שָׁנִי [tolàat shani], and white as *fine linen* שֵׁשׁ [shesh] for the clothes of the High Priest and the curtains in the Tabernacle. The tetrad comprises three BCTs and one rival term to prototype (RT *linen*). These instructions have the statute of commandments pertain to the temple (Ex 25:3-4). The color tetrad is used also in 2Chr 2:6[H7]; 13[H14]; 3:14. The books of Chronicles are a later text written in the post-exilic period as a synoptic to the books of Samuel and Kings. *Blue* [tehèlet] and *purple* [argamàn] remain unchanged while *scarlet* תּוֹלַעַת שָׁנִי [tolàat shani] and *fine linen* שֵׁשׁ [shesh] have been replaced for *crimson* כַּרְמִיל [karmil], and בּוּץ [butz] in 2Chr.

The tetrad synergy cannot be understood without the linguistic and cultural aspects of all members of the compound: “four continuously reoccurring colors in an important passage of the so-called Priestly Code in the Torah” (Scholem 1979–1980: 92). Blue and purple are obtained from the same source using the same technology:

The Royal Purple אֲרָגָמָן [argamàn] and the Biblical (or Ritual) Blue תְּכֵלֶת [tehèlet] were two of the most important colors in the culture of ancient Israel. The Royal (or Tyrian) Purple was also important in the cultures of non-Jewish civilizations. These two dyes were made from marine snails and were important not only for the economy of maritime civilizations but had social, religious and even political implications as well. (Spanier and Ron 1987: 9)

In Ancient Rome (Republic and Monarch periods), purple אֲרָגָמָן [argamàn] became a code for the aristocracy, patricians and the emperor. There is a vast scholarly literature on the symbolism and technology of mining the biblical blue and purple.² They will be considered in color compounds. A special phenomenon is that during the construction of the Second Temple in the 6th century BC, the prophet Ezekiel abolished the color tetrad of the Priestly Code and replaced it with white linen (Eze 44:17). The color tetrad of *blue*, *purple*, *scarlet*, and *fine linen* was ritually invisible in the following centuries but evolved as the cornerstone of the symbolism of the Priestly Code during Tabernacle and First Temple. The rich symbolism of color tetrad remained an important element in interpretations of Judaism.

The Rival terms for the prototype (RT) are *sapphire* סַפִּיר [sapir] and *badgers’/dolphins’ skins* עֹרֹת תְּחָשִׁים [oròt tehashìm]. They are significant in a different way. The *sapphire* סַפִּיר [sapir] is an important element of the mystical Throne of God (Ex 24:10; Eze 1; 10). The dark blue badgers’ skins cover the tent of the Tabernacle.

² Bridgeman 1987; Elliott 2008; Guckelsberger 2013; Jensen 1963; Leadbetter 2003; Pliny the Elder 1855; Reese 2010; Reinhold 1970; Spanier (ed.) 1987; Stieglitz 1994; Ziderman 1986; 1990.

2 The basic color term (BCT) and the sacral color tetrad synergy

According to Gesenius *blue* תְּהֵלֶת [tehèlet] could be a derivate from two different Hebrew roots: *Tav-Haf-Lamed* תָּהַל [tahàl] *obsol.* root, prob. *to shell, to peel* and *Kaf-Haf-Lamed* כָּכַל *perfection, completeness, completion*:

Tehèlet תְּהֵלֶת [tehèlet] a *shellfish*, specially one so called (*helix ianthina*, Linn.), i.e. a species of muscle found in the Mediterranean sea, with a blue shell, from which is procured the blue or cerulean purple. Hence for *cerulean purple, violet, dark blue*, Fr. *bleu foncé*; and also for cloths, *garments, yarn or thread*, dyed with this *purple*; espec. of the hangings and other cloths of the tabernacle, in which this color was combined with *reddish purple, scarlet*, and *gold*, Ex 26:1; 27:16; 31:36. cloth of blue, for covering the sacred table and other furniture. Num 4:6; 7:9. 11:12; *loops of blue*, for connecting the hangings, Ex 26:4. 36:11. The same mixture of colors was employed in the ephod of the high priest, Ex 5:8; 15:28; 28:6-8; 39:2; while his robe was wholly of blue Ex 28:31; 39:22. See also Ex 6:23; 25:4-5; 26:4, 31; 28:33; 35; 36:8; 39:24; Num 4:6. seqq.; Eze. 23:6; 24; 27:7. Vulgate *well render*, LXX ὑάκινθος, *hyacinthina*. (Gesenius 1996: 1130)

Gesenius's opinion unites the semantics and technology of dye extraction:

תָּהַל [tahàl] *obsol.* root, prob. *to shell, to peel*, i.q. שָׁכַל II, whence *shehèlet* שִׁכְלֵת a *shellfish, muscle*. Hence תְּהֵלֶת *tehèlet*; 2. *Kaf-Lamed-He* כָּלָה possible under the meanings of *tehèlet* תְּהֵלֶת (root *Tav-Haf-Lamed* תָּהַל) is a *shellfish, muscle, helix ianthina*, i.e. a specie of muscle found in the Mediterranean, adhering to the rocks, with a cerulean shell, from which the blue or cerulean purple is procured. Hence for *cerulean purple, violet, dark blue*. [...] תְּהֵלֶת [tahlit] from root *Kaf-Haf-Lamed* כָּלָה 1. *completion, perfection*, Ps 119:96. Others *hope, condence perfection, completeness*; 2. *end, extremity*, Neh 3:21, Job 26:10. (Gesenius 1996: 1130).

According to Hartley, *tehèlet* is borrowed from Phoenician. He quotes Dietrich and Lorenz (1964–1966) on pointing out similar words meaning *blue* or/and *purple wool* in Semitic languages (Akkadian *takiltu*, Neo-Assyrian *takiltu*). The word *tehèlet* occurs in both Qumran manuscripts and the Talmud (Hartley 2011: 185). Hartley accepts that *purple* [argamàn] entered Hebrew and other Semitic languages from Akkadian (Hartley 2011: 198–200).

The textual sematizations of תְּהֵלֶת [tehèlet] are 'sacral space' and a sign for 'wealth' and 'aristocracy'. These secondary meanings of *tehèlet* and *argamàn* are a consequence of the difficulties in obtaining them from marine mollusk. The *tehèlet* and *argamàn* fabrics and clothes were very expensive. "It took roughly 250,000 shellfish to yield one ounce of dye" (Ball 2001: 225).

2.1 Individual uses

The individual uses of [tehèlet] are found in the descriptions of the Priestly Code: “You shall make loops of blue on the outer edge of the last curtain in the first set, and likewise in the second set.” (Ex 26:4), It remains an enigma how the former slaves could collect blue and purple fabrics worth more than gold in the midst of the Jewish desert. All seven individual uses of BCT *blue* (Ex 22; 26:4; 28:28; 31; 36:11; 39:21) serve the Priestly Code when the tabernacle is raised.

2.2 Color duads

2.2.1 Blue-white

The blue color has special force evidenced by one of the commandments formulated at Num 15:38–39. The Israelites must “make tassels on the corners of the garments, with a blue cord on each tassel” and to look at the blue cord to “remember all the commands of the LORD, that you may obey them and not prostitute yourselves by going after the lusts of your own hearts and eyes”. This means at least two things. The first one is that blue-white unit at the tassels is mnemonic technic for remembering all moral indicatives and legal of commandments, e.g. Honor your father and your mother; You shall not murder; You shall not give false testimony against your neighbor, etc. The second is white and blue tassels are the prototype of the flag of the state of Israel. The white in this duad comes from the garment of *fine linen*.

2.2.2 Blue (tehèlet and badgers’s skins) – purple (argamàn)

Numbers 4:6-15 give instructions on how to pack the tabernacle when the camp is to move. Two kinds of blue appear – the BCT *tehèlet* and RT *badgers’s skins* (in Orthodox translations *blue*, *hyacinthine* LXX). They are in duad with purple: “and they shall take all the vessels of ministry, wherewith they minister in the sanctuary, and put them in a **cloth of blue [tehèlet]**, and cover them with a **covering of sealskin** [or tahàsh], and shall put them on the frame. And they shall take away the ashes from the altar, and spread a **purple cloth thereon** (Num 4:12-13).

2.2.3 Scarlet (tolàat shani) – Blue (badgers’s skins)

This duad was used in Num 4:8:

And they shall spread upon them a cloth of **scarlet** [tolàat shani], and cover the same with a covering of **badgers' skins** [or tahàsh], and shall put in the staffs of it. (KJV)

and they shall spread upon them a cloth of **scarlet** [tolàat shani], and cover the same with a covering of **sealskin** [or tahàsh], and shall put in the staves thereof. (ASV)

и върху тях ще разпрострат **червен** [“red” tolàat shani] плат, и него ще покрят с покрив от **язовски кожи** [“badger’s skins” oròt tehashim], и ще проврат върлините ѝ. (BUL1)

и да метнат върху тях **багрен** [“scarlet” tolàat shani] плат, и да го покрят с покривало от **синя кожа** [“blue skin” or tahàsh], и да проврат върлините. (BUL2)

Bulgarian orthodox translation follows Septuagint version for Hebrew [or tahàsh] as *синя кожа* (“blue skins” BUL2) while the protestant version keeps to *язовски кожи* (“badgers’ skins” BUL1). The duads of blue (tehèlet + badgers’s skins), purple (argamàn) and scarlet (tolàat shani) & blue (badger’s skins) are loaded with secondary meanings ‘movement of the tabernacle’, ‘relocation of the tabernacle’. The Blue-white duad is crucial for Jewish culture and religious heritage meaning ‘remembering the commandments’. This meaning is implanted into the flag of the modern state of Israel. All seven individual uses of blue tehèlet are situated in the static position of the tabernacle when it is built.

2.3 The color tetrad – the Priestly Code and sacral four-color synergism

The color tertad contains *blue* תְּכֵלֶת [tehèlet], *purple* אֲרָגָמָן [argamàn], *scarlet* תּוֹלַעַת שָׁנִי [tolàat shani] and *fine linen* שֵׁשׁ [shesh]. The four colors are together in the Tabernacle and in the First Temple but for the Second Temple (after the VIth BC) they were canceled by “the hand of the LORD” (Eze 40:13). Prophet Ezekiel announced the cancelation of the four colors replacing them with the whiteness of the linen: “When they enter the gates of the inner court, they are to wear linen clothes; they must not wear any woolen garment while ministering at the gates of the inner court or inside the temple. They are to wear linen turbans on their heads and linen undergarments around their waists. They must not wear anything that makes them perspire.” (: 44:17–18)

As mentioned above, the synergy in the tetrad cannot be understood without the linguistic and cultural aspects of the other three members of the compound. Scholem points out that *blue* תְּכֵלֶת [tehèlet] and *purple* אֲרָגָמָן [argamàn] “have the same meaning” (Scholem 1979–1980: 67).

The word אֲרָגָמָן [argamàn] is translated *purple* in English, πορφύρα [porfira] in Greek, and *purpura* in Latin. Gesenius accepts India origin of *argamàn*, from Sanskrit

râgaman, *râgavan*, literally “tinged with red” where *râga* means “red” (Gesenius 1996: 83–84). Hartley (2011: 200) mentioned the hypothesis of the Indo-European origin of *argamàn*, without binding with Sanskrit, but rejects this view as less likely. In the vast literature on the royal purple (purple of Tyre) it is widely accepted that blue *tehèlet* and purple *argàman* are obtained from marine mollusk, *Murex snails* (Jensen 1963). Guckelsberger (2013: 3–4) indicates several marine shellfish families for obtaining Tyrian or Royal Purple. *Murex snails* inhabits the waters of the Eastern Mediterranean – present-day Lebanon, Cyprus, and Crete. The Hebrew word for Cyprus (Elisa) accompanies *argamàn* in Eze 27:7 specifying the place of production of that color.

In Biblical and Modern Hebrew, שֶׁשׁ [shesh] means Numeral six. Only for Biblical Hebrew there are meanings *fine linen* and *white marble*. In the Talmud, it is explained that *shesh* is flax, twisted six times (Soncino Babylonian Talmud 1935–1948: Yoma 35b). Scholars are unanimous that this term in OT is borrowed from ancient Egyptian. Two other words for flax appear before Shesh in the structure of the Old Testament text. Moses held a symbolic chain 3BCTs + 1RT = 4 elements by introducing a loan word for fine linen meaning Hebrew six + BCTs for the other three tetrad colors.

Tolàat shani is Hebrew noun phrase. *Tolàat* is a case form of the word *worm* תּוֹלַעַת [toleà]. Gesenius (1996) believes that *tolàat shani* is close to pink and is extracted from a specific insect: “*Kermes, Coccus Ilicis*, which adheres with its eggs to the twigs of a species of oak, and is related to the *cochineal* or *coccus cadi*” (: 1093). Miklosich (1852–1865: 1120) pointed out the same logic in forming the basic term *red* in Slavic languages. *Red* is derived from the Pra-Slavic *čirvljenŭ, derived from the word “worm”, root *čirŭi, Old-Bulgarian чрѡбъ [chruv]. The original terms of Humboldt (1836 [1971], 1836 [1999]), *Weltansicht* (language as the capacity to coin concepts) and the *inner form of the word*, are key for explaining international naming through the technology for production. Jews and Slavs have the same inner form for *crimson*, червен (“red”). If we try to rename the worm’s qualities in the field of symbolism in sacred space, the following semantic features are obtained: ‘softness’, ‘movement in tunnels’, and ‘spiral movement’. We must attribute these semantic features to the horizontal and vertical movement of God’s commandments into human space. For *shani* Gesenius distinguishes two roots that are homonyms, *Shin-Nun-He* שָׁנָה root II, as Gesenius (1996) marked it, produces *crimson, rose color, crimson garments*. Root I brings forth numeral: *the second, second, secondary, of a second rank or order* (: 1093). The noun phrase occurs in two versions: תּוֹלַעַת שָׁנִי [tolàat shani] and שָׁנִי תּוֹלַעַת [shnèi tolàat] meaning *crimson color, and crimson cloth*.

In Judaism, the transcendence of God cannot be presented in artifacts. Scholem (1979–1980: 85–88) recalls the monotheistic doctrine of the unpictorial God and the “colorful world of the Creation is differentiated in the Bible so decidedly from the realm of the Creator”. However, Scholem points to three exceptions in the Old

Testament. These are the rainbow (Gen 9:12), the blue in the ritual fringes (tassels) (Num 15:38), and “the four basic colors in the setting up of the tabernacle, and of the priestly cult”. (Scholem 1979–1980: 88). Scholem defines the color tetrad “enigma” and “cryptic”. Thus, the semiotic decoding color symbolism turns into hermeneutics and theology.

According to Hartley, *tehèlet* is a loan word. The choice of Moses to use foreign words is significant. This is to indicate the special status of these colors as sacred and for foreign words to serve easier committing to memory. Gesenius’s point of view for Hebrew source of terminology gives other optics and inner forms as a Hebrew worldview.

Brenner (1982) avoids root and etymology analysis of *tehèlet*, *argamàn* and *tolàat shani* and does not include them into her classifications. She postulates them as “they are considered color terms of a unique type”. On the one hand, she placed them below in the field hierarchy of Primary, Secondary and Tertiary Terms, “because of their restricted applicability and specific nature” (: 46). On the other hand, quite rightly, she treats them as BCT “the primary, general nature of adòm”, of red (: 76). Finally, “[...] because non-linguistic evidence suggests that their references may be included in primary color terms [...] these lexemes will be internally arranged under the adòm [...]” (Brenner 1982: 46). The Slavic and Hebrew worldviews (in terms of Humboldt’s *Weltansicht* (language as the capacity to coin concepts) are identical for the formation of a basic term of *червен* (“red”) and *scarlet* תולעת שני [tolàat shani], but are radically different if we compare the inner form of Slavic red (*червен*) and Hebrew red אדום [adòm]. The term *tolàat shani* is translated into Bulgarian with red (*червен*), very rarely as vermilion (*червячено червено* “wormy red”) and never as scarlet (*ален*).

From a symbolic point of view, the cancellation by prophet Ezekiel (44:17-18) of the Mosaic color tetrad is significant. Revocation refers to clothing in the Second Temple (after the VIth BC), and the replacement with one, white-linen color. Ezekiel used another type of white linen, *phishtim*, compared to *shesh* by the time of Moses and *butz* by Solomon. These changes of flax terms is intentional and symbolic. The *linen* in Moses’s Tabernacle is שש [shesh], 2Chr 3:13-14 replaced it with בוץ [butz], and Ezekiel used linen type פשתים [pishtim]. The inner form of the three terms is different, and this is a sign of different content that takes the Hebrew language consciousness into different logical and theological paradigms.

2.3.1 Blue and the semiotic axes in the sacral space

Because of the high symbolic status of the Holy of Holies as an intermediate space between the highest unreachable divine and lower, the world of humanity, we need to harness all possible significant structures. The Holy of Holies is a place where God

dwells on the earth. Only the prophets and the High Priest can access the Holy of Holies. The temple is a mediator between people and God. The purpose of the Temple and the Holy of Holies is communication between people and God. “There, above the cover between the two cherubim that are over the ark of the Testimony, I will meet with you and give you all my commands for the Israelites.” (Ex 25:22 NIV)

We can identify the semiotic axis inside-outside of the horizontal in both directions – from the outside inwards (inside), the Temple and back – from the temple to outside. To be inside and outside the temple are two different worlds. The temple is a sacred space. Outside the temple is a profane space. The sacred space differs from every-day, profane space. The yard of the temple provides a smooth transition among sacred and profane. Every sacred space is between the human and divine levels. Thus, the temple has a vertical axis – God is above the temple, and the profane is below the temple’s sacredness. A possible semiotic axis is the vertical ‘bottom-up’, from the earth to the sky, and vice versa. God descends from above to deliver His orders at Holy of Holies – “over the ark of the Testimony” He meets and communicates with Moses. Chosen people, the prophets and the high priest, raised up (exalted) to receive God’s commandments. For laymen, this elevation is inaccessible, even deadly. The chosen individuals spread the commandments of God horizontally among laymen. An essential feature of the color tetrad is that it is a part of the religious ritual. Color Tetrad is intended for use and influence on the laymen through the sight of the priest’s clothes and temple interior. The Color Tetrad is postulated verbally, allowing analyzing the verbal data for decoding the symbolic unity of the color tetrad

2.3.2 Ritual symbolism and sacral four-color synergism

The method of the late Victor Turner is appropriate in decoding the ritual color symbol as a syncretic intersection of social reality, of mystical-religious, and of psychological-cognitive parameters of human beings. Three points of Turner’s method of exploring the religious ritual are important for the approach. The first one is “that religion is not merely a toy of the race’s childhood, to be discarded at a nodal point of scientific and technological development, but is really at the heart of the human matter.” (Turner 1975: 31) The second one is that “the Freudian model could not [hold] to my mind adequately account for the dramatic and performative aspects, not only of rituals themselves but of the social and cultural processes in which these were embedded.” (Turner 1975: 31). The third one is the effect of the symbols on the subconscious of the participants (Turner 1975: 175–176).

The ritual color symbol has its “logic” in the human psyche, but it has also its philosophy in the secret religious-mystic notions and concepts. The next factor forming the color symbol is the ritual’s role as social glue in the process of keeping

the social order. If we stay only at the mystic explanation of color symbolism, we will make a huge mistake. We need to involve modern humanitarian knowledge to understand color as a sign. A special place here is the non-arbitrariness of the sign in folklore and religious rituals (Almalech 1996, 2011). A basic instrument is reduplication (Yelle 2012) and the Priestly Code constantly use reduplication. The specified is a key to decoding of the visual colors (in folk wedding and funeral) and the verbal biblical instructions for colors in the temple. Ritual and religious signs are motivated, on the one hand by the Neo-Platonic type of mystical approach,³ on the other hand – by culturization and semanticizing of the prototypes of color (Almalech 2001, 2011, 2017b, 2021). This is not in contradiction to linguistic and structuralist principle – the arbitrariness of the sign.

The motivation of the color sign is the prototype's culturization and semanticizing with human concepts and feelings in the rituals. Culturization and semanticizing of prototypes lead to the idea that a color is a cultural unit (Almalech 2017b; Eco 1996 [1985]). The cultural unit 'biblical color' is overloaded with culture (both Jewish and Christian), but also with the theory and practice of translation. The cultural unit 'biblical color' augments through different types of words expressing color – BCT, PT, RT, and BFPT. The sacral four-color synergism has three BCT (scarlet, blue, purple) and one RT – fine linen. In terms of Art Color Science (Munsell 2008 [1905]),⁴ *argamàn* cannot have visual prototypes because it belongs to the subtractive mixing of colors, the CMY (Cyan, Magenta, Yellow), which are the result of the additive mixing of RGB (Red, Green, Blue).

Sacral four-color synergism as Scholem pointed out, has cosmological interpretation in the writings of Philo (*De vita Mosis* XVIII § 88) and Josephus (*Antiquities* III, 6, 4 § 183): “[...] Philo and Josephus explain the four colors as allegories of the four elements, that is, as purely cosmological. White stands for the earth on which flax grows [while], purple is [for] the sea or water because it is obtained from the blood of the sea snail, *tehelet* is the air that appears in the blue of heaven, scarlet red is fire.” (Scholem 1979–1980: 94–95) Cosmological interpretation is an example of color motivation. Philo has been influenced by the Hellenistic and Josephus from Roman-Hellenistic notions. In Judaism, *tehelet* and *argaman* must be produced from the sea depths, from a sea *murex*. In view of modern humanitarian science, blue corresponds to the prototype sea and/or sky (Almalech 2021; Rosch 1972, 1973; Wierzbicka 1990).

³ Scholem (1972, 1974) assessed the philosophical Kabbalah as a mixture of original Jewish ideas and Neo-Platonism.

⁴ Munsell's *Color measured color system, based on the three qualities Hue, Value and Chroma* includes the ideas of Hering (1964 [1892]). *Salient* is the term of Hering's (1964 [1892]) color theory corresponding to the *prototype* in the most popular modern Prototype theory (Rosch 1972, 1973) using Hering's ideas.

The final result (blue during the day and cerulean purple as at sunset) and the method of production (from the depths of the sea) corresponds to the two Hebrew roots proposed by Gesenius as the basis of the term *blue* תְּכֵלֶת [tehèlet]: 1. Tav-Haf-Lamed *to shell, to peel*, i.q. Shin-Haf-Lamed II, whence [shehèlet] a shellfish, muscle *helix ianthina*. Hence [tehèlet]; 2. Kaf-Lamed-He possible under the meanings of *perfection, completeness, completion, tahlit* (: 1130). In this way, both *perfection, completeness, completion* and the way of production are being realized. If we accept Gesenius' suggestion, it appears that Moses has introduced neologism in which a prototype for blue and the result (the dye blue) are bound, and not a foreign word. In the Old Testament times, no one has introduced another term for all the nuances of the blue color. In Modern Hebrew, the word *techèlet* means light-blue, and the BCT for blue serves the biblical word כָּהֹל [kahòl]. The word signifies the black color of painted eyes (makeup) and it is *hapax legomena* (Ezekiel 23:40).

The analysis of the linguistic tissue – lexical and discursive – gives impressive results. Translations and data on frequency also give valuable results as the interlingual symmetry, asymmetry, and dissymmetry. Together, they provide a priceless linguistic basis for further analysis and hypotheses.

2.3.3 Sacral context: historical, statistical and culture aspects

In terms of our methods of deciphering the signs of color in the sacred text, white is marked with a rival term to prototype (RT), *fine linen*, but not with BCT. This reminds us of two things: one is diligently avoiding the use of BCT in the OT and the second is the universal status of “the robe of light”, i.e. robe of linen, be the best tool to “achieve respect among the gods” (Goodenough 1964: 165–176). The words of Tetrad are also used elsewhere in the OT, usually for garments of aristocracy or for sacred purposes. Swartz's book *The Signifying Creator* (2012) practically does not use any semiotic theories but almost all the multitude instances and analyses are from the Talmud, i.e. Jewish religious interpretative thought. In the chapter *Semiotics of garment* he cites Barthes (1983), to say then that the semiotic reflections on fashion do not refer to the ritual clothing:

Of course, the garments of the priest in the ancient Temple are the very opposite of fashion. The priestly vestments are presumably eternal and are meant for one person on earth at a time; only the high priest may wear them as he performs the sacrifice in the Temple. At the same time, they are worn every time that sacrifice is performed. They are ritual garments, and an important feature of ritual is its repeatability, in contrast to the presumed newness of fashion. (Swartz 2012: 34)

Color Tetrad is only part of the whole colors' symbolic presence in the Holy of Holies and all over the Tabernacle. Color Tetrad is in the context of two types of gold,

‘pure gold’ (22 karats) and gold (18 and fewer karats) + silver and copper. Besides the metals, the ingredients of the holy incense contain elements related to white, yellow, and red – *myrrh, aromatic gum, balm, spices, stacte, onycha, and galbanum*. Over the Holy of Holies, the tent of the Tabernacle comprises rams’ skins dyed red and blue of the badgers/dolphins’ skins. The term for red on the tent is not a member of the sacral tetrad, it is BCT אָדָם [adòm], and the term for blue is RT (badgers/dolphins skins עֶרֶת תְּהַשִּׁים [orèt tehashìm]). Thus, the interior tetrad differs (visually and linguistically) from the red and blue skins of the Tabernacle exterior.

The structure of the temple, according to the commandments of God, comprises an idea for concentricity. At the innermost point, the holiest place, there is a pure gold, after that gold and silver in the hall, and in the outermost part, in the yard, the metal is bronze/copper. This concentric structure symbolically represents the horizontal path from the Divine to the yard of the temple, and profane outside the yard. This is the semiotic axis from inside where the Divine is – out where profane is. The relationship between the temple horizontal levels (from within to outside in “concentric circles”) is marked twice – by metals and by the blue filaments whether they are single or in compounds of three more colors in the sacral synergy. Metals (pure gold, gold, silver, copper) and blue markings three veils separating the innermost Holy Place (the Ark of the Testimony) (Ex 26:31-35) from the big hall and entrance/door of the Tabernacle’s tent (Ex 36:36-37), to the outermost part of the courtyard and gate (Ex 27:13-16).

The blue wool filaments provide the flow of sacral energy from the epicenter of the sacral through the great hall, through the yard to space outside the temple complex. The blue color passes among the static surrounding of pure gold in the Ark of Testimony, which gradually degrades (in terms of mysticism) to gold, to silver, and to copper in the yard, i.e. the blue *tehelet* remains unchanged in contrast to the symbolism of the metals. These structures are valid for Tabernacle and the First Temple. For the Second Temple, there are no similar instructions in the vision of Ezekiel to the restoration of the temple in Jerusalem. The Blue provides a connection (visible and invisible) between the Holy of Holies and the yard of the temple. To these concentric static structures of metals and sacred synergistic colors we have to add the mobility of the synergy of the color tetrad of the high priest’s and the priest’s clothes (Ex 28:5; 6; 8; 39:15; 27; 31; 33; 37).

The presented is hypothesis for symbolic meanings and functions of blue color in the sacral space. The etymology and word formation are significant in the semiotic perspective. All dedicated and systematic researchers of the Hebrew text of the Old Testament (Brenner 1982; Scholem 1979–1980) follow the authority of Gesenius (1996). Hartley (2011) used sources published in the twentieth century, which differs from Gesenius. In Ex 26:31, LXX introduces ὑάκινθον [hyacinth] for *tehélet* “blue”, πορφύραν [porfuràn] for *argamàn* “purple”, κόκκινον [kòkinon] for *tolàat shani*

“scarlet”: καὶ αὐτοὶ λήμψονται τὸ χρυσίον καὶ τὴν πορφύραν καὶ τὸ κόκκινον καὶ τὴν βύσσον. In Vulgate, *hyacinthum* (for *tehélet*), *purpuram* (for *argamàn*) *coccumque* (for *tolàat shani*) and *byssum* (for *shesh*). In English *tolàat shani* is *scarlet*, which corresponds to the Bulgarian *алено* (“scarlet”) but, *tolàat shani* is systematically translated *червено* [tcervèno] (“red”) into Bulgarian.

We can treat the enigma of the color tetrad as a code. An important goal is to decode the age-old aberration of Biblical codes for Indo-European linguistic and cultural space. Bible is also a media between God and humanity. “Eco (1965) uses the term ‘aberrant decoding’ to refer to a text which has been decoded by means of a different code from that used to encode it (1965)” Chandler (2002: 186). Eco used “aberrant decoding” on the occasion of current mass media. But the Bible is a venerable, time-honored and influencing media – to shape culture and the way of thinking. Aberration in the case of the Old Testament could come from both inevitable interlingual asymmetry and dissymmetry, and doctrinal causes.

3 Prototype terms (PT)

The examination of PTs is motivated by the fact the prototypes (sky and sea) are not used as a substitute for BCT in translation, i.e. there is no semio-osmosis between BCT and PT unlike semio-osmosis between black and dark, green and freshness (TBFP), see Almalech 2017a, 2018.

3.1 *Sky, Heaven*: [shamàim], [rakìa], [rekià shamàim], and [shehakìm]

Here we will examine at the Hebrew names of sky/heaven in the biblical text given the possibility of the presence of blue. The non-color (secondary) meanings of *sky* and *sea* are the norm for word associations: *freedom, cleanliness, space, flight* in the norm (Almalech 2001, 2011). The *sky* and the *sea* are statistically most clearly reflected as prototypes: the *sky* and the *sea* are indicated by about 70% of respondents as a response to the word stimulus BCT *blue*. With this frequency, they are the most often indicated prototypes in the norm. At the center of the norm for free word-associations,⁵ non-color meanings present an universal meanings associated with blue: *freedom, cleanliness, space, flight, dream, cheerful, tenderness, joy, tradition, youth, volition, tranquility, carelessness, ease, spaciousness, vastness*.

⁵ Kent-Rosanoff (1910) test.

Genesis 1 describes the creation of the world. A few lexemes enclose the sky: *heaven, sky, firmament/expanse/dome* for the Hebrew terms שָׁמַיִם [shamàim], רָקִיעַ [rakia], and הַשָּׁמַיִם הַרְקִיעַ [rekià ha-shamàim]. This raises the question ‘How many skies are there in Genesis 1?’ Data for comparative analysis are drawn from the classical translations: the 70 Jewish priests for the Septuagint (LXX), St. Jerome for the Vulgate (VUL) St. Constantine-Cyril Philosopher for the Old Bulgarian, the numerous contributors in King James Version for English (KJV), Martin Luther for German (LUT). Other languages are involved for comparison.

The first appearance of one of the terms for the sky is in Gen 1:1. It is שָׁמַיִם [shamàim] always *pluralia tantum*.⁶ All English translations use *heaven*. Septuagint’s choice is οὐρανός [uranòs], and *caelum* in Vulgate.

Genesis 1:1

ἐν ἀρχῇ ἐποίησεν ὁ θεὸς τὸν οὐρανὸν καὶ γῆν (LXX)

in principio creavit Deus caelum et terram (VUL)

In the beginning God created the heaven and the earth. (KJV)

In the beginning God created the heavens and the earth. (ASV)

In the beginning God created the heavens and the earth. (NIV)

The second appearance of one of the terms for the sky is in Gen 1:6: רָקִיעַ [rakia].

The third appearance is in Gen 1:7, and it is the same as in Gen 1:6 רָקִיעַ [rakia]. In Genesis 1:7, there are three uses of the term [rakia]. English translations differ: *firmament* (KJV, ASV, RSV, NKJ, RWB, WEB), *expanse* (NIV, NIB, NAS, NAU, DBY). The most interesting is NRS where the word *dome* is the choice. Septuagint’s choice is στερέωμα [sterèoma], and *firmamentum* in Vulgate.

Genesis 1:6

And God said, Let there be a firmament in the midst of the waters, and let it divide the waters from the waters. (ASV)

καὶ εἶπεν ὁ θεὸς γενηθήτω στερέωμα ἐν μέσῳ τοῦ ὕδατος καὶ ἔστω διακρίζον ἀνά μέσον ὕδατος καὶ ὕδατος καὶ ἐγένετο οὕτως (LXX)

dixit quoque Deus fiat firmamentum in medio aquarum et dividat aquas ab aquis (VUL)

TDOT (vol. 13: 647) gives the root Reish-Kuf-Ayn רָקַע a general meaning of “a thin, narrow area” calling it a “cosmological term” and the verb “to stamp” (vol. 15: 209) and finds many Semitic corresponding meanings. TWOT pointed out ‘spreading out’ or “stretching forth”. BDB (: 956) “an expansion of plates”, i.e. “broad plates, beaten out”.

⁶ Nouns that are always in the plural.

Piperov (1961–1962) is aware of the semantics of the word רַקִּיעַ [rakia]:

[...] *rakia* (Gen 1:8) is a word in the Hebrew language from the verb *raḱà*: 1) extended surface (solid), expanse, firmament 1a) expanse (flat as a base, waters above) 1b1) considered by Hebrews as solid and supporting ‘waters’ above; 2. to hammer; to flatten something with a hammer; to make a thin metal flat plate. *Rakia* (firmament) is understood as the giant celestial hemispherical lid that carried the celestial ocean and formed a vault above the Earth’s circle. [...] It seems that *rakia* would have been a cosmological, technical expression by which the essence of the sky is pointed to something solid that spread over the earth, while *shamaim* was a cultic expression adopted from the common people’s speech. (: 286)

The semantics of the root do not indicate an association with the blue color.

Genesis 1:8; 20 introduce the noun phrase רַקִּיעַ הַשָּׁמַיִם [rekià ha-shamàim]. English translators use *firmament heaven* (KJV, NKJ, ASV, WEB, RWB, RSV), *expanse heaven/s* (NAS, NAU, DBY), *expanse sky* (NIB, NIV). With the word *dome* in “God called the dome Sky”, NRS remains bound with the idea of a *dome*, which is good retransmission of the Hebrew root of רַקִּיעַ [rakia]. Septuagint, οὐρανὸν στερέωμα [uranòn sterèoma] and Vulgate *firmamentum* and *caelum*.

Genesis 1:8

God called the dome Sky. And there was evening and there was morning, the second day. (NRS)

καὶ ἐκάλεσεν ὁ θεὸς τὸ στερέωμα οὐρανὸν καὶ εἶδεν ὁ θεὸς ὅτι καλὸν καὶ ἐγένετο ἑσπέρα καὶ ἐγένετο πρωὶ ἡμέρα Δευτέρα (LXX)

vocativque Deus firmamentum caelum et factum est vespere et mane dies secundus (VUL)

English translations has definitely distinguished between [shamàim], [rakia] and [rekià ha-shamàim] – albeit in a different way. Where *shamàim* is used, all translations introduce the term *heavens*. For *rakia*, English translations differ: *firmament* *expanse* and *dome*. For the noun phrase (verse 8) *rekià ha-shamàim*, see the quote above.

The other languages keep to similar translation strategies.

In Gen 1:1; 8, שָׁמַיִם [shamàim] is *heaven* or *sky* but the Hebrew text cause us to make a difference between the different kinds of *shamàim*. For the simple reason that the term *shamàim* should be understood as different things – once in verse 1 this is *shamàim-1*, and for the verse 8 *shamàim-2*. *Shamàim-1* is the first thing that has been created (Gen 1:1). *Shamàim-2* is probably a better candidate for an association with blue color, being closer to the physical heavens because *shamàim-1* is rather tagged the direction ‘up’ in the opposition ‘up-down’ after the Big-Bang as today we call the beginning of the universe in physics. *Shamàim-1* appears when “the earth was formless and empty, darkness was over the surface of the deep, and the Spirit of

God was hovering over the waters” (verse 2), and the light is not yet created. In Genesis 1, *shamaim-1* signifies up and down as space and directions, not color.

Piperov pointed to the etymology of *shamàim*: “The etymology of the Hebrew name for *heaven* (*shamàim*) is still unclear for now. The explanations are given so far that *shamàim* means a *covering; height; a place for water*, etc., can only be considered as experiments and assumptions.” (Piperov 1961–1962: 285–286). *Water* in Hebrew is **מים** [màim]. *Water* is always *pluralia tantum*, as well as the *heavens* presented by the term **שָׁמַיִם** [shamàim]. In Jewish culture, the word *water* encodes information about the chemical formula of water – twice hydrogen and once oxygen – H₂O or H-O-H = **מימי** or **מים**. One of the possible etymologies of *shamàim*, marked by Piperov, is “a place for water”. It is the clearest and most popular of all meanings of **שָׁמַיִם** [shamàim], as Piperov emphasizes.

Lack of color association for the lexeme **רָקִיעַ** [rakia] (first use in verse 6) is confirmed by the root semantics. This term refers to “chamfer”, “creating” as an engineering activity rather than a color. Verbs and nouns of Kuf-Reish-Ayn **רָקַע** suggest a similar semantics.

Piperov pointed to the complexity of the notions of *sky* in ancient Jewish writers:

[...] the sky is stretched out like a thin canvas stretched crosswise as a tent (Isa 40:20; 44:24, Jer 10:12; 51:12, Rev 12:1); it has openings (windows and doors) that can be opened and closed (Gen 7:11; 28:18; 2Ki 7:2, 19; Mal 3:10; 23); it is propped up on pillars that can be shaken (Job 26:11); lies on the bases that are turbulent (2Sam 22:8); can be divided (Isa 63:19), etc. (: 286)

In Genesis 1-3, there is a vertical movement of Creation, where every cosmic concept is first named, and thereafter a more private concept referring to the earthly dimension.

To the two above-mentioned meanings of *shamàim* can be added a third that comes into use after Gen 1. This third meaning is a substitute for the Tetragrammaton YHWH to avoid mention of the sacred name. In view of the chronology of occurrence in Gen 1, the first is *shamaim-1*, second is *rakia*, third is the compound *rekià-shamaim*. *Shamaim-3* is the name of God (a substitute of the God’s proper name the Tetragrammaton) remains outside of the other languages in translations, since it is typically Hebrew only.

As a hypothesis, the extended semantics of the root Reish-Kuf-Ayn **רָקַע** can be compared to the theory of relativity. If we look at the structure of time-space in contemporary theoretical physics, we will be astonished to find “unfolding” or re-creating the whole word-forming paradigm of the root Reish-Kuf-Ayn **רָקַע** in Einstein’s theory of relativity and space-time. In the word *rakia* we can find encoded the idea for the structure of the universe in the process of the Creation, reminiscent of the “elastic fabric”, but not an association or information about blue color.

The discoveries of modern science, especially physics and chemistry, are some times astonishing because it turns out that some of the latest achievements of natural sciences are encoded in the word-forming structure of biblical and modern Hebrew.

3.2 The gift of Moses [shehakim]

Moses used the noun שְׁהַקִּים [shehakim], translated as *sky/skies* in English, for the first time in the Old Testament in Deut 33:26. It is an introduction of the new lexeme for heaven. Deut 31–34 are the personal message and blessing of Moses known as “The Song of Moses”. It comes after the terms of the Creation from Gen 1 (*shamàim, rakia, rekià shamàim*). We must be very careful when we say that this is a new lexeme because Biblical Hebrew is not the spoken Hebrew. We must assume that שְׁהַקִּים [shehakim] is a lexeme that has long been present in the language system, but in the lexicon stocks of the Pentateuch it is indeed a new sky invented by Moses.

Deuteronomy 33:26

*There is none like unto the God of Jeshurun, who rideth upon the **heaven** [שְׁמַיִם] in thy help, and in his excellency on the **sky** [שְׁהַקִּים]. (KJV)*

*There is none like unto God, O Jeshurun, Who rideth upon the **heavens** for thy help, And in his excellency on the **skies**. (ASV)*

οὐκ ἔστιν ὡσπερ ὁ θεός τοῦ ἡγαπημένου ὁ ἐπιβαίνων ἐπὶ τὸν οὐρανόν βοηθός σου καὶ ὁμολογῶν τῆς τοῦ σπρωμάτος (LXX)

non est alius ut Deus rectissimi ascensor caeli auxiliator tuus magnificentia eius discurrunt nubes (VUL)

The basic meaning of noun is *dust, cloud* שְׁהַקִּים [shahàk]. Biblical Hebrew has few different terms for cloud: עָנָן [anàn], נְחִיל [nehìl], כְּתָם [kètem], צֶל [tzel], עֲרֻפּוֹל [irpùl], which means that Moses used a word for cloud, inserting new meaning – sky. The שְׁהַקִּים [shehakim] is plural, perhaps by analogy with *shamaim*. The root Shin-Het-Kuf שְׁהַקִּים is found a few books before Deuteronomy in Ex 30:36 as the verb *beat* (Septuagint *to break up, cut up*). English translations are unanimous in the translation of שְׁהַקִּים [shehakim] as *heavens* and *skies* for שְׁמַיִם [shamàim] from the same verse. Septuagint gives respectively οὐρανός [uranòs] for שְׁמַיִם [shamàim], στερέωμα [sterèoma] for שְׁהַקִּים [shehakim]. Vulgate uses *caeli* for שְׁמַיִם [shamàim] and *nubes* (“clouds”) for שְׁהַקִּים [shehakim]. After the first use of [shehakim] (Deut 33:26) it becomes usual term for *heavens, skies* Job 35:5; Ps 18:12, etc. The other meanings of the noun, *dust* and *cloud*, are present in Job 38:37; 36:28. The lexeme שְׁהַקִּים [shahàk]

can be seen as a gift from Moses to the Jews because it is used for the first time by Moses in Deut 33:26.

Where is the place of the “new” sky on the vertical of the Creation? The paradigm of the root Shin-Het-Kuf שחק gives us the answer to this question and its location in the text: the fact of Moses’s first use of this new term for heaven, and the later clarification of the prophets. As usually, Gesenius (1996: 1051) is brilliantly accurate:

שחק [shahàk] I

1. *to rub or beat in pieces, to pound fine* (Ex 30: 36); trop. of enemies, Ps 18: 43. Also, *to wear away* as water stones Job 14:19.
2. *to expand by rubbing or beating, to stretch out.* Hence שחק no. II

שחק [shahàk] II

1. Poetic word *dust, fine dust*, so called from *rubbing, trending*, Isa 40:15.
2. Rarely sing. שחק [shahàk] Ps 89:7; 38. Often plur. שְׁחָקִים [shehakìm] *sky, the heavens*, so called from their expanse, like רָקִיעַ [rakia]. *A thin cloud*, Prov 8:28. As the seat of God and the angels, Ps 89:7; 38; 68; 35. Often parallel with שָׁמַיִם [shamàim], Deut 33:26; Job 35:5; Ps 36:6; 57:11; 108:5; Jer 51:9. But שחק [shahàk] and שְׁחָקִים [shehakìm] denote the sky or heavens both as serene or clouded; e.g. as serene Job 37:18 *Hast thou with him spread out the sky [shehakìm], which is firm, and, as a molten looking glass?* Or as covered with clouds, Job 37:21; whence descend the rain and dew, Job 36:28; Prov 3:20; also the manna Ps 78:23 compare Isa 45:8; and whence the thunder is heard, Ps 77:18. עֲבֵי שְׁחָקִים [avèi shehakìm] *clouds of the heavens* Ps 18:12; 2Sam 22:12. Also, put for *the clouds* themselves Job 38:37, parall. נִבְלֵי שָׁמַיִם [nivlèi shamàim] *bottles of the heavens*.

The noun phrase עֲבֵי שְׁחָקִים [avèi shehakìm] means *darkness of clouds* as Gesenius (1996: 738) pointed out at the article for עב [av], Ex 19:9; Ps 18:12. He pointed on the same page data on the regular use of עב [av] meaning *cloud*. Gesenius adds the obsolete root Ayn-Vet-Vet עבב meaning *to cover*. It is one more example of intentionality and the knot of meanings that intertwine in the Biblical Hebrew worldview, where עֲבֵי שְׁחָקִים [avèi shehakìm] has the semantic features of *firmament* רָקִיעַ [rakia]. The difference is that עֲבֵי שְׁחָקִים [avèi shehakìm] probably comprises color association, *dark clouds*.

The various meanings of the paradigm of the verb שחק [shahàk] contain the overall style and structure of the Deuteronomy: if the monotheism is not honored, the Jews will be “beaten in pieces”, “crushed”, “pulverized”. The gift of Moses שְׁחָקִים [shehakìm] is a term for the sky that has no color association but the engineering content of creation. The phrase [avèi shehakìm] is an exception, but the color association was not for blue color, but for dark clouds.

3.3 Hierarchy of the heavens

The problem of association with the blue color of different names for heaven naturally led us to the question of the place in the hierarchy of the Creation of these different types of heaven. Here I will not use the mystical (the book of Enoch, Pseudo-Dionysius the Areopagite) meditations, nor the folklore presets, e.g. the Jewish Agada. The topics and opinion of Talmud are reviewed in detail by Rappoport (1995 vol. 1: 19–23). The basis of the analysis is the biblical text and linguistic facts.

Prophet Jeremiah give his answer to where in the hierarchy are the “skies” שְׁחַקִּים [shehakim] as a species of heaven:

Jeremiah 51:9 [LXX 28:9]

We would have healed Babylon, but she is not healed: forsake her, and let us go every one into his own country; for her judgment reacheth unto heaven [shamàim], and is lifted up even to the skies [shehakim] (ASV)

We would have healed Babylon, but she cannot be healed; let us leave her and each go to his own land, for her judgment reaches to the skies [shamàim], it rises as high as the clouds [shehakim]. (NIB)

Wir wollten Babel heilen; aber es wollte nicht geheilt werden. So laßt es fahren und laßt uns ein jeder in sein Land ziehen! Denn seine Strafe reicht bis an den Himmel [„sky“ shamàim], und langt hinauf bis an die Wolken [„clouds“ shehakim] (LUT)

Most of the English versions translate שְׁחַקִּים [shehakim] with *skies*, only NIV and NIB follow VUL (*nubes* “clouds” but also a “cover”) with *clouds*. Septuagint stands on an entirely different position translating [shehakim] with *star*, *constellation* ἀστρον [àstron], i.e. higher than the blue sky of earth. Regardless of the translations, Jer 51:9 situates *shehakim* above the blue *heaven/sky shamàim-2*. This reaffirms Gesenius’s (see above) view that this type of heavens is of the *rakia* type.

All terms for sky and heaven should have one additional meaning for the earth’s blue sky, which is different from the words used for the Creation of the world.

Hypothesis:

1. *Shamàim-1* (Gen 1:1), the highest sky is meaning directions above-below, *heaven*, οὐρανός [uranòs], *caelum*. No color.
2. *Rakia* (Gen 1:6) marks the structure of the universe, *firmament*, στερέωμα [sterèoma] meaning solid body, foundation, *caelum* “1. mainstay; basis 2. a) bulwark; support b) general proof.” (Войнов и Милев 1990: 265). No color.
3. *Rekia shamàim* (Gen 1:8) *firmament heaven*, *expanse sky*, *dome sky*, οὐρανὸν στερέωμα [uranòn sterèoma]: *firmamentum* and *caelum*. No color.
4. *Shamàim-2* (Gen 1:9), this is not the telluric blue sky but the appearance of colors in the Big Bang Creation level. Interestingly, the Zohar’s meditation on the creation of non-telluric colors corresponds to the scientific cosmological model of the Big Bang:

Within the most hidden recess a dark flame issued from the mystery of Eyn sof, the Infinite, like a fog forming in unformed – enclosed in the ring of that sphere, neither white nor black, neither red, nor green, of no color whatsoever. Only after this flame began to assume size and dimension, did it produce radiant colors. From the innermost center of the flame sprang forth a well out of which colors issued and spread upon everything beneath, hidden in mysterious hiddenness of *Eyn sof* [“without end”, Infinite]. (Barnstone ed. 1984: 707)

5. *Shamàim*-3 (Gen 14–15) is the telluric blue sky. Bible informs that the sun and the moon (“two great lights”,) are presented after *shamàim*, *rakia*, and *shamàim rakia*.
6. *Shehakim* appears last (Deut 33:26) meaning *dust, cloud, sky, the heavens*, “so called from their expanse, like *rakia*”. Often it a serene or clouded sky. Jer 51:9 pointed the *shamàim*, the blue sky of the earth, below the stars *shehakim*. For telluric sky *shamàim* – Blue; for *shehakim* – no color.
7. *Shamàim* as a substitute of the God’s proper name, the Tetragrammaton YHWH is out of this Hierarchy of the heavens. It is higher than anything created and transcendental. No color.

3.4 Summary

All terms in Gen 1 should not be associated with the blue color because the light available to the human anatomy appears after verses 14–15 when “God made two great lights – the greater light to govern the day and the lesser light to govern the night. He also made the stars.” (v. 16). On the other hand, the prototype *sky* is of the highest incidence compared to other prototypes in the Free Word-Association Norm. This means that at the appearance of the prototype *sky* even in Gen 1, there is inertia to associate the cosmic sky, firmament with the blue color.

It is difficult to judge what kind of metaphor is due to this stability, given that “metaphor is not just a decorative aspect of language, but a basic schema that people conceptualize the world and their own activities” (Gibbs 2008a: 3), whether it is related to the conceptual metaphor or to primary or complex metaphors (Gibbs 2008a: 6). The most frequent association to BCT blue is the abstract concept of *freedom* in the Norm for Free Word-Associations. Visual experience from childhood links the blue sky with qualities such as infinitely, wide. Language and culture supplement notions as abstract systems inherent to the social person. The test of Free Word-Associations reveals our linguistic consciousness and unconsciousness. Test results allow us to flesh out the hidden relations ‘prototype-salient color-most typical feature of the prototype-secondary meanings of color in text and visual culture’.

All kinds of metaphors contribute to our understanding of abstract concepts and to the giant Bible cultural area, where blue skies are many things. Hebrew worldview

uses conceptual metaphors presented both by different terms for sky and by their root semantics. Hebrew readers develop and use a conscious and subconscious linguistic knowledge of these metaphors through the extended semantics of the roots of the various sky terms. Lakoff confirms this view: “[...] conceptual metaphors are part of the cognitive unconscious and are learned and used automatically without awareness.” (2008: 25). He emphasizes the linguistic aspects of this system of metaphors “grounded via correlations in embodied experience”, and system “exists physically in our brains” (Lakoff 2008: 24). As Gibbs reminds “conceptual metaphors may be best characterized as extended structure-mappings between domains” (Gibbs 2008b: 7).

Behind every metaphor is a comparison and finding similarity. The general metaphor is an intellectual mechanism inverse to the opposition which is a contrast. The infinity and height of Heaven are suitable for the divine, so the basic feature of the prototype (TBFP) is an understandable symbol of the divine and even a substitute. TWOT in BW indicates the theological aspects of the *shamàim*, related both to meanings ‘above’, and ‘high’ of Gen 1:1-8 and to the qualities available to our perceptions as ‘infinite’ and blue:

Heaven is [...] the abode of God (Deut 26:15; 1Ki 8:30), and it is from there that he reaches down to do his will on earth. As the heavens are infinitely high above the earth, so are God’s thoughts and ways infinitely above man’s ability to comprehend (Isa 55:8-9). [...] Isa (57:15) states that though God dwells in the high and lofty place, he will also dwell with those of a contrite and humble spirit. The heavens tell of the glory of God (Ps 19:1[H2]) [...] Though the heavens are his throne, they will one day vanish like smoke (Isa 51:6) and be rolled up like a scroll (Isa 34:4). (TWOT in BW)

No one of the Hebrew words for sky/heaven provokes a straight association with blue. Given the high recognizability of the sky as a prototype in the test for free words-associations, the sky is loaded with metaphors and symbolism on the low-high axis. Heaven is the territory of the highest gods in many cultures. In Judaism, low-high axis is in symbiosis with water *màim-shamàim* derivative link leading to the substitute (*shamàim*) of the proper name of the God, the Tetragrammaton. The hierarchy of heavens is a topic of interest to Jews and non-Jews. About *shehakim* there are different opinions regarding the hierarchy of the heavens. Another layer is Moses’ relationship with the Israelites and the introduction of a sky that lacks water at the expense of *sand* (*shehakim*) producing *dark* (*sandy*) *clouds* [avèi shehakim] in climate conditions of the Middle East.

The interpretative aspect of the translations of the Hebrew terms reveals the relativism Greek and Latin terms *οὐρανός* [uranòs] and *caelum* insert Greek and Roman mythology gods of sky in the Bible. Interpreters are forced to translate the Hebrew cosmological term *rakia* with the Greek *στερέωμα* [sterèoma] (from *στερεός*

[stereòs]) and *firmamentum* “firm, solid”. This gives emphasis to the Hebrew inner form of the term *rakia* as a, usually translated as the *firmament*. These metaphors of the night and day sky present the Basic Features of the prototype (BFPT) for blue – infinity, expanse, vastness, boundless, and the Hebrew substitute for God’s name YHWH, *shamàim*.

Inner forms of Hebrew words for skies are in opposition: שָׁמַיִם [shamàim] is associated with liquids, *water* מַיִם [màim], while רַקִּיעַ [rakia] *firmament*. The שְׁהַקִּים [shehakim] is related to both the solids שַׁחַק [shahàk] I *dust* and the basic feature of the prototype (TBFP) שַׁחַק [shahàk] II *to expand* by rubbing or beating, *to stretch out*.

4 Rival terms for the prototypes (RT): *badgers’ skins* [oròt tehashim], and *sapphire* [sapir]

4.1 Badgers’ skins participate in color duad on the exterior of the Tabernacle

At the tent of the Tabernacle badgers’ skins עֹרֹת תְּהַשִּׁים [oròt tehashim] are located over the *dyed red* ram’s skins מְאָדָּמִים [meadamim], Ex 26:14:

You shall make a covering for the tent of rams’ skins dyed red and a covering of porpoise skins above. (NAU)

And you shall make for the tent a covering of tanned rams’ skins and goatskins. (RSV)

You shall make for the tent a covering of tanned rams’ skins and an outer covering of fine leather. (NRS)

You shall also make a covering of ram skins dyed red for the tent, and a covering of badger skins above that. (NKJ)

Badgers’ skins are translated differently as far as the word תְּהַשִּׁים [tahàsh] has no clear meaning. The differences affect not only the type of skin but also the color of the skin. For עֹרֹת תְּהַשִּׁים [oròt tehashim] in Ex 25:5 English versions differ: *badgers’ skins* (KJV and NKJ), *sea cows* (NIV), *sealskins* (ASV), *porpoise skins* (NAS and NAU), *goatskins* (RSV), *fine leather* (NRS), *violet skins* (DRA), *peaux de dauphins* (TOB). Bulgarian Synodal version (BUL2) prefers *сини кожи* (“blue skins”), the Protestant versions (BUL 1, BUL3, BUL4) *язовешки кожи* or *дельфинова кожа* (“badgers’ skins” or “dolphin’s skin”). Russian RST *кожи синие* (“blue skins”). Orthodox translations follow Septuagint’s choice ὑακίνθινυ *hyacinthine* for *oròt tehashim*. Vulgate prefers *pellēs ianthinas* (“sealskins”). German LUT avoids color term – *Dachsfelle* (“badgers’ skins”) as Spanish *pieles finas* (“fine skins”), and NRS; French LSG and TOB – *peaux de dauphin* (“dolphin skins”), Italian NRV – *PELLI DI DELFINO* (“dolphin skins”).

From now on, I will use blue skins because I accept that the Jewish priests who translated the text into Greek, three centuries BC, are closest to the real vision of עור תהש [or tahàsh] pl. ערות תהשים [oròt tehashim]. The analysis of sacral color synergy at the Tabernacle continues with rival term (RT) *blue skins* ערות תהשים [oròt tehashim].

4.1.1 Blue skins in the context of duads and tetrads. Hypotheses about color synergies and semiotic axes

We can understand and decode the synergy of color combinations if we use different methods. Linguistic facts (lexical and contextual) and alphabetic writing have a mixed nature – pure linguistic and cultural. Next to them are the prototypes – *light, darkness, sea and sky, fire and blood, the sun at noon, and all the plants*. Moreover, Judaism and Islam are cultures prohibiting images where the numbers, geometry, and stereometry have a strong symbolic presence. The ones with significance are the myths associated with the lives of the prophets, kings, and Jewish heroes, e.g. number four is to Moses for forty years in the wilderness, forty days on the Mount Sinai, four colors of Priestly Code.

Homan (2002) expresses that Tabernacle is a replica of the tent temples of polytheistic peoples and cultures surrounding Israel. examines Tabernacle's tent as a Middle East temple. He mentions the problem with the exact meaning of תהשים [tehashim]. He found most of the hypotheses of *Encyclopaedia Biblica* (1952–1982 vol. 8: 520–521) attractive in which the skins ערות תהשים [oròt tehashim] and *dyed red* מְאֲדָמִים [meadamim] refer to the natural color of the leather. Homan offers *yellow, orange* and/or *red* as color to substantiate his thesis that, “this colors may correspond to various solar aspects of Yahweh” (Homan 2002: 155–156). Homan's idea for the solar aspect of Yahweh, expressed by the *yellow/red* color of תהש [tahàsh] is irrelevant to the Jewish monotheistic doctrine of One God, transcendental and incognizable. Homan's assumption is in complete dissonance with the color decision of the Septuagint (*hyacinthine* “blue”), as well as to color duads and triads, which wrap the elements of the Tabernacle when it is in motion.

Numbers 4:5-14; 5:9-12 lists several color duads for different parts of Tabernacle: תְּכֵלֶת [tehèlet] (“blue” ὑακίνθινον) + עור תהש [or tahàsh] “blue/hyacinth skin” δέγμα ὑακίνθινον] v. 6; אַרְגָּמָן (“purple cloth”, ὀλοπόρφυρο) + עור תהש (“blue/hyacinth skin” δέγμα ὑακίνθινον) verses 13–14. The triad תְּכֵלֶת [tehèlet] (“blue” ὑακίνθινον) + תּוֹלַעַת שָׁנִי [tolàat shani “scarlet cloth”, κόκκινον) + עור תהש (“blue/hyacinth skin” δέγμα ὑακίνθινον) verses 7–8. The statistics show the importance of תהש [tahàsh] for the packaged tabernacle when in the process of relocation. When the camp is arranged to move forward, the vessels, the golden

altar, all the instruments of ministry, the censers, the fleshhooks, the shovels, and the basins, all the vessels of the altar, the curtains of the tabernacle, its covering, the hanging for the door of the tabernacle – all must be wrapped and covering of badgers' skin (Exo 25:5; 26:14; 35:7; 36:19; 39:14; Num 4:6; 8; 10–12; 14; 25; Eze 16:10). The blue skins are combined in the packing with few other materials and their colors: *blue* תְּכֵלֶת [tehèlet], *scarlet* תּוֹלַעַת שָׁנִי [tolàat shanì], *purple* אֶרְגָּמָן [argamàn], and while *עוֹר תַּחַשׁ* [or tahàsh]. Remarkably, the coverings of the Tabernacle instruments play an apotropaic role because the Levites who bear the holy luggage 'shall not touch *any* holy thing, lest they die' (Num 4:15).

When people and the tabernacle are in motion, red type-*adòm* is missing from the leather and textiles of the packed-in tabernacle. Dyed red skins are not prescribed here. Obviously, these color duads have their significant importance. Much more likely, blue or violet is to serve monotheistic doctrine than yellow or red, which express "various solar aspects of Yahweh".

Interestingly and adequately is the assumption that red-*adòm* on Tabernacle roof keeps it apotropaic power and meaning because inside the tent there are people and sacred artifacts – they should be preserved from the power of the Devine energy, which can kill people who are not ready or if they touch the Tabernacle. In the packaged Tabernacle, there are only sacred artifacts, which need color symbolic wrapping. At a minimum, the choice of animal and color is indicative. *Blue* skins cover *red* skins on the tent. This is a normative prescription without analog, six times in Exodus, starting at 25:5, seven uses at Num 4:5-14 "when the camp is to move" the order is blue above red-*adòm*. Eze 16:10 used the noun phrase once. A total, of fourteen times in OT.

A few characteristics of the tent of the Tabernacle are important:

- The color duad is above and over the four colors synergies, and it is in vertical dimension towards the Holy of Holies.
- The constituents of the skin roof participated neither in material nor in terms of color into sacral four colors synergies.
- The color duad on the roof is an important element of the vertical context of the four colors synergies.
- The explanation of this relative opposition and at the same time, a unity of colors is a mediator function of the entire facility of the Tabernacle.
- The color duad at the roof is absent from the First and Second Temples.

In Tabernacle, the semiotic axis 'inside–outside' is on the horizontal and vertical dimensions. In the middle is the Holy of Holies, towards which are the possible movements. The axis 'inside–outside' means out of the Holy of Holies, be it to the people, or be it to God. If the direction is toward the people, the direction is horizontal, and if it is directed toward God is vertical. If God descends messages or

orders to people, the direction is ‘from outside human level–towards inside human level’. In the vertical from God to the Holy of Holies or ‘top–down’. In Judaism, this direction is called ‘*Maasei Bereshit* (Acts of Creation). If people strive to achieve God, the direction is ‘inside human level–towards outside of human level’ in vertical. In Judaism, this direction is called, *Maasei Merkabakh* (Lord’s Chariot), in which man rises upwards.

Metals with a characteristic color mark the horizontal earth level. The center is the Holy of Holies where the gold is pure and this is the most inside. Gold and silver are in the great hall outside the center. The most outside from the center – in the courtyard of the tent – the metal is copper. Judaism assumes that all metals are degraded gold.

In the exterior, vertical level marks the relationship ‘man–God’, ‘connecting the earth with the divine dimensions’, and color signifier of the relation is the colored skins duad which is above the color tetrad. In the interior, under the tent, the vertical axis is advocated by the ‘red worm’ תולעת שני [tolàat shani]. Assuming the etymology of the word reflects the connection to the worm-like creature living on and in the ground. On the other hand, the manner of movement of the worms symbolizes the shape of the channels connecting the Divine level with the earth. Therefore, it seems the symbolism of [tolàat shani] is in both directions vertical – both ‘descending from above to downwards’ of God’s presence on earth, and ‘raising from downwards to upward human’s supplications/prays.

Bokser (1963) highlighted the sky as an abode of gods. Moreover, he precisely indicates the connection of blue with the two prototypes (sea and sky) in Jewish tradition – Biblical, Talmudic, and Kabbalistic. Through detailed analyses of Jewish tradition, Bokser precedes the Theory of prototypes with more than a decade in an in-depth article.

Bokser reaffirmed my hypothesis – prototypes enter the culture and acquire different meanings in rituals – folk, polytheistic, monotheistic – where there is Norma, code, repeatability, and consistency. A valuable instance is the red bridal veil, *flammeum*, which remain unchangeable for thousands of years – from Ancient Rome to Balkan brides in nineteenth century (Almalech 1996), contemporary (rural) Chinese and India brides. There is a hypothesis that the first use for white bridal veil was presented by Anna Duchess of Brittany, queen consort of France (1477–1514). Anne’s marriage (1491) to King Charles VIII of France was not an association which brings to her enough power and positive feelings. She preferred to continue to rule in Brittany, rather than giving up the title for the title of Queen of France. Mythology says that to protest that Anna wore a white dress and white veil because she knew that white is not the favorite color of the King. Mythology also says she wore white at her third marriage ceremony on 8 January 1499. Wearing white was a new precedent for brides worldwide. It took centuries to transform a single royal act where white is

a symbol of ‘hate’ and ‘disobedience’ to mass practice until white accommodate its universal meanings – ‘physical and spirit pureness’, ‘virginity’ for brides

In Judaism, and not only, there is also ‘a closer association of the color blue with the deity’, i.e. blue = ‘divine’ + ‘above’:

Apart from its intrinsic aesthetic appeal as a color, blue carries an added interest; it resembles the color of the sea and the sky. In all cultures of antiquity, the sky is conceived as the special abode of the deity, and this led to a closer association of the color blue with the deity. (Bokser 1963: 1)

In Talmud

Rabbi Meir’s statement is: “Why was the color blue singled out from all other colors? Because blue resembles the sea and the sea resembles the sky and the sky resembles the throne of divine glory.” Rabbi Meir offers as text-proof the passages in Exodus and Ezekiel where God’s throne and the ground below His throne are described as resembling the “sapphire.” (Bokser 1963: 3)

Both types of blue – עוֹר תְּהַשׁ [or tahash] and תְּכֵלֶת [tehèlet] – by virtue of their relationship with the prototypes – *sea* and *sky* – bring subliminal techniques to the infinity of God. It is because an infinity of sky and sea is their fundamental feature, besides the color blue. Another significant attribute of sky and sea (i.e. of blue color), culturally, semiotically, symbolically and semantically, is that the prototypes of blue give the concept and idea of ‘above’ and ‘below.’

The term מְאָדָּמִים [meadamim] names the color of covering of the tent of the Tabernacle. It is required to be of *rams’ skins dyed red*. The word מְאָדָּמִים [meadamim] is an element of the derivational chain *red* אָדָם [adòm] – *man* אָדָם [adàm] – *ground* אֲדָמָה [adamà] – *blood* דָּם [dam] – *Adam* אָדָם [adàm] – *Edom* אֲדָם [edòm]. *Adòm* is the most common basic term for red color. There is no indication of the technology by which this focal color is obtained. The nuance is of the prototypical red of the blood. The term is the same in Modern Hebrew. In the context of the ‘roof of the tent of the Tabernacle’ obviously red color type-adòm מְאָדָּמִים [meadamim] functions with the ‘apotropaic’, ‘preserve-reproduction’ meaning (well known from the folk tradition, see Almalech 1996), and as a color signal for something we should be careful. Here the apotropaic function is transformed to ‘preserve and build up again’ meaning. In the chronology of the biblical text this is a new meaning for *red* אָדָם [adòm], because a whole series of narratives prior to the book of Exodus – the Garden of Eden, fratricide (Cain and Abel), the giving up his birthright by Esau-Edom to Jacob-Israel – *red* אָדָם [adòm] is a marker of ‘earth sinful’, ‘irrational’, ‘murder’.

4.1.2 Summary

The white from linen-*shesh* remains inside the temple only, i.e. it has a static element that builds relationships ‘six—white marble’, ‘4–6’ as ‘perfection’, worthy only of

the Holy of Holies. *Shesh* and all color Tetrad are retained in the First Temple. The only change is the replacement of six-[shesh]-flax with round-[butz]-flax. The entire Tetrad is withdrawn from the Second Temple. This change eliminated the communication channels on semiotic axis, based on the symbolic semantics of color tetrad in the Second Temple.

It is no longer a surprise that the period of the Second Temple is considered of the lowest morally. Ezra (2:63) and Nehemiah indicate that after returning from exile there are no priests ministering the oracle stones *Urim* and *Thummim*: “The governor, therefore, ordered them not to eat any of the most sacred food until there should be a priest ministering with the Urim and Thummim.” (Neh 7:65 NIV)

The historical context reaffirms the high symbolic status of the color Duad and Tetrad in Tabernacle.

Semiotic hypothesis about the sacred status of the Tabernacle colors and First and Second Temples gives an idea of a millennial model of the perpetual motion. The model of the perpetual motion is highly marked by the presence or absence of blue color.

This model is an attempt to reveal how the sacral level is engineered in its most sacred point – the Holy of Holies – and the function of the sacred space as a connection between the unachievable, unattainable, abstract God and the human level.

The aim of the semiotic hypotheses is to achieve a better understanding of possible implicit structures and elements that stand for both the sacral level in the Bible and the potential impact (consciously and subconsciously) the two-dimensional text has on reader/listener.

4.2 The Pure Sapphire and the Throne of the Lord

We must add the presence of mega-light blue to the mega-light presences – white and red – in the description of the Throne of the Lord, coming from the sapphire that was mentioned only in three places in the Old Testament – Ex 24:10; Eze 1, 10. The place of blue light in the Old Testament is too specific. It is important because sapphire is an essential element and code for one of the most mystical objects – the Throne of the Lord, also called the Chariot of the Lord. Blue light is associated with sapphire, both in word and in color vision.

The “definitions” of the sapphire of the Throne of the Lord are in Ex 24:10 (“pavement of sapphire, as clear as the sky itself”, “a paved work of sapphire stone, and as it were the very heaven for clearness”), and in Ezekiel, 1:26; 10:1 (“the likeness of a throne, as a sapphire stone”). In Ex 24, we witness 74 people (“Moses, Aaron, Nadab, Abihu, and seventy of the elders of Israel”) saw the God of Israel, “and under His feet appeared to be a pavement of sapphire, as clear as the sky itself”. This

episode is important because earlier only Moses was called to Mount Sinai to receive the stone tablets with the law and commandments.

Moses, Aaron, Nadab, Abihu, and seventy of the elders of Israel saw the God of Israel, and under his feet, there is a sapphire floor: “Then went up Moses, and Aaron, Nadab, and Abihu, and seventy of the elders of Israel. And they saw the God of Israel; and there was under his feet as it were a paved work of sapphire stone and as it were the very heaven for clearness.” (Ex 24:9-10 ASV)

In Ezekiel, the Sapphire of the Throne of the Lord is part of the prophetic vision, which describes the Chariot of the Lord in many details. The description is in the first and the tenth chapters. It is a canonical mystical part in the Old Testament. The vision includes many mystical elements: the archangel of Ophnaim (“wheels”), the living creatures, the throne, and ‘the awesome crystal, stretched out over’ the heads of the living creatures. In 1:26, it appears that the above the ‘awesome crystal’ there is throne which is ‘as the appearance of a sapphire stone.’

Ezekiel 1:22

The likeness of the firmament above the heads of the living creatures *was* like the color of an awesome crystal, stretched out over their heads. (ASV)

And the likeness of the firmament upon the heads of the living creature {was} as the color of the terrible crystal, stretched forth over their heads above. (WEB)

Ezekiel 1:26

And above the firmament that was over their heads was the likeness of a throne, as the appearance of a sapphire stone; and upon the likeness of the throne was a likeness as the appearance of a man upon it above. (ASV)

And above the firmament that {was} over their heads {was} the likeness of a throne, as the appearance of a sapphire stone: and upon the likeness of the throne {was} the likeness as the appearance of a man above upon it. (WEB)

In chapter ten, the prophet confirms that the throne is like a sapphire (Eze 10:1) but not the pavement ‘under His feet’ (Exo 10:24): “Then I looked, and behold, in the firmament that was over the head of the cherubim there appeared above them as it were a sapphire stone, as the appearance of the likeness of a throne.” (Eze 10:1 ASV). In the first chapter, the firmament is above the heads of the living creatures, and in the tenth, the firmament is above the head of the cherubim. Ezekiel uses the word firmament רַקִּיעַ [rakia] both in chapters one and ten. As mentioned above, [rakia] is the first ‘cosmological term’ for the sky in the Bible connected by derivative links with ‘to stamp’, ‘spreading out’ or ‘stretching forth’, ‘an expansion of plates’, i.e. ‘broad plates, beaten out’. In Exodus 24:10, the word is *heavens* שָׁמַיִם [shamàim] connected with water מַיִם [màim]. For Ex 24:10 some English translations prefer *sky* (NIV, NIB, NAS, NAU) but more frequently use *heaven* (KJV, NKJ, ASV, RSV, NRS, WEB, RWB). An interesting detail is the term “clearness” which defines the sky in Ex 24:10.

The Hebrew word used is one of 'ritual purity' טָהוֹר [tahòr], used for the gold in the Holy of Holies. In other words, the prototype of blue color, the sky, is defined as a ritual clean blue.

The word *sapphire* is at the heart of the Kabbalistic term *Sephira*. The idea is that the primordial substance *Sephiroth* refract and radiate light at the same time. It is incorrect to derive the term *Sephirah* from the Greek word *sphere* though it is done often.

4.2.1 The paradigm of the Sapphire, root Sameh-Pe-Reish ספּר/Sameh-Fe-Reish ספר

Most of the encyclopedias claim the word ספּר [sapir] is a loan word from Sanskrit. "The stone owes its name to the Sanskrit *çanipriya*." (ISBE). However, Neither Gesenius (1996: 730), neither Hartley (2011) nor Clines (1993–2011) comment on the etymology of the word ספּר [sapir]. The semantics of the root suggests several homophonic roots, well developed in different declensions. According to Gesenius (1996: 731–733), it includes meanings to count, to number, number (*mispàr*), to scratch, to scrape, to shave, to write, to scratch, or grave in letters, which all come from the idea of cutting in, graving, writer, scribe (*sofer*), the art of writing and reading, a book (*sèfer*), writing, a bill of purchase or sale to recount ((*lispòr*), to narrate (*lispòr*), to tell, to declare.

Even if the word sapphire is borrowed from Sanskrit, it is integrated into the Jewish culture of writing and worldview and becomes part of the root Sameh-Pe-Reish ספּר. The sound [s] is not written with the letter Sin ש but with the letter Sameh ס. It is not with letter Sin ש because the word could fit the paradigm of the word *shofar* (root Shin-Fe-Reish שפּר) which is one of the roots through which light is signified in the text of the Old Testament.

Does the root of Sameh-Pe-Reish ספּר emit light? Obviously, with the presence of the word sapphire in its paradigm, we must unconditionally and unequivocally understand that books (*sfarim*) must emit spiritual light, that they must not be word-fornication but kind of mathematics that should radiate spiritual light. And the light indicated by the Shin-Fe-Reish שפּר root is just another kind of light arranged closer to the laws of propagation of sound than light. The light indicated by the Shin-Fe-Reish שפּר is spiritual, but it has two basic features, different from the type of light of blue sapphire Sameh-Pe-Reish ספּר. Shofar light comes 'from God to man' as a commandment, secondly, it is consistent with human space and with the sound wave, not with the light waveform of matter. With the sound of the ritual horn – the shofar – the wall of ancient Jericho was demolished and the polytheism located on Earth was defeated. The light coming from the shofar is sound working most rapidly in the human dimension and the conditions of the Earth. The light emitted by the

sapphire is another type of light. It can only illuminate a person who walks his own, difficult, morally elevated path, up to God. In this case, the direction that finally leads to the blue light of the sapphire is ‘from man to God’, i.e. bottom-up.

Blue light is accessible to very few, ritually pure, moral people. Shin-Fe-Reish-type light is a sound wave that is heard by both humans and the Lord. Therefore, the shofar is played as a sign of the beginning and the end of Shabbat and religious holidays. The blue light, named by Sameh-Pe-Reish ספּר, indicates that one must make a serious effort to attain ritual purity to be admitted to the Mystical Mega-Blue, situated in the ideal, and in the Divine. The affiliation of the blue light of the sapphire from the Throne of the Lord to the ideal, is that the divine can be decoded from the unfolded epithet definition in Eze 1:22: “as the color of the terrible crystal, stretched forth over their heads above.” The word *terrible* leads to the idea of belonging to the ideal, which with its power is dangerous and scary for ordinary people.

It is unnecessary to indicate the full semantic scope and dimensions of words from ספּר root. What is important here is to emphasize that mathematical activity, the word *number* and the word *book*, the written storage of the mathematical activities are from the same linguistic, mental, semantic, semiotic, and cultural fields. In Jewish culture, writing and books are mathematics – this is the simple conclusion that the Hebrew worldview imposes on us. Moreover, in the case of the root of Sameh-Pe-Reish ספּר/Sameh-Fe-Reish ספּר meanings encompass a huge semantic perimeter.

4.2.2 The reference of sapphire in the Old Testament

Most Bible dictionaries and encyclopedias claim that this word does not mean what we today refer to as sapphire – a solid and transparent gem – but a soft, water-soluble, opaque semi-precious stone called the *lapis lazuli* with the modern name lazurite.

Among the biblical encyclopedias and dictionaries, there is only one source, the Fausset Dictionary, which states the opposite: “The Hebrew *lapis lazuli* is transparent and suited for engraving; probably our sapphire.” Despite the popular opinion that the Hebrew word ספּר [sapir] refers to soft, semi-precious and opaque stone, I think that the text indicates a transparent sapphire. This is not the real ancient sapphire, but a prophetic image of a transparent blue gemstone. My opinion is based on Ex 24:10 definition of sapphire: “heaven in his clearness” (KJV, WEB), the very heaven for clearness (ASV, RSV, NRS, RWB), clear as the sky itself (NIV, NIB, NAS, NAU), the very heavens in its clarity (NKJ). Septuagint used the word καθαριότης [kathariòtes] meaning *cleanliness, purity*. The Hebrew word טהור [tahòr] translated *pure* or *clear*. It calls the ‘ritual purity’ but also indicates transparency. The lapis lazuli is opaque.

The best specimens, from ancient times to the present, are obtained in the regions of Afghanistan and Pakistan. The stone is also mined in China. The prophet used טָהוֹר [tahòr] for clear, clean, pure among eight other root options that Hebrew has in its system to signify clear, pure, and clean.

Ezekiel 1:22 calls the firmament “terrible crystal”. The awesome crystal is a definition of the prototype of blue color – the sky, the heaven, the firmament. In the phrase *terrible crystal*, the Hebrew word that corresponds to “crystal” is ice קֶרֶח [kèrah]. The ice possesses ‘transparency’. In Hebrew, the standard word for crystal is another – גְּבִישׁ [gavish]. Often the context requires the translation of the Hebrew word קֶרֶח [kèrah] with *ice*, not with *crystal*, e.g. Job 37:10, Job 38:29, Job 6:16 “Which are dark because of the ice קֶרֶח [kèrah], and into which the snow vanishes.” The three uses of ice from Job indicate his brilliant knowledge of Hebrew and poetically motivated use of many Aramaic words, in parallel with their Hebrew conformity. The fourth use of this type is in Ps 147:7: “He casteth forth his ice like morsels: who can stand before his cold?” Sometimes the word *glass* זְכוּכִית [zhohìt] is also used in a context requiring *crystal* translation. Again, this is the brilliant and poetic Job 28:17: “The gold and the crystal cannot equal it: and the exchange of it shall not be for jewels of fine gold {jewels ...: or, vessels of}.”

Thus, the sapphire at Moses is clear. The claims that the word סַפִּיר [sapir] means the opaque semi-precious *lapis lazuli*, collide with the word from the ascent of Mount Sinai (Ex 24:10), as well as the scary crystal of the Ezekiel vision. To this, we should remember that Ex 24:10 and Eze 1; 10 to be interpreted as typical mystical terminology, i.e. to describe something that is not an object in three-dimensional human space, but rather a description of meditative images, expressed in human words, that approximately tell what is seen at the ideal level.

The very essence of the Divine presupposes both the permeation of light and the comparison with the sky. These elements of sapphire (Ex 24:10) and the space of the crystal of Eze 1:22 are grounds for considering the blue light in the theme of Old Testament Light. Moreover, in the twelfth century, the Jewish rationalist RAMBAM (Moses ben Maimon) suggested that sapphire was white precisely because of these peculiarities of the comparisons in Ex 24:10 and Eze 1. RAMBAM’s point of view follows Aristotle’s on transparency and clarity. Scholem (1979) rightly objected that Clarity and Transparency are not a color but a property of materials.

The conclusion is that in the Throne of the Lord, sapphire is transparent and with scattered light. Therefore, we can talk about blue light. It can be called mystical mega-light blue. The blue [tehèlet] cord on each tassel of the priest’s garment is considered a transformation of the sapphire in The Torah command (Num 15:38-40) to meditate on the blue [tehèlet] cord.

5 Terms for the basic features of the prototypes (TBFP)

The basic features of the sky and sea are ‘space’, ‘expanse’, ‘breadth’, ‘infinite’, ‘boundless’. These prototype features are explicit in the Norm of Free Word Associations (Almalech 2011). These qualities explain the various semanticizings of blue in Judaism. Metaphorizing the sky is a key religious space by conceptual, primary, and complex metaphors as “extended structure-mappings between domains” (Gibbs 2008b: 7). Thus, the word *heaven* [shamàim] became a substitute for the Tetragrammaton YHWH. Blue heaven/skies are many things, e.g. in the philosophical Kabbalah, the name of God before creation began is *Ein Sof*, (“endlessly” “infinite”) understood as an adverb. The adverbial semantics express the understanding that all that is known about Him is that He will act endlessly (*Ein Sof*).

6 Conclusions

The cultural unit blue participates in different layers and levels of the Old Testament interlaced in different cultural areas of the heritage.

The basic color term [tehèlet] is the most frequent BCT among the BCTs for any color.

The abounding and opulent symbolism of blue color is supported by the frequency – Biblical most incidence BCT is the *blue* [tehèlet].

It is prohibited to produce the *blue* [tehèlet] from land objects – it should be taken from a marine mollusk, i.e. from the sea depth.

BCT blue *tehèlet* participates in symbolism of the Priestly Code.

The blue thread is an important element of the blue-white duad in ritual fringes. The mighty symbolism is the reason why the flag of the modern state of Israel is blue-white duad.

In some medieval contemplations, blue was conceived as a symbol of the spiritual in man, and white as a symbol of the corporeal. Bokser reminds this opinion:

Rabbi Aaron Halevi, in his *Sefer ha-Hinuh* (XIIIth c.) regards the white and the blue of the fringe as symbolizing the body and the soul. The white symbolizes the body which was created from the primordial substance beneath the divine throne, a substance which [...] is described in the *Pirke de-Rabbi Eliezer* as snowy white. The blue, Rabbi Aaron Halevi continues, by the familiar chain of associations, stands for the divine throne and therefore represents the soul. The author adds that the supremacy of the soul over the body is expressed in placing the thread of blue over the white threads of the fringe. (Bokser 1963: 7–8)

Unlike metals, blue תְּהֵלֶת [tehèlet] is located in all horizontal spaces of the tabernacle – from the Holy of Holies, through the Great Hall to the courtyard. Being positioned at all horizontal points of the temple complex, blue תְּהֵלֶת [tehèlet] carry semantics ‘from downwards to upwards’ because it is made from the blood of a creature inhabiting the deep sea. The same applies to Tyre (Royal) purple אֶרְגָּמָן [argamàn] produced from the same marine mollusk, *murex snails*. Thus, Jewish BCT blue [tehèlet] has a function in the horizontal of the sacred space, remaining genetically and symbolically related to the vertical. It is therefore not surprising that the blue [tehèlet] develops semantics based on the Tabernacle commandments and semantics in the later books of the Old Testament. We should not forget either the disappearance of this color at the beginning of our era, nor the throne of the Lord which is “as the sky, as transparent sapphire”, and the blue fringes on the clothes of the Jews as a transformation of this sapphire for compliance with the God’s commandments, and ultimately – the way of man to God, i.e. ‘from downwards to upwards’. To enable this to happen, it was preceded by a descent of God into the blue ritual fringes, i.e. a ‘descend from upwards to downwards’.

The temple is a sacred space. It is a mediator between the Divine, which is in heaven, and the profane, which is outside the temple in horizontal space relative to the temple. *Color Tetrad* serves the mediator function of the Holy of Holies, i.e. communication between God and humanity.

PT sky/heavens is expressed with few words. No one of the Hebrew words for sky provokes straight association with blue. Terms for sky serve low-high axis in symbiosis with water *màim-shamàim*. One of the terms for sky (*shamàim*) is substitute of the proper name of God, YHWH. *Rakia* is as a cosmological term usually translated as *firmament*. The different inner forms of *shamàim*, *rakia*, *shehakim*, *rekia shamàim*, *avèi shehakim* (“clouds of the heavens”) give birth to the theme of hierarchy of heavens. The other prototype, the *sea*, is never used as a carrier of the color blue.

RT, *blue skins* (*badger’s skins*) and *sapphire*, have high symbolical presence in the Bible. Blue skins cover the tent of tabernacle. *Sapphire* is an element of the Throne of God. The blue color is involved in the most mystical elements in the Old Testament: the Throne of God (*sapphire*); the key role of BCT blue (*tehèlet*) in the sacral color tetrads, triads, and duads; the blue at the ritual fringes is a commandment to obey the law in Jewish behavior; the obligation to produce blue dye from, a marine mollusk but never from land objects; one of PTs (*shamàim*) is a substitute of the Tetragrammaton.

Color as a cultural unit comprises visual and verbal color languages. The biblical verbal color language has some unique features for blue. A basic feature of the structure of the Old Testament’s color language is the opposition between colors, e.g. red-white (Isa 1:18), darkness-light (hundreds of uses) with secondary meaning

‘evil-good’. Cultural unit blue shows an ability to appear in synergic color compounds (duads, triads, tetrads) but not in opposition. We can say, Blue is the most communicative color in the Old Testament.

BCT *tehèlet* and RT *blue/badger’s skins (or tahàsh)* describe fabrics at the Priestly Code of the Tabernacle. BCT, PT RT, and TBFP are lingual terms connecting the verbal with the visual blue provoking fast association with the cultural set of meanings. The interdisciplinary approach revealed the relation between thought, language, and culture.

Although the blue fringes and the tetrad disappeared thousands of years ago, they remain in the attention of modern scholars, ancient historians, and theologians in Judaism and Christianity (Philo’s *De specialibus legibus*, *De vita Mosis*, Josephus’ *Antiquitates Judaicae*, books 1–5, Pliny the Elder’s *Natural history*, book 9, ch. 60, St. Jerome’s *Letter to Fabiola*, Bede VII-VII c. *On the Tabernacle*).

Abbreviations

Biblical dictionaries and encyclopedias

BDB	Brown, Francis, S. R. Driver, Charles Briggs. 1995 [1891–1905]. <i>Hebrew and English Lexicon of the Old Testament</i> . Peabody, Mass: Hendrickson Publishers.
BW	BibleWorks. Software of Biblical exegesis and research. Copyright BibleWorks, LLC. Hermeneutika, Big Fork, Montana; P.O. Box 6158 Norfolk, Virginia.
EB	<i>Encyclopaedia Biblica</i> . 1950–1982. “תהלת” in <i>Encyclopaedia Biblica</i> , vol. 8, 520–521. Museum of Jewish Antiquities, Mosad Bialik, Universita ha-Ivrit be Yeruhalayim: Text in Hebrew.
ISBE	<i>International Standard Bible Encyclopedia</i> . 5 vol. set, 1939. [1915]. James Orr (general ed.). Eerdmans Publishing Co; 1915. Chicago: Howard-Severance Co.
TDOT	<i>Theological Dictionary of the Old Testament</i> . 15 vol. set. 1975–2015. G. Johannes Botterweck, Heinz-Josef Fabry & Helmer Ringgren (eds). Translators: David Green, Douglas Scott. Grand Rapids: Eerdmans.
TWOT	<i>The Theological Wordbook of the Old Testament</i> by Laird Harris, Gleason Archer, Bruce Waltke. Illinois: Moody Press. 1980 [2003].

Bibles

ASV	American Standard Version 1901
BUL1	Bulgarian Protestant Version 1940, 1995, 2005
BUL2	Bulgarian Orthodox Version 1925, 1991
BUL3	Protestant “Veren” edition, 2000
BUL4	Protestant 1873 with newer versions 1914; 1924
DBY	The Darby Bible 1884/1890
DRA	The Douay-Rheims 1899. Very literal translation of the Latin Vulgate.
KJV	King James Bible. 1769 [1988–1997]. Retrieved from http://biblehub.com/interlinear

LSG	The French Louis Segond Version 1910 [1988–1997]
LUT	Revidierte Lutherbibel 1984
LXX	Septuagint. Retrieved from http://biblehub.com/interlinear/
NAB	The New American Bible 1991
NAS	New American Standard Bible. Retrieved from http://biblehub.com/interlinear/
NAU	New American Standard Bible 1995
NIB	New International Version UK 1983
NIV	New International Version 1984 (US)
NKJ	New King James Version 1982
NRV	La Sacra Biblia Nuova Riveduta 1994
NT	New Testament
NRS	New Revised Standard Version 1989
RSV	Revised Standard Version 1952/1971
RVA	Reina-Valera Actualizada 1989
RWB	Revised Webster 1833/1995
OT	Old Testament
RST	Russian Synodal Text of the Bible 1917 [1996]
TOB	Topical Bible
VUL	Latin Vulgate
WEB	The Webster Bible 1833
WTT	Biblia Hebraica Stuttgartensia 1990

Books from the Bible

Deut	Deuteronomy
Ex	Exodus
Eze	Ezekiel
Gen	Genesis
Isa	Isaiah
Jer	Jeremiah
Mal	Malachi
Neh	Nehemiah
Num	Numbers
Ps	Psalms
Zech	Zechariah
Zep	Zephaniah
1Ki	1Kings
2Chr	2Chronicles
2Ki	2Kings
2Sam	2Samuel

Languages

Bul.	Bulgarian
Cze.	Czech
Pol.	Polish
Rus.	Russian

Colors

BCT	basic color terms
B&K	Berlin&Kay
PT	prototype terms
RT	rival terms of the prototype
TBFP	Terms for the Basic Feature of the Prototypes

General

espec.	especially
i.e.	that is
i.e.	in other words
i.q.	the same as
obsol.	obsolete (root)
prob.	probably
seqq.	the following (ones)
trop.	words that represent, realize a figurative meaning
v.	verse

Periodicals, reference works and serials

JSOT	Journal for the Study of the Old Testament
LSS	Language and Semiotic Studies
PMLA	Proceedings of the Modern Language Association of America

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