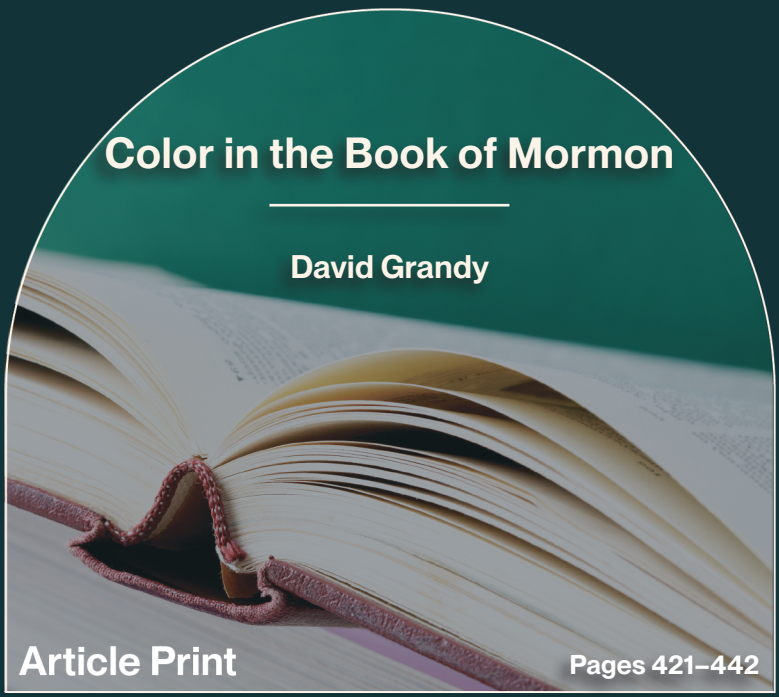
The Interpreter Foundation™

Interpreter

A Journal of Latter-day Saint Faith and Scholarship

Color in the Book of Mormon

David Grandy



Article Print

Pages 421–442

Volume 68 | 2026

ISSN 2372-1227 (print)
ISSN 2372-126X (online)

Mission Statement

Supporting The Church of Jesus Christ of Latter-day Saints through scholarship.

The Interpreter Foundation supports the Church in the following ways:

- **Promotion:** We provide tools to encourage and facilitate personal learning by study and faith, and disseminate accurate information to the public about the Church.
- **Explanation:** We make the results of relevant scholarship more accessible to non-specialists.
- **Defense:** We respond to misunderstandings and criticisms of Church beliefs, policies, and practices.
- **Faithfulness:** Our leadership, staff, and associates strive to follow Jesus Christ and be true to the teachings of His Church.
- **Scholarship:** Our leadership, staff, and associates incorporate standards of scholarship appropriate to their academic disciplines.

This journal compiles weekly publications. Visit us online at InterpreterFoundation.org

Color in the Book of Mormon

David Grandy

Abstract: *Given that only four colors are mentioned in the Book of Mormon (white, black, red, and gray), readers may ask, "Where are all the other colors?" But this is a distinctively modern question, that is, one keyed to the early modern understanding of color pioneered by Isaac Newton. The Book of Mormon does not embody this understanding. Instead, it reenacts difficulties associated with grasping color meanings intrinsic to the Bible and Homer's* Iliad *and* Odyssey. *These difficulties support the claim that we are reading an ancient record.*

For many readers of the Book of Mormon, few passages are more challenging than Nephi's explanation of why the Lord cursed or marked Lamanites with a black skin: "For behold, they had hardened their hearts against him, that they had become like unto a flint; wherefore, as they were white, and exceedingly fair and delightsome, that they might not be enticing to my people the Lord did cause a skin of blackness to come upon them" (2 Nephi 5:21). This passage, along with others,[1] appears to link white skin with righteousness and black skin with wickedness, though some scholars have argued that the color labels are metaphorical rather than physical.[2]

In this article, I set aside the issue of skin color while taking a

1. 3 Nephi 2:14–16; Jacob 3:8; 2 Nephi 30:6.
2. For an overview of different responses, see Brant A. Gardner, "What Does the Book of Mormon Mean by 'Skin of Blackness?,'" FAIR Latter-day Saints (website),fairlatterdaysaints.org/archive/publications/what-does-the-book-of-mormon-mean-by-skin-of-blackness. Also, Scripture Central Staff, "What Is the 'Skin of Blackness' in the Book of Mormon?," KnowWhy 718, 18 April 2024, scripturecentral.org/knowhy/what-is-the-skin-of-blackness-in-the-book-of-mormon.

wide-angle look at color in the Book of Mormon. We cannot assume, I argue, that we live in the same color experience as the Nephites and Lamanites. This may seem a trite observation, for the color experience of one culture never cleanly translates into another, and when we encounter ancient cultures, the difficulty mounts. But it seems to me that no one to date has seriously tried to think outside the color narrative that shapes modern thought while reading the Book of Mormon. When one does this, it is surprising how well the Book of Mormon aligns with older understandings of color, which indeed may appear as misunderstandings. The first task then is to note the change in perspective that occurred during the early modern period.

Our Modern Color Experience

A familiar aphorism states that you never know where you are until you know where you came from. Without that knowledge, it is reflexive to assume that all people, regardless of time and place, share your categories of understanding. A case in point is color. Thanks mostly to early modern developments in science and culture, our color experience is very different from that of our ancestors long ago. Let me offer a brief genealogy of the modern color experience.

The colors we reflexively impose on nature are mirrored in our historically unprecedented understanding of the rainbow. In 1666, Isaac Newton held a prism up to a shaft of sunlight and saw the light reappear as an array of colors on the wall of his darkened study. He then inverted a second prism, placed it between the first prism and the wall, and merged the colors back into colorless light. Finally, wishing to see if colored light could be broken down further, he let a colored ray of light pass through a prism and noted that it kept its color. These and other observations led Newton to assert that colors are the primary elements of colorless light, or what is sometimes called "white" light.

By assigning primacy to colors, Newton upended the prevailing belief that colors occur when white light is stressed or modified. Put differently, white light is primary or elemental and colors are secondary effects. Today, virtually no one — no scientific authority — endorses this understanding of color.[3] It has been consigned to history's trash bin.

3. The lone exception may be Arthur Zajonc, a physicist with Goethean sympathies. (Goethe's view is discussed below.) See Arthur Zajonc *Catching the Light: The Entwined History of Light and Mind* (New York: Bantam Books, 1993), archive.org/details/catchinglightent0000zajo/page/n5/mode/2up.

Largely because of Newton's experiments and his analysis of the prismatic spectrum, we now experience the rainbow differently. Believing that there must be a connection between its colors and the seven tones of the musical scale (C, D, E, F, G, A, B), Newton bequeathed it with seven colors — red, orange, yellow, green, blue, indigo, and violet.[4] It is doubtful, however, that anyone sees exactly seven colors while looking at a rainbow.[5] In theory, we see — or at least we look at — an indefinite number of colors, for each tiny gradation of the rainbow vibrates at a different frequency. Historically, however, people perceived fewer than seven colors. That is, they were culturally predisposed to see fewer than seven colors, even though they possessed the biological apparatus to see arbitrarily many. Medieval representations of the rainbow often feature four colors, linking them to the four Aristotelian elements. Isidore of Seville explained that the rainbow gathers red from the sky (where fire, the lightest terrestrial element, naturally exists), white from air, purple from water, and black from earth.[6]

The moral of this strange (to us) medieval color arrangement is that we generally see what we are prepared to see. Reflecting on the change in humankind's color sensibilities during the early modern era, Michel Pastoureau writes, "The [prismatic] spectrum, the color wheel, the notion of primary colors, the law of simultaneous contrasts, the distinction between retinal rods and cones — these are not eternal notions but stages in the ever-changing history of knowledge."[7]

4. Penelope Gouk, "The Harmonic Roots of Newtonian Science," in *Let Newton Be! A New Perspective on His Life and Works,* ed. John Fauvel et al. (Oxford, UK: Oxford University Press, 1990), 98–125.
5. After commenting on "the strong mystical thread" in Newton's work and his subjective penchant for pairing musical tones with colors, Philip Ball writes, "And so the Newtonian rainbow acquired its indigo and violet where I defy anyone to see other than a blue deepening to purple." *Bright Earth: Art and the Invention of Color* (Chicago: University of Chicago Press, 2003), 25.
6. Isidore of Seville, *On the Nature of Things* (*De Natura Rerum*), trans. Carolyn Embach (Berlin: Weidmann, 1969), 40, researchgate.net/publication/315663902. Isidore adds that "other rainbows" are composed of two colors, blue and rose, the former relating to the destruction of sinners by the flood in the days of Noah and the latter to a future annihilation of sinners by fire (p. 40).
7. Michel Pastoureau, *Blue: The History of a Color*, trans. Markus I. Cruse (Princeton: Princeton University Press, 2018), 9. Pastoureau laments that many scholars, when talking about the history of color, fail to distinguish between vision and perception. Vision is "a biological phenomenon" while perception "is a function of culture." Failure to separate the two results in anachronistic outlooks that are "ethnocentric, imprecise, and dangerous," 25.

Further, "Color is first and foremost a social phenomenon. There is no transcultural truth to color perception."[8]

Black and white feature prominently in premodern color typologies, though for some modern purists they are not colors because they do not exist on Newton's color spectrum.[9] Pressing the matter further, however, we note that Newton rejected as "vulgar" the belief that colors are real outside the human mind: "For the Rays [of the prismatic spectrum] to speak properly are not coloured. In them there is nothing else than a certain Power and Disposition to stir up a Sensation of this or that Colour." He compared this disposition to the sound-making potential of "a Bell or musical String," whose "trembling Motion" produces air waves that impinge on the eardrum to trigger acoustical sensations.[10]

This outlook, which is the received view of modern physical science, tracks back to the Greek atomists who evacuated the world of color (and other sensory qualities like sound and taste) in order to explain nature merely as a congeries of interactions among lifeless atoms. Aristotle and others rejected atomism as too spare to account for life's richness,[11] but after Lucretius' *On the Nature of Things* was rediscovered in 1417, atomism became a vanguard of modern thought.[12] The aim was to edit sense experience so that superfluous or subjective details might be distinguished from real features of the world, and color was deemed a superfluous detail. It happened in the brain but not in physical nature. For Newton, atoms (what he called "corpuscles") were real because they were bits of matter obeying his

8. Pastoureau, *Blue*, 7.
9. If the prismatic spectrum (rainbow) is regarded as the cradle of color, neither black nor white qualify as colors. White, however, occurs as prismatic colors combine, and black occurs in the absence of light, or when an object absorbs all light that falls upon it. With pigments (rather than light of different frequencies), different rules apply, which is why printers can produce faux black print from cyan, magenta, and yellow ink cartridges when the black cartridge is depleted. In this article, every hue or shade that one might find in a box of crayons is considered a color.
10. Isaac Newton, *Opticks* (Amherst, NY: Prometheus Books, 2003), 124–25.
11. According to Democritus, atoms are the basic units of being moving in a void—an expanse of nonbeing. Although colorless, invisible (too small to be seen), indivisible, and immutable, they are differently shaped so as to combine or fit together to form the larger objects of everyday experience. Among other things, Aristotle balked at their supposed invulnerability to change and decomposition. His reservations may be found in Book I of his *Physics*.
12. Stephen Greenblatt, *The Swerve: How the World Became Modern* (New York: W. W. Norton, 2011).

laws of motion; their associated colors, however, were merely brain-detonated sensations plastered on a colorless world.

The upshot was a brightly colored world held aloft by the illusion of color. While most people took this explanation in stride, some protested. When Johann Wolfgang von Goethe undertook his study of light, he procured a prism and instinctively looked through it.[13] What he saw contradicted Newton's conclusion regarding the primacy of colors. Like Newton, he saw prismatic colors, but only at the interface of light and darkness. A blank piece of paper, for instance, does not produce colors when viewed through a prism. Its image is simply displaced according to the laws of refraction. Colors, however, show up along its edges when the paper is held against a darker or lighter background. Colors, in other words, flash into existence when light and darkness clash; when an expanse of light is broken by darkness. Accordingly, "colors are the deeds of light; its deeds and sufferings."[14] They are beautiful by-products of the oppositional clash between light and darkness.

Goethe adduced the following rule regarding the production of colors: lighter edges (lighter backgrounds) produce warm colors (yellow, orange, red) while darker edges produce cool colors (green, blue, violet). Then, turning from his indoor study to nature at large, he found macrocosmic affirmation of these inferences. The sun, he noted, burns with a colorless radiance, but we generally see it as yellow owing to the atmosphere in which its light is refracted: atmospheric particles catch the sunlight and darken it to yellow. At dawn and dusk, the effect is even more pronounced when sunlight deepens toward reddish hues as it passes through a lengthening field of atmospheric haze and dust.

The opposite effect is seen at midday. Looking skyward, we see blue, which is the light-moderated darkness of outer space. In this instance, darkness (Goethe saw it as an active force, not the absence of light) travels through the earth's atmosphere, but the atmosphere, not perfectly transparent, resists darkness in the form of light-illuminated particles. These tone down or lighten the blackness of space

13. Some of the following is taken from David Grandy, "Goethe on Light and Color," *Journal of Interdisciplinary Studies* 17, no. 1/2 (Fall 2005), 26–44.

14. Johann Wolfgang von Goethe, *Theory of Color* (London: John Murray, 1840), gutenberg.org/ebooks/50572, quoted in David Seamon and Arthur Zajonc, *Goethe's Way of Science: A Phenomenology of Nature* (Albany, NY: State University of New York Press, 1998), 19.

and give us the blue sky. (One should note here that light cannot be seen until it interacts with material bodies. On the moon, whose atmosphere is very thin, the white sun is surrounded by blackness at midday.)

It is interesting that these overarching color sensations — the blue sky and the yellow sun — originate in the atmosphere, which people once felt demarcated the upper and lower worlds, and which functioned as a site of conflict between the powers of light and darkness. We now live within that conflict, Goethe believed, and the colors of nature express "the deeds and sufferings" of light on our behalf.

Herman Melville's critique of modern color theory is less philosophical though no less forceful. Ishmael, the narrator of Melville's *Moby Dick*, stated that it "was the whiteness of the whale that above all things appalled me."[15] He acknowledged that while white may be beautiful in some settings, when left to itself it can become repulsive and ghastly. And so, throughout the novel, the reader suspects something unnatural about the white whale that Captain Ahab and his crew relentlessly pursue. Ishmael states that the whale is emblematic of "the palsied universe" given us by "natural philosophers" (scientists): "The sweet tinges of sunset skies and woods; yea, and the gilded velvets of butterflies, and the butterfly cheeks of young girls; all these are but subtile deceits, not actually inherent in substances, but only laid on from without; so that all deified Nature absolutely paints like the harlot, whose allurements cover nothing but the charnel-house within . . . of all these things the Albino whale was the symbol," and such motivated the pursuit.[16]

It was a contest between humankind, armed with technology, and nature, seen now as indifferent to humankind's fate by reason of its "palsied," bleached-out state. Ishmael suggests that Moby Dick is proxy for our fear of extinction. The whale's chromatic indefiniteness "shadows forth the heartless voids and immensities of the universe, and thus stabs us from behind with the thought of annihilation, when beholding the white depths of the milky way."[17] Whereas the Milky Way had once represented a "Bridge Out of Time" leading to a better world,[18] it now, for Ishmael, suggested oblivion.

15. Herman Melville, *Moby-Dick; or, The Whale* (New York: Harper & Brothers, 1851), 207, archive.org/details/mobydickorwhale01melv/page/n7/mode/2up.
16. Melville, *Moby-Dick*, 216–17.
17. Melville, *Moby-Dick*, 216.
18. Giorgio de Santillana and Hertha von Dechend, *Hamlet's Mill: An Essay on*

All this flowed from the simple decision to subtract from nature its sensory qualities while promoting early modern science's atomistic agenda. Along with color, sound was blinked away as well, and taste, texture, and aroma — qualities of nature that resisted mechanical and mathematical analysis. The inevitable effect was Ishmael's "palsied universe," a far cry from what seems to be the case when nature is taken at face value.

And a bit of a doublethink. In his discussion of science's dismissal of subjective qualities, Alfred North Whitehead wrote that "we forget how strained and paradoxical is the view of nature which modern science imposes on our thoughts."[19] This view teaches us that "[material] bodies are perceived with qualities which in reality do not belong to them, qualities which in fact are purely the offspring of the mind."[20] If this is true, Whitehead continued, "nature gets credit which should in truth be reserved for ourselves; the rose for its scent; the nightingale for his song: and the sun for his radiance. The poets are entirely mistaken. They should address their lyrics to themselves, and should turn them into odes of self-congratulation on the excellency of the human mind. Nature is a dull affair, soundless, scentless, colourless; merely the hurrying of material, endlessly, meaninglessly."[21]

While most people today do not worry about modern science's mechanistic streamlining of nature, they nevertheless live with its consequences. Whitehead insisted that this narrow approach to nature has cleared the field of all its rivals and shadows our religious and philosophical thought. "And yet," he adds, "it is quite unbelievable."[22] Who really believes that the song of the meadowlark is just a succession of soundless air waves impacting the eardrum and activating the experience of music in the brain? Or that colorless daffodils emit colorless sense data that trigger a yellow sensation upon entering the brain?

These are abstract ideas contradicted by ordinary experience. When, however, they are accepted as scientific fact (rather than merely as a consequence of a scientific agenda), they shape our apprehension of the world in new ways by eliminating possibilities of belief that once freely abounded. "There are more things in heaven and earth . . .

Myth and the Frame of Time (Boston: David R. Godine, 1977), 2.

19. Alfred North Whitehead, *Science and the Modern World* (New York: Macmillan, 1926), 122, archive.org/details/sciencemodernwor00whit_0/page/n7/mode/2up?q=paradoxical.
20. Whitehead, *Science*, 80.
21. Whitehead, *Science*, 80.
22. Whitehead, *Science*, 80.

than are dreamt of in your philosophy," Hamlet told his friend Horatio.[23] Ironically, early modern science gave us *fewer* things to believe in. The subjective qualities of nature were dismissed, and heaven itself, along with angels, spirits, and other supernatural or paranormal beings, was called into question in a rush to explain the world mechanistically.

Premodern Color Experience

The foregoing is not meant as an attack on Newtonian science or our modern understanding of color. Every culture lives on its own map of reality, a map fitted to its fundamental aims and preconceptions. Because, however, maps are invariably less comprehensive than the territory they purport to represent, things may seem distorted as we move from one map to another. We are, however, more likely to view those distortions charitably if we are aware of the predilections, limitations, and incoherencies of our own map.

A surprising feature of ancient and medieval texts is the relative paucity of references to color and a seeming confusion in the application of colors to things we "know" to be differently colored. "There are but few real color-terms found in Biblical or traditional literature," wrote Emile G. Hirsch and Caspar Levias in 1906.[24] "Only white, and two of the elementary colors, red and green, are distinguished by name; while for blue and yellow distinct terms are entirely wanting." By "elementary," Hirsch and Levias apparently mean the modern colors of the rainbow. They continue, "The other elementary colors are expressed by words denoting degrees of lightness and darkness; while non-elementary colors are indicated by the names of the objects from which they are derived. Moreover, one and the same word is used to denote not only several shades of one color, but even what are now known as different colors."[25]

Hirsch and Levias attribute these disparities to an "undeveloped" color vocabulary. This presupposes that there is but one right way to experience and talk about colors, a view that would find little support today.[26] Nevertheless, it is difficult not to be surprised by the

23. William Shakespeare, *Hamlet*, 1.5.187–88. References are to act, scene, and lines.
24. *Jewish Encyclopedia.com*, s.v. "Color," jewishencyclopedia.com/articles/4557-color.
25. Hirsch and Levias, *Jewish Encyclopedia.com*, s.v. "Color."
26. Athalya Brenner indicates a late nineteenth-century shift away from such dismissive thinking. She writes,

differences they discuss. Black and white seem to play starring roles in the Biblical imagination and tend to embrace darker and lighter hues that we would associate with colors like purple, brown, yellow, and so on. Moreover, colors were laden with symbolism (as also were numbers in antiquity: think of the Biblical significance of seven or twelve), and so there may be much more to a color than its location on the prismatic spectrum or the frequency at which it vibrates. These are scientific definitions that tend to lift color out of everyday experience, but for people innocent of such thinking and keyed to other criteria, there might be wildly different ways of apprehending the colors of nature. Hirsch and Levias, for instance, state, "The term 'yaraḳ,' originally 'pale,' is used [in the Bible] to describe those uncertain colors which waver between green, yellow, and blue."[27] Our struggle to grasp this migratory color need not imply that it was not a perfectly sensible descriptor to the people who once used it.

Stepping beyond the Bible, we encounter similar color puzzles in Homer's *Iliad* and *Odyssey*. William Gladstone was probably the first scholar to publicly wonder why Homer unfailingly described the waters of the Mediterranean Sea as "wine-dark" or "wine-looking" rather than blue.[28] Wine is now typically described as dark red, and while there may be occasional instances of watery redness in the sea, these, for us, are exceptions to the rule of blue. Further, we imagine the sea taking its coloring from the blue sky, but Homer never calls the sky

---

> The lack of a colour name in a language might imply a lack of discrimination of that (chromatic) color on the part of the speakers of that language. This assumption was held to be valid mainly until 1880. It was widely applied to so-called "primitive" cultures and to literatures of ancient civilizations, where the absence of a single term for our "blue," for instance, is conspicuous; colour names are few (in comparison to modern European languages); and the boundaries between chromatic colours seem to be only vaguely defined, if at all. . . . [Hugo] Magnus showed already in 1880 that colour perception and its verbal identification are not directly connected.

That is, the perception of colors need not necessitate color naming, and the absence of color names need not imply mental or cultural backwardness. Athalya Brenner, *Colour Terms in the Old Testament* (Sheffield, UK: Journal for the Study of the Old Testament Press, 1982), 12, scribd.com/document/475527352/COLOUR-TERMS-IN-THE-OLD-TESTAMENT-pdf.

27. Hirsch and Levias, *Jewish Encyclopedia.com*, s.v. "Color."
28. Guy Deutscher, *Through the Language Glass: Why the World Looks Different in Other Languages* (New York: Metropolitan Books, 2010), 33–36, 57. Deutscher, a linguist, rehearses the puzzlements of Gladstone, a nineteenth-century English statesman and classicist.

blue. Evidently thinking of its shining, metallic quality, he calls it copper, bronze, or iron. He also commits such modern howlers as calling sheep violet and honey green.[29]

Believing that anyone with normal vision would speak properly when assigning colors to nature, some scholars speculated that Homer was colorblind.[30] This hypothesis, however, is now widely dismissed. Homer has a fine eye for visual detail; that detail, though, appears to be contextual rather than separately picked out. Colors for him seem to be more intimately associated with other qualities of nature and the moods and feelings that suffuse a particular setting. Being more poetic than scientific, they blur and blend differences rather than isolate and multiply them as distinct, self-standing categories. Accordingly, Homer's color vocabulary, like the Bible's, is small compared to the one we employ.

Early Greeks who reasoned about color and color vision had similarly small vocabularies and seemingly convoluted analysis. Empedocles, the first thinker to posit four fundamental elements, associated white or bright with fire and black or dark with water, feeling that

29. Deutscher, *Through the Language Glass,* 33–34. Here again we need to bear in mind the distinction between biological vision and cultural perception. It is interesting that blue, the most popular color in the modern world according to Pastoreau, was perceived as barbaric, frightening, and evil in many ancient cultures. "Having blue eyes was considered almost a physical deformity, or at the very least a sign of bad character," states Pastoureau in his description of ancient Rome's deep dislike of blue. Such loathing appears to have contributed to a reluctance to pick out blue and link it with a specific word. Pastoureau observes that there "were numerous terms for blue" in ancient Rome and ancient Greece, "but they were all polyvalent, chromatically imprecise and sometimes contradictory." Pastoureau, *Blue*, 26–27. Hence it was seen but not precisely named.

30. We cannot, of course, assume that Homer was eyewitness to the events he narrates in the *Iliad* and *Odyssey.* He lived three or four hundred years after they occurred. Nor is it generally assumed that he wrote those epics as a modern author would. A common theory holds that he was heir to an oral tradition from which he composed the epics with the help of narrative markers whereby they could be remembered, sung, and passed on to future generations. Only much later were they written down.

    A related question pertains to Homer himself. Was he a single individual or proxy for generations of poets who incrementally and collectively composed the epics? We will probably never know for sure, but none of these issues alter the color puzzles I am addressing. If they were puzzles for his ancient listeners, they would have been questioned and corrected long before they reached modern readers. There is no evidence that ancient color schemes, whether Homeric or Biblical, were puzzling to people of their time.

this opposition was sufficient to generate all the intermediate shadings and tints of nature.[31] Plato likewise began with black and white but also included "bright" and red as the basic colors of nature from which all other colors are derived by mixing. By mixing red and white we get orange, he states, and then writes that "red mixed with black and white is of course *purple*."[32] Of course? We generally think of purple as a mixture of red and blue, but blue for Plato is an unnamed color so he finds another route.

Still, the inclusion of black may seem odd, along with bright, both primary colors for Plato. And then we have white, which, like black, might strike a modern thinker as the absence or cancellation of color. Additionally, Plato seems to feel that he is talking beyond his remit, for he insists that god alone can know the proportions for these mixtures, and that if anyone were to put "these matters . . . to an actual test, he would demonstrate his ignorance of the difference between the human and the divine."[33]

Clearly, Plato's color sensibilities are different from our own. Less in awe of color mixtures, Aristotle conjectured that all non-primary colors spring from mixtures of black and white, the most pleasing of which are combined according to simple mathematical ratios like those that govern pleasing musical intervals.[34] In principle, these colors could be produced by a painter.

What about the Book of Mormon?

The foregoing is a brief sampling of premodern color theories in Western and Near Eastern (Biblical) thought. Although incomplete, the sketch suggests a wide disparity between our own color experience and that of ancient people. Some might propose that the ancients were fumbling toward the truth that we now grasp, but I suggest their

31. Katerina Ierodiakonou, "Empedocles on Colour and Colour Vision," *Oxford Studies in Ancient Philosophy*, 2005, 1–37, academia.edu/3677794/Empedocles_on_colour_and_colour_vision.
32. *Plato: Complete Works*, ed. John M. Cooper (Indianapolis: Hackett, 1997), 1269–70, emphasis in original. Plato's comment about purple parallels a similar comment by Pope Innocent III (AD 1161–1216) regarding green in his revision of liturgical colors: "green is a color halfway between white, black, and red." Quoted in Pastoureau, *Blue*, 40.
33. *Plato: Complete Works*, 1270.
34. Aristotle, *Sense and Sensibilia,* 1.3.1, classics.mit.edu/Aristotle/sense.1.1.html. This is one variation on Aristotle's thesis that all colors originate from black and white, or, variously, dark and light.

experience bubbled up from different premises and preconceptions of nature — this was the point of my earlier discussion about Newton's game-changing prism observations and analysis. Alter a few fundamental understandings and everything falls into place in a radically different way. It is as if Newton and company — Copernicus, Kepler, Galileo, Descartes, among others — turned the kaleidoscope of the Western mind.

According to Guy Deutscher, we see with three eyes: two physical eyes and the eye of the mind.[35] The worldviews we inherit mediate the phenomena of nature differently. Speaking scientifically, there is no physiological difference between modern readers of the Book of Mormon and the Lehites and Jaredites they read about. And because we share the same physiology, there is no difference in the way raw sense data impact our sense organs. There is, however, a vast difference in the way we interpret those data.

We need to remember also that some sense data do change over time: we do not live in the same visual world as our distant ancestors. When my wife Janet and I visited Israel, we were told that the ground that Jesus walked on in Jerusalem was several feet lower than the ground we were walking on. Material debris had slowly accumulated, making it impossible to literally walk where Jesus once walked.[36] Similarly, a kind of visual or imagistic debris separates us from the past. As I look out my window, I see in the distance automobiles traveling along an interstate highway. Who saw that long ago? (On the other hand, how often have I seen mule teams pulling wagons when looking out my window, or a caravan of camel-riding Bedouin?) At night we flip on incandescent or florescent lights to illuminate the darkness, but just two centuries ago people lit kerosene lanterns or gas lamps, which not only illuminated a different world but illuminated it differently.[37]

35. Deutscher, *Through the Looking Glass of Language*, 55.
36. Heinrich Schliemann's discovery of the ancient city of Troy is another case in point. Having inferred the location of the city from Homer's *Iliad*, he misidentified the city in the strata that had accumulated over several millennia of ecological wear and tear. That is, his surface coordinates (latitude and longitude) were correct, but his depth coordinate was erroneous.
37. Even the switch from incandescent to florescent lighting exacts an emotional toll. From the first to the fourth grades, I attended school in older buildings with incandescent lights. Then, in the fifth grade, my classmates and I were transferred to a brand-new building, one with fluorescent lights. I recall not liking them. They were bright but lacked the warm tones of the incandescent lights.

Pastoureau argues that as we try to grasp the past, even scholars forget that the past unfolded in a different visual ambience — one very difficult for us to imagine and reproduce. Speaking of the cave paintings of Lascaux, Altamira, and other European sites, he wonders, "Who is really aware that between these paintings and the present, millions — billions? — of color images from all eras have intervened, images that neither our gaze nor our memory has been spared? These images have the effect of a distorting filter; we have consumed, digested, and recorded them in a kind of collective unconscious. Time has done its work, millennia have passed, art has continually been transformed. That is why we cannot see and will never be able to see as our distant ancestors did. This applies to forms and is even more true of colors."[38]

Despite the difficulty of the quest, or perhaps because of it, Pastoureau has spent nearly fifty years trying to recover lost color narratives. Our own quest begins with a simple observation. Under the title "Colors in the Book of Mormon," Grego, an Internet blogger, writes, "Wow! This hit me today: there are very few colors in the Book of Mormon, especially for descriptional purposes. For those who hold the belief that Joseph Smith, an American, wrote this book of fiction, this is incredible to me."[39] Grego then notes the absence of seven familiar colors: yellow, blue, green, orange, purple, violet, and brown.

While his remark on the paucity of colors is a bit unclear, it appears that Grego wishes to propose that if the Book of Mormon were the product of Joseph Smith's imagination, it would include all or most of the colors familiar to people of his time and place — nineteenth-century America. There is, however, a puzzling absence of seven common colors.

Moreover, the colors mentioned in the Book of Mormon are the colors most likely to be found in ancient texts. White and black are foundational mainstays in such texts, and red is invariably the first color mentioned thereafter.[40] Reaching back to light and darkness,

38. Michel Pastoureau, *Red: The* History *of a Color*, trans. Jody Gladding (Princeton: Princeton University Press, 2017), 18.
39. Grego, "Colors in the Book of Mormon," *Book of Mormon Notes—How Deep Can You Dig?* (blog), 3 September 2008, bookofmormonnotes.wordpress.com/tag/book-of-mormon-colors/.
40. Pastoureau writes, "For thousands of years in the West, red was the only color worthy of that name, the only true color. As much on the chronological as hierarchical level, it outstripped all others. Not that they did not exist, but they had to wait a long time before they were considered colors and then played

white and black are primordial features of the cosmos, while red, by scholarly consensus, is striking and memorable because it is the color of blood and fire. White, black, gray (understood as a mixture of white and black in some ancient cultures[41]), and red are the only colors mentioned in the Book of Mormon. Red is mentioned in connection with the Amlicites, who marked themselves with red, presumably a red dye (Alma 3:13, 14). Gray receives one mention: it is the color that Lehi's and Sariah's hair turns as they lament Laman and Lemuel's disobedience (1 Nephi 18:18). It is a bit of an outlier, for gray, in all known cultures, was not picked out and named as a distinct color until well after red, but its single mention in the Book of Mormon by Nephi describes what happens as black hair progressively turns white. Attuned to black and white (the vast majority of color references in the Book of Mormon concern black and white), Nephi presumably could see the black-to-white transition of graying hair, and this transition Joseph Smith, relying on his own color lexicon, described as "gray" while translating the gold plates.

What about scarlet? While beholding the great and abominable church in vision, Nephi states that he "saw gold, and silver, and silks, and scarlets, and fine-twined linen, and all manner of precious clothing; and I saw many harlots" (1 Nephi 13:7). Here "gold" and "silver" refer to precious metals rather than colors, and the term "scarlets" (note the

---

a comparable role in material culture, social codes, and systems of thought." *Red*, 14. Here Pastoureau glosses over the consciousness-kindling apprehension of white and black, two "colors" so foundational that they were often regarded as categorically different phenomena. He adds, though, that in many ancient languages "only three color terms seem to exist: white, black, and red. But the first two are not always recognized as true chromatic adjectives; essentially, they describe darkness and light," 14.

41. Ingrid Blom-Böer and David A. Warburton, "The Composition of the Colour Palette and the Socio-Economic Role of Pigments Used in Egyptian Painting," in *The Value of Colour: Material and Economic Aspects in the Ancient World*, ed. Shiyanthi Thavapalan and David Alan Warburton (Berlin: Deutsche Nationalbibliothek, 2019), 242, academia.edu/40771331/The_Value_of_Colour_Material_and_Economic_Aspects_in_the_Ancient_World. We pick out gray as a color worthy of its own name. Ancient Egyptians, like other ancient peoples, did not. They saw it, of course, but considered it a variation of black or white, or an interblending of the two, one that did not merit its own name. A parallel instance is the English word *blue*. It covers a range of colors that we feel no need to name other than to add modifiers such as "light," "dark," "navy," and so on. In Russian, by contrast, two *different* colors— ссссс (*siniy* resembling our dark blue) and сссссссс (*goluboy* resembling our light or pale blue)—cover that range.

plural) most plausibly refers to a distinctive kind of clothing once worn by people of high rank. For moderns, scarlet is a shade of red, but, according to John Munro, it was originally (in the European Middle Ages) identified primarily as an expensive woolen textile whose color might correspond to our modern notion of scarlet but might also be "black, purple, violet, murrey (mulberry: purple-red), brown, grey, blue, perse (dark greyish-blue), green — or even white."[42] He writes, "The enigma posed by the sudden eleventh-century appearances of scarlet is equally matched by the mystery of the word's specific meaning. The popular notion of so long ago that the medieval scarlet was necessarily a textile having this unique brilliant red colour was effectively refuted by nineteenth-century historical, literary, and especially philological scholarship."[43]

In brief, medieval scarlet was a textile — one made from finest wool — but it was not matched to a specific color. Nephi's description of the great and abominable church captures this point perfectly. He links "scarlets" with "silks," another expensive cloth of nonspecific color, and then adds, "and all manner of precious clothing." His concern is not with color but with the cost and exclusivity of the textile.

42. John Munro, "The Medieval Scarlet and the Economics of Sartorial Splendor," in *Cloth and Clothing in Medieval Europe: Essays in Memory of Professor E. M. Carus-Wilson*, ed. N. B. Harte and K. G. Ponting (London: Heinemann Educational Books, 1983), 20, archive.org/details/clothclothinginm0000unse/page/n5/mode/2up.

43. Munro, "Medieval Scarlet," 19. John Gage comments that in late antiquity, lawyers "sought to stabilize" the color purple

> by referring not to a chromatic term but to a method of manufacture. . . . It continued to be so in Europe at large until the Renaissance, so that we find many "purples," from white and yellow to blue and black, as well as red and green. . . . The history of the much more recent colour-term "scarlet" suggests a similar progression from material to abstraction. The two colours [purple and scarlet] had a close relationship as dyestuffs in Jewish culture; but the term "scarlet" itself appeared in the German-speaking world in the eleventh century to signify a fine shorn woollen cloth of great value. "Scarlets" of many colours from black and blue to white (undyed) and green are documented in the early literature but since the complement to the most valuable woollen textile of the period was, understandably, the most valuable dye (which in the Middle Ages was the bright red *kermes* or *coccus*), it seems that by the thirteenth century the most usual "scarlet" was that dyed with this colour. Hence came the confusion of the colour with the cloth.

John Gage, *Color and Culture: Practice and Meaning From Antiquity to Abstraction (*Berkeley: University of California Press, 1999), 80.

We note also that Nephi's description of the great and abominable church aligns with John's description of Babylon in Revelation 17, which Joseph Smith may have reflexively called up while translating the gold plates. Interestingly, though, Nephi's description lacks modern markers included by John, or perhaps by later translators of the Bible. There is no mention of purple, which is often paired with scarlet in the Bible. (Here, again, the question is not when a color is first perceived, but rather when it is *picked out* as a color worthy of its own name. In antiquity both scarlet and purple were "unnamed" colors. They were perceived but subsumed under broader color designations like red and imprecisely, even ambiguously, specified by modifiers.) Moreover, whereas in Revelation the woman representing Babylon is explicitly arrayed in a scarlet-*colored* garment (in the King James version, and implicitly so in other versions), in 1 Nephi "scarlets" more naturally denotes luxurious articles of clothing and the prideful wearing of them. This is a familiar motif in the Book of Mormon — Church members fall into apostasy as they acquire costly apparel and dress more extravagantly than their peers.

Still, skeptics might protest that four colors (with gray being a mix of black and white or, sometimes, a subcategory of one or the other) is too slim a foundation from which to support the antiquity of the Book Mormon. My reply is that a slim foundation is exactly what we should expect from an ancient text. What is more, the colors of the Book of Mormon line up with the color sequence found in the Bible and other ancient records. By "color sequence" I mean the chronological order in which cultures name the colors of the world. Invariably they first key off light and dark, day and night, white and black, and then they appear to be startled by red, owing to the sight of blood and fire, both of which intimate life — blood by the loss of life as blood flows from the body and fire by its bright movement and life-giving warmth. The Book of Mormon follows this sequence.

Citing a watershed study in color naming, Wolfgang Schenkel writes:

> The anthropologists Brent Berlin and Paul Kay established in 1969 that for all the [twenty] languages they studied, the different languages of the world reveal individual, but parallel, historical sequences for the acquisition of colour words, beginning at Stage I with the distinction between black and

> white, and culminating in Stage VII with the multitude of colour terms familiar to *us*.[44]

Schenkel then adds: "Egyptian stands at Stage IIIA, having terms for black and white (Stage I), red (Stage II), and green; it is the green that puts Egyptian at stage IIIA, because it did not add yellow (rather than green) after red (which would have been Stage IIIB)."[45] By this criterion, the Book of Mormon is a Stage II document.

The Book of Mormon does not follow the color sequence as far as the Bible, wherein green comes after red and then yellow. Insofar as it goes, however, it gets things right. Not only that, but its smaller complement of colors makes sense in light of the historical fact that, unlike the Bible, it has not undergone centuries of translation and emendation. After observing that "the Bible is poor, very poor, in color notations," Pastoureau writes that it has "become increasingly colorful over the course of centuries and translations, and all the more so as vernacular languages accentuated this phenomenon in the modern era."[46] At the very least, if any of Grego's unmentioned colors (yellow, blue, green, orange, purple, violet, and brown) were referenced in the Book of Mormon at the expense of white, black, or red, that would indicate a modern provenance. But these three basic colors slip into the Book of Mormon in just the right way and thereby support Joseph Smith's claim that he translated an ancient record.

The Book of Mormon Color Experience

The Book of Mormon message — that Jesus is the Christ and that God has blessed humankind with a plan of lasting happiness — transcends culture. For that reason, one can profitably read the record without grasping the ancient thought world from which it sprang. If, however, we aspire to a deeper understanding of the record, we can try to step into that thought world.

---

44. Wolfgang Schenkel, "Colours as Viewed by the Ancient Egyptians and the Explanation of this View as Seen by Academics Studying Colour," in *The Value of Colour*, 42. The watershed study is Brent Berlin and Paul Kay, *Basic Color Terms: Their Universality and Evolution* (Berkeley: University of California Press, 1969). After studying twenty languages, Berlin and Kay broadened their research to include another seventy-eight languages and claimed to find further evidence of a universal or near-universal uniformity in the emergence of color terms.
45. Schenkel, "Colours as Viewed by the Ancient Egyptians," 42.
46. Pastoureau, *Red*, 50, 58.

With its mention of black, white, and red, the Book of Mormon reenacts a multicultural tricolor motif that some scholars insist arises from our shared (human) biology. The neural processes that govern color vision gift us with a package deal of black, white, and red, and these three colors consequently show up together in many contexts. Jessica Hemming writes, "The red-white-and-black tricolour is a symbolically charged set of colours virtually worldwide, and as such has drawn comment from many disciplines, principally folklore, anthropology, linguistics, comparative religion, psychology, and art history."[47]

In the Book of Mormon, however, red receives scant mention. Although the Book of Mormon fits the Berlin-Kay taxonomy as a Stage II document, it appears to be early Stage II because red is not explicitly combined with black and white. In her *Colour Terms in the Old Testament*, though, Athalya Brenner proposes that a memory of brightness resulting from primordial light-dark contrast is hidden up in all color. After observing that "[b]rightness . . . is the decisive factor for naming the distinction between dark and light, black and white," she writes, "It will be submitted that names for the achromatic 'black/white' originally had, and — to a certain degree — even retained, a basic meaning of 'darkness' /'light'; that the motivation for installing further terms was first brightness and only later chromaticity."[48] This, I suggest, is the thought world of the Book of Mormon: brightness is more elemental than color. Clearly there are resonances here with Lehi's teaching on the existential necessity of primordial opposition and with Goethe's belief that colors arise from the clash of light and darkness.

From a modern perspective, the Book of Mormon thought world is more black-and-white than technicolor. It does not mention most of the colors that populate our experience. But that, I believe, is because we live downstream from the ancient appreciation of light, which the Book of Mormon dramatically instantiates on several occasions. The implicit understanding that motivates the black-white typology of the Book of Mormon is this: colors, no matter how many or how few, exist by the grace of light and are therefore secondary blessings.

It is neither accident nor anomaly that Plato, while offering an account of the creation of the universe, included bright as one of the four basic colors. Bright or brightness is the agency by which we see

47. Jessica Hemming, "Red, White, and Black in Symbolic Thought: The Tricolour Folk Motif, Colour Naming, and Trichromatic Vision," *Folklore* 123 (December 2012): 310.

48. Brenner, *Colour Terms in the Old Testament*, 12–13.

the other colors — black, white, and red. In the *Republic*, Plato calls sight "the most sunlike" of the senses and likened the sun to "the good." Sunlight, in turn, is compared to "the child of the good, which the good produced as its own analogue."[49] Just as the ungraspable idea of the good imparts intelligibility to all other (lesser) ideas, so unseen sunlight imparts visibility to all physical bodies.[50] One is like the other in that neither can be reduced to the revelation it brings about. When Socrates (Plato's principal interlocutor) explains this to his listeners, one responds, "This is an incredible beauty you are talking about . . . if it [the good] is the cause of knowledge and truth itself surpasses them in beauty."[51]

In brief, Plato is putting his finger on something higher than visible reality, something irreducible to the play of colors that tends to mesmerize modern culture. In his own philosophical way, he is "chant[ing] the radiance" of the world.[52] Centuries later, Percy Bysshe Shelley appears to have channeled Plato's ancient appreciation of light — an appreciation shared by many others in antiquity — when he wrote, "Heaven's light forever shines, Earth's shadows fly; Life, like a dome of many-colour'd glass, Stains the white radiance of Eternity."[53]

White is the color most evocative of light because it trembles on the possibility of clarity and revelatory understanding. In his description of the sixteen molten stones that the brother of Jared took to the Lord to be brightened by his touch, Moroni equates whiteness with clearness: "And they were white and clear, even as transparent glass" (Ether 3:1). Black, on the other hand, recalls the crippling, smothering darkness that preceded the resurrected Savior's visit to the Nephites. Each color names a basic human experience, and the two together name

49. Plato, *Republic*, 6.508a-509c, ia802802.us.archive.org/20/items/PlatoTheRepublicCambridgeTomGriffith/Plato%20The%20Republic%20(Cambridge%2C%20Tom%20Griffith).pdf.
50. Plato, *Republic*, 6.508a-509c.
51. Plato, *Republic*, 6.509a.
52. I borrow this felicitous phrase from Daniel Boorstin, who uses it to suggest that the world's radiance was the primeval trigger for belief in God. "Not the fitting-together-ness, not the hierarchy of beings or the order of nature, but the blinding splendor, the Light of the World. How the world once came into being or how it might end seemed irrelevant before the brightness of the visible world." Daniel J. Boorstin, *The Creators: A History of Heroes of the Imagination* (New York: Vintage, 1993), 4.
53. Percy Bysshe Shelley, "Adonais: An Elegy on the Death of John Keats," stanza 52, poetryfoundation.org/poems/45112/adonais-an-elegy-on-the-death-of-john-keats.

the light-dark opposition of day and night, a basic rhythm of our being, and, at a higher turn of the spiral, the good news that God wishes to "snatch" us from darkness into light. To follow the younger Alma, "I was in the darkest abyss, but now I behold the marvelous light of God. My soul was racked with eternal torment; but I am snatched, and my soul is pained no more" (Mosiah 27:29).

Even the Book of Mormon as we have it today may be said to have been snatched from darkness. The plates from which it was translated were buried in the earth and then brought to daylight under the direction of the angel Moroni. Further, according to some eyewitnesses, Joseph, while using a seer stone to translate the gold plates, peered into a dark hat so that the illuminated characters or images of the record could be seen. David Whitmer, for instance, wrote, "Joseph Smith would put the seer stone into a hat, and put his face in the hat, drawing it closely around his face to exclude the light; and in the darkness the spiritual light would shine. A piece of something resembling parchment would appear, and on that appeared the writing. One character at a time would appear, and under it was the interpretation in English."[54]

"Where danger is," wrote Friedrich Hölderlin, "also grows the saving power."[55] Darkness is danger, and light is power that grows and saves by scattering darkness. This is the basic color typology of the gospel of Jesus Christ, repeated again and again in sacred writ. "In the beginning . . . darkness was upon the face of the deep. . . . And God said, Let there be light: and there was light" (Genesis 1:1–3). Then comes the separation of day and night, dry earth and sea, and so on, all of which presumably give rise to a multicolored earth, though colors are not mentioned. What is absolutely fundamental is the emergence of light from darkness, the two opposites compounding to produce life, meaning, and the possibility of lasting joy, according to Lehi (2 Nephi 2:11–13).

John begins his New Testament record by echoing the language of Genesis: "In the beginning was the Word" (John 1:1). By the Word

54. David Whitmer, *An Address to All Believers in Christ* (Richmond, MO: David Whitmer, 1887), 12, archive.org/details/addresstoallbeli00whit/page/n7/mode/2up, and Russell M. Nelson, "A Treasured Testament," *Ensign* (July 1993), 61–65, catalog.churchofjesuschrist.org/assets/daad1a45-4d4d-450c-a1a1-892781f7130c/0/62.

55. From the opening lines of *Patmos*, which in the original German read, "Nah ist/ Und schwer zu fassen der Gott./ Wo aber Gefahr ist, wächst/ Das Rettende auch," holderlinpoems.com/deutsche_texte/patmos1.html.

(Christ) all things were created, and "in him was life; and the life was the light of men (John 1:4). Then darkness: "And the light shineth in darkness, and the darkness comprehended it not" (John 1:5). Although darkness is an essential element of creation, its primordial intrigue is incomprehension. All the same, it is what makes light so wondrous.[56] The younger Alma reported that it was his pain-filled darkness that made his light-mediated rescue from darkness so exquisite and sweet: "And oh, what joy, and what marvelous light I did behold; yea, my soul was filled with joy as exceeding as was my pain!" (Alma 36:20).

The "marvelous light" that Alma experienced was a sudden expansion of understanding regarding God's rescuing love. "I was lost and now I am found / am blind, but now I see," runs a lyric from the gospel hymn "Amazing Grace." For Alma, light was amazing grace, and after his rescue from darkness, he praised God and exulted in his new understanding. He did not, however, adorn his praise with color details. At that moment light was everything and color at best an afterthought.

If we sometimes feel that the Book of Mormon embodies a black-white overload, this is because we fail to appreciate the depth of its commitment to the basic lost-and-found narrative of the gospel of Jesus Christ. To borrow from John Milton, "paradise lost" and "paradise regained"; that is, the fall and the redemption, the interplay of despairing loss and Christ-mediated joyful recovery that is the heart and hub of all existence.

Joseph Smith stated, "I told the brethren that the Book of Mormon was the most correct of any book on earth, and the keystone of our religion, and a man would get nearer to God by abiding by its precepts, than by any other book."[57] I suggest that part of the Book of

56. It is wrong to characterize darkness as wholly negative. As Pastoureau points out, it is the necessary precondition for light, whether we consider the Genesis creation account or the Big Bang, or even if we posit a universe with no beginning. In any case, we picture a dark world swollen with the possibility of light and life: "a world perfectly black, matrix on the one hand, terrifying on the other. A dual symbolism will accompany the color black throughout its history." Michel Pastourneau, *Black: The History of a Color* (Princeton: Princeton University Press, 2008), 20. Pastoureau goes on to note that black earth connotes fertility and rebirth and that some blacks are dull while others are shiny or "luminous." Finally, I note that blackness or darkness can be revelatory. The darker the night sky, the more stars we see.

57. Joseph Smith, *History of the Church*, 4:461, archive.org/details/HistoryOfTheChurchOfJesusChristOfLatter-daySaints1902-Volume4/page/n505/mode/2up; also, Joseph Smith, *Teachings of the Prophet Joseph Smith*, comp. Joseph Fielding Smith (Salt Lake City: Deseret Book, 1967), 194.

Mormon's "correctness" lies in its ancient, pristine character. Unlike the Bible, it was not, while tumbling down through the centuries, exposed to changing understandings of reality and constant emendation. This is why it mentions so few colors and embodies a color narrative unaligned with modern color consciousness. It is instead attuned to antiquity's vivid apprehension of light and dark, day and night, life and death.

[**Author's Note:** *I thank Brant Gardner and three anonymous referees for comments that improved this article.*]

David Grandy *grew up in Montpelier, Idaho, and earned his PhD from Indiana University in History and Philosophy of Science. He taught at BYU-Hawaii and BYU in Provo (philosophy department). He is particularly interested in space, time, motion, and light. He recently served a senior couples mission with his wife, Janet, in Germany.*

Interpreter: A Journal of Latter-day Saint Faith and Scholarship is a peer-reviewed academic journal published by The Interpreter Foundation. Our mission is simple: Supporting The Church of Jesus Christ of Latter-day Saints through scholarship.

The Interpreter Foundation