

3. DNA AND THE BOOK OF MORMON SCIENCE, SETTLERS, AND SCRIPTURE

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On January 31, 2014, the Church of Jesus Christ of Latter-day Saints released the sixth in a series of essays on Gospel Topics. Titled “Book of Mormon and DNA Studies,” the essay “affirms that the Book of Mormon is a volume of sacred scripture comparable to the Bible.” The “primary purpose of the Book of Mormon,” the essay notes, “is more spiritual than historical.” The authors then tailor a response to people who “have wondered whether the migrations it [the Book of Mormon] describes are compatible with scientific studies of ancient America.” The essay contains an important acknowledgment: “the evidence assembled to date suggest that the majority of Native American carry largely Asian DNA.” The essay counters, though, that the conclusions of science are tentative and “there are sound scientific reasons” that DNA from the Near East representing Book of Mormon peoples “might remain undetected.” The essay sanctions a limited geographic setting for Book of Mormon events in the New World and offers a lengthy summary of basic principles of population genetics (for example, founder effect, population bottleneck, genetic drift, etc.) that might result in the loss of DNA profiles. The essay concludes with the claim that the current scientific evidence is simply too inconclusive for use by either critics or defenders of the Book of Mormon.¹

This essay helps the LDS Church to reduce the gulf that has emerged between its views of Native America and those coming from the scientific community. Its acknowledgment of the DNA

1. “Book of Mormon and DNA Studies,” at www.lds.org/topics/book-of-mormon-and-dna-studies.

indicating an Asian origin of Native Americans is a positive step forward for the LDS Church. The emphasis on the importance of the spirituality of scripture over historicity is particularly noteworthy. The words of caution issued to both defenders and critics of the Book of Mormon are likewise praiseworthy. The essay struggles, though, to escape fully settler colonialist thinking and to bridge the gap between science and scripture. The essay fails to address adequately Indigenous perspectives on either the science or the scripture.

In our reflections on this essay, we employ a decolonizing methodology to help bring to the forefront Indigenous perspectives on DNA and the Book of Mormon.² We consider the LDS Church's essay, not just within the context of new scientific insights into Native American origins, but also within the context of what settler colonial Mormons and Native Americans say about each other. Raised in the LDS Church with Indigenous heritage, both of us learned from an early age that we should aspire to become "white and delightful." Due to intermarriage over multiple generations, one of us—Murphy—may appear closer to that than the other. When we read the Book of Mormon, we encounter conflicting messages. On the one hand, the scripture teaches that "all are alike unto God," yet it also represents dark skin as a curse from God for the wickedness of our ancestors and promises a removal of the curse, and thereby a return to whiteness, in return for righteous behavior.³ This conflicting message has its roots in the colonial

2. Gina Colvin and Joanna Brooks, *Decolonizing Mormonism: Approaching a Post-Colonial Zion* (Salt Lake City: University of Utah Press, 2018); Susan A. Miller and James Riding In, *Native Historians Write Back: Decolonizing American Indian History* (Lubbock: Texas Tech University Press, 2011); Margaret E. Kovach, *Indigenous Methodologies: Characteristics, Conversations, and Contexts* (Toronto: University of Toronto Press, Scholarly Publishing Division, 2010); Angela Waziyatawin Wilson and Michael Yellow Bird, *For Indigenous Eyes Only: A Decolonization Handbook* (Santa Fe: School of American Research, 2005); Michael Yellow Bird and Angela Waziyatawin Wilson, *For Indigenous Minds Only: A Decolonization Handbook* (Santa Fe: School of American Research Press, 2012); P. Jane Hafen and Brenden W. Rensink, eds., *Essays on American Indian and Mormon History* (Salt Lake City: University of Utah Press, 2019).

3. 2 Ne 5: 21–24, 26:33; 30:6; Alma 3:6–10, 23:18; Elise Boxer, "The Book of Mormon as Mormon Settler Colonialism," in Hafen and Rensink, eds., *Essays on American Indian and Mormon History*, 3–22; Kimberly M. Berkey and Joseph M. Spencer, "Great Cause to Mourn: The Complexity of The Book of Mormon's

ideology that attributed ancient American civilizations to white immigrants from Israel who had purportedly been destroyed by the ancestors of the American Indians. In the twenty-first century, despite abundant evidence refuting that view, it remains difficult for white audiences to hear Native voices even when speaking about the origins of our own ancestors. As we read the forthright acknowledgments coming from the church's DNA essay, we see an opportunity, yet to be fully realized, for Latter-day Saints to disrupt the older settler narratives that have privileged the authority of colonizers over the bodies and voices of the colonized.

Historical Context

When Joseph Smith published the Book of Mormon in upstate New York in 1830, the idea that American Indians had descended from the lost tribes of Israel was commonplace.⁴ Similarly, settler colonial scholars frequently claimed that an ancient white nation of mound builders had been responsible for the abundant evidences of civilization scattered across the landscape recently taken in violent confrontations with the Haudenosaunee (Iroquois) and a coalition of western tribes under the leadership of Tecumseh.⁵

Presentation of Gender and Race,” in Elizabaeth Fenton and Jared Hickman, eds., *Americanist Approaches to The Book of Mormon* (New York: Oxford University Press, 2019), 298–320.

4. James Adair, *Adair's History of the American Indians* (Johnson City, Tennessee: Watauga Press, 1930 [1775]); Elias Boudinot, *A Star in the West; or a Humble Attempt to Discover the Long Lost Ten Tribes of Israel, Preparatory to the Return to Their Beloved City, Jerusalem* (Trenton, New Jersey: D. Fenton and S. Hutchinson & J. Dunham, 1816); Ethan Smith, *View of the Hebrews: Or the Tribes of Israel in America*, 2nd ed. (Poultney, Vermont: Smith and Smith, 1825); Thomas W Murphy, “Imagining Lamanites: Native Americans and the Book of Mormon,” PhD diss., University of Washington, Seattle, 2003); Dan Vogel, *Indian Origins and the Book of Mormon* (Salt Lake City: Signature Books, 1986); Lee Eldridge. Huddleston, *Origins of the American Indians, European Concepts, 1492–1729* (Austin: Institute for Latin American Studies, University of Texas Press, 1967); Elizabeth Fenton, “Nephites and Israelites: *The Book of Mormon* and Hebraic Indian Theory,” in Fenton and Hickman, eds. *Americanist Approaches*, 277–97.

5. Robert Silverberg, *Mound Builders of Ancient America: The Archaeology of a Myth* (Greenwich: New York Graphic Society, 1968); Barbara Alice Mann, *Native Americans, Archaeologists, and the Mounds* (New York: Peter Lang, 2003); Robert Wauchope, *Lost Tribes and Sunken Continents: Myth and Method in the Study of American Indians* (Chicago: University of Chicago Press, 1962); Cyrus Thomas, *Report on the Mound Explorations of the Bureau of Ethnology* (Washington, DC: Smithsonian Institution Press, 1985 [1894]).

Racial prejudice, fostered by acrimonious portrayals of Indian opponents during the American Revolution and the War of 1812, led popular American authors to assert that American Indians were a savage, nomadic people incapable of creating civilization without inspiration from the peoples of the Old World.⁶ These purported savages, settler colonists in America had begun to tell themselves, had once committed the same types of atrocities against an ancient American civilization that armies of American patriots were inflicting upon Indigenous nations.⁷ These images of American Indians helped white settlers to ease their own consciences as they occupied land that had belonged to others and reap the benefits of conquest and colonization.

The Book of Mormon entered this cultural dialogue with a narrative supporting the assertion that the ancestors of American Indians had come from Israel. These ancestors, the new scripture claimed, had once been white, delightful, and chosen people, but had degenerated, darkened, and lost their covenant status. After a thousand-year struggle between Nephites and Lamanites that strikingly resembled settler perceptions of the tensions between European colonists and the Indigenous people they colonized, the Book of Mormon ends with a cataclysmic war in which dark-skinned Lamanites destroy the nation of lighter-skinned Nephites. The Book of Mormon thus gave the sanction of scriptural status to the popular Euroamerican accusations that American Indians

6. Alan Taylor, *The Divided Ground: Indians, Settlers, and the Northern Borderlands of the American Revolution* (New York: Knopf, 2006); William Cooper's *Town: Power and Persuasion on the Frontier of the Early American Republic* (New York: Vintage Books, 1995), 39; Mann, *Mounds*; Roxanne Dunbar-Ortiz, *An Indigenous People's History of the United States* (Boston: Beacon Press, 2014), 107; James Fenimore Cooper, *The Last of the Mohicans: A Narrative of 1757* (New York: Macmillan, 1921 [1826]). Intriguingly, an advertisement for the Book of Mormon appeared on the following page when we consulted it on February 3, 2016. "James Fenimore Cooper," www.online-literature.com/cooperj.

7. Mann, *Mounds*; George E. Tinker, *Missionary Conquest: The Gospel and Native American Cultural Genocide* (Minneapolis: Fortress Press, 1993); Vine Deloria Jr., *Custer Died for Your Sins: An Indian Manifesto* (Norman: University of Oklahoma Press, 1988); Robert Allen Warrior, "Canaanites, Cowboys, and Indians: Deliverance, Conquest, and Liberation Theology Today," in *Native and Christian: Indigenous Voices on Religious Identity in the United States and Canada*, ed. James Treat (New York: Routledge, 1996); Dunbar-Ortiz, *Indigenous People's History*.

were only recent immigrants themselves who had once destroyed an ancient white nation of mound builders.⁸

By the last decades of the nineteenth century, LDS views of ancient America and those emerging from the nascent field of anthropology had diverged in significant ways. The gradual acceptance of Darwinian ideas of human evolution removed the need for scientists to turn to the Bible for explanations of global history and migrations.⁹ Similarities between the biology of Asians and American Indians undermined claims of ancient migrations from Europe and the Near East.¹⁰ The idea that an ancient white race was responsible for American civilization fell by the wayside as archaeologists established what several nations of American Indians had been saying all along, that their ancestors built the mounds and other spectacular earthworks.¹¹ The anthropological community jettisoned these old ideas on the basis of both the accumulation of contradictory evidence and a recognition of their racist underpinnings.¹²

Some Latter-day Saint scholars began questioning their own beliefs, with a few acknowledging Asian origins of most Indians and starting to suggest that Mormons look for Nephites and Lamanites, not across the North and South American continents, but in more limited geographic settings such as southern Mexico and Central America or the Northeast and Midwest United States.¹³ By the mid-twentieth century, an insurmountable gulf

8. Jace Weaver, "Missions and Missionaries," in *Native America in the Twentieth Century: An Encyclopedia* (New York: Garland Publishing, 1994); Murphy, "Imagining Lamanites."

9. Murphy, "Imagining Lamanites"; Wauchope, *Lost Tribes*; Simon G. Southerton, *Losing a Lost Tribe: Native Americans, DNA, and the Mormon Church* (Salt Lake City: Signature Books, 2004).

10. Murphy, "Imagining Lamanites"; Michael Crawford, *The Origins of Native Americans: Evidence from Anthropological Genetics* (New York: Cambridge University Press, 1998).

11. Mann, *Mounds*; Silverberg, *Mound Builders*; Thomas, "Mound Exploration"; Murphy, "Imagining Lamanites."

12. Stephen Jay Gould, *The Mismeasure of Man* (New York: W.W. Norton, 1996); Silverberg, *Mound Builders*.

13. Louis E. Hills, *A Short Work on the Geography of Mexico and Central America from 2234 B.C. To 421 A.D.* (Independence, Missouri: Louis E. Hills, 1917); *Historical Data from Ancient Records and Ruins of Mexico and Central America* (Independence, Missouri: Louis E. Hills, 1919); John Sorenson, *The Geography of Book of Mormon*

had developed between traditional LDS views and those coming from the scientific community. Of central concern to LDS scholars were not just questions of origins but also the different flora, fauna, and technology described in the Book of Mormon versus that found in oral histories and the archaeological record.¹⁴ As their own scholars were beginning to articulate the tenuousness of Mormon beliefs about Native Americans, the LDS Church leadership responded with a defensive posture, proclaiming in the new introduction to the 1981 edition of the Book of Mormon that the Lamanites “are the principal ancestors of the American Indians.”¹⁵ By the twenty-first century, it would become increasingly evident to church leadership that this defensive posture would need to bend to the overwhelming new evidence coming from DNA.

That realization, though, would follow an unsuccessful attempt to quiet voices coming from the scholarly community. In November 2002, the LDS Church began, but then aborted, disciplinary action against one of us (Murphy) for his essay “Lamanite Genesis, Genealogy, and Genetics,” published in the anthology *American Apocrypha*. This article summarized new evidence from DNA and its implications for the Book of Mormon.¹⁶ Murphy successfully contested the disciplinary action and then assisted

Events: A Source Book (Provo, Utah: Foundation for Ancient Research and Mormon Studies, 1992); *An Ancient American Setting for the Book of Mormon* (Salt Lake City: Deseret Book Co., 1996); Terry L. Givens, *By the Hand of Mormon: The American Scripture that Launched a New World Religion* (New York: Oxford University Press, 2002).

14. Stan Larson, *Quest for the Gold Plates: Thomas Stuart Ferguson's Archaeological Search for the Book of Mormon* (Salt Lake City: Freethinker Press/Smith Research Associates, 1996); B. H. Roberts, *Studies of the Book of Mormon*, 2nd ed. (Salt Lake City: Signature Books, 1992); George D. Smith, “B. H. Roberts: Book of Mormon Apologist and Skeptic,” in *American Apocrypha: Essays on the Book of Mormon*, ed. Dan Vogel and Brent Lee Metcalfe (Salt Lake City: Signature Books, 2002).

15. Book of Mormon (Salt Lake City: Church of Jesus Christ of Latter-day Saints, 1981); Robert J. Mathews, “The New Publications of Standard Works—1979, 1981,” *BYU Studies* 22, no. 4 (1982).

16. Thomas W Murphy, “Lamanite Genesis, Genealogy, and Genetics,” in *American Apocrypha: Essays on the Book of Mormon*, ed. Dan Vogel and Brent Lee Metcalfe (Salt Lake City: Signature Books, 2002); “Double Helix: Reading Scripture in a Genomic Age,” www.academia.edu/10367204/2003; Philip Lindholm, *Latter-Day Dissent: At the Crossroads of Intellectual Inquiry and Ecclesiastical Authority* (Salt Lake City: Greg Kofford Books, 2011); William Lobdell and Larry B Stammer, “Mormon Scientist, Church Clash over DNA Test,” *Los Angeles Times*, Dec. 8, 2002; M. L. Lyke, “Church Put to DNA Test,” *Seattle Post-Intelligencer*, Jan. 12, 2003.

Baca with a documentary film, *In Laman's Terms: Looking at Lamanite Identity*, drawing from diverse Indigenous perspectives to examine and challenge changing images and origins of Lamanites in the LDS Church.¹⁷ In 2006, as we were working on the film, the LDS Church began to make changes to the introduction to the Book of Mormon with an updated edition published nationally by Doubleday.¹⁸ These changes removed the term “principal” and amended the claim to assert that Lamanites were only “among the ancestors of the American Indians.” By 2013 the LDS Church incorporated this correction, along with others reflecting changing views on race and plural marriage, into its own editions of the Book of Mormon.¹⁹ Yet, even with these changes, LDS historian Elise Boxer (Fort Peck Assiniboine and Sioux) notes, “The Introduction to the Book of Mormon and the history therein not only ignores the diversity of Indigenous Peoples completely, but ignores their unique history that intimately connects them to the land.”²⁰

The film *In Laman's Terms* exemplifies Native concerns about historic representations of American Indians in the Book of Mormon and LDS pageantry, now challenged by DNA evidence. The Hill Cumorah Pageant in Palmyra, New York, for example, has been a Mormon cultural mainstay of many LDS family visitors to the Smith farm and surrounding area since the early 1920s. Now slated to close in 2020, the pageant demonstrates overt racism by having LDS actors in redface perform staged battles of Book of

17. Angelo Baca, *In Laman's Terms: Looking at Lamanite Identity* (Seattle: Native Voices, 2008); “Porter Rockwell and Samuel the Lamanite Fistfight in Heaven: A Mormon Navajo Filmmaker’s Perspective,” in Colvin and Brooks, eds., *Decolonizing Mormonism*, 67–76.

18. Both authors also appeared in another film released in 2005, and Murphy appeared in one in 2003. Scott Johnson and Joel Kramer, *The Bible Vs. The Book of Mormon* (Brigham City, Utah: Living Hope Ministries, 2005); Joel Kramer and Jeremy Reyes, *DNA Vs. The Book of Mormon* (Brigham City, Utah: Living Hope Ministries, 2003). These films, produced by Living Hope Ministries, represented an evangelical Christian, not an Indigenous perspective, on these debates. For critiques, see Thomas W Murphy, “Inventing Galileo,” *Sunstone* 131 (2004): 60; “Decolonization on the Salish Sea: A Tribal Journey Back to Mormon Studies,” in Colvin and Brooks, eds., *Decolonizing Mormonism*, 47–66.

19. Peggy Fletcher Stack, “Single Word Change in Book of Mormon Speaks Volumes,” *Salt Lake Tribune*, Nov. 8, 2007; “New Mormon Scriptures Tweak Race, Polygamy References,” *ibid.*, Mar. 19, 2013; “Book of Mormon and DNA Studies.”

20. Boxer, “Mormon Settler Colonialism,” 9.

Mormon lore simultaneously stripping Native American cultural identity and reinforcing imagined ones from scripture presented as history. Such epic mythical story telling in New York, like Pioneer Days in Utah, keeps the heritage tales about days of yore alive, yet are clearly in direct contradiction to Native histories and Indigenous voices presented in the film.²¹ Forrest Cuch (Ute) told the audience, “We are not of Israelite” heritage and “certainly are not going to turn white someday.”²² G. Peter Jemison (Seneca) questioned the idea that his ancestors had contributed to an ancient destruction of a Nephite civilization: “We were never the kind that thought you had to really wipe out every last person.”²³ Tim Roderick (Wampanoag) observed that stories of Lamanites served as a tool for white Latter-day Saints to “let themselves at ease” over their own complicity in atrocities against Native America.²⁴ For people of Native heritage, the DNA evidence substantiated claims to an occupation of the Americas since time immemorial, dispelled racist allegations that our ancestors were once white and that we should aspire to be so again, and corrected the historical record about who had actually engaged in wars of ethnic destruction.²⁵

Content

The church’s publication of “Book of Mormon and DNA Studies” on its website on the last day of 2014 is a watershed moment in LDS understandings of the Book of Mormon. In the long term, the most significant statement in the essay is likely to be the forthright acknowledgment in the second paragraph that “the primary purpose of the Book of Mormon is more spiritual than

21. Baca, *In Laman’s Terms*; Angelo Baca and Erika Bsumek, “On Pioneer Day, Don’t Forget the People Who Were Already Here,” *Salt Lake Tribune*, July 20, 2019; Philip J. Deloria, *Playing Indian* (New Haven, Connecticut: Yale University Press, 1998); Gerald S. Argetsinger, “The Hill Cumorah Pageant: A Historical Perspective,” *Journal of Book of Mormon Studies* 13, 1–2 (2004); Elise Boxer, “This Is the Place! Disrupting Mormon Settler Colonialism,” in Colvin and Brooks, *Decolonizing Mormonism*, 77–99.

22. Baca, *In Laman’s Terms*.

23. *Ibid.*

24. *Ibid.*

25. *Ibid.*; Murphy, *Imagining Lamanites*; P. Jane Hafen, “Afterword” in Colvin and Brooks, eds., *Decolonizing Mormonism*, 263–73.

historical.” This statement follows the opening sentence of the first paragraph affirming “that the Book of Mormon is a volume of sacred scripture comparable to the Bible.”²⁶ It is particularly significant that the opening sentence does not affirm the Book of Mormon as an ancient history, but instead affirms its status as scripture like the Bible.²⁷

After setting the stage with an umbrella large enough to include those who do not find the Book of Mormon’s history compelling, the essay narrows its focus to those who “have wondered whether the migrations it describes are compatible with scientific studies of ancient America.” The essay acknowledges the central problem: “Some have contended that the migrations mentioned in the Book of Mormon did not occur because the majority of DNA identified to date in modern native peoples most closely resembles that of eastern Asian populations.” Yet it claims that the conclusion of genetics and science more generally “are tentative,” that “much work remains to be done,” and suggests “the need for a more careful approach to the data.” In particular, the essay asserts that “nothing is known about the DNA of Book of Mormon peoples, and even if their genetic profile were known, there are sound scientific reasons it might remain undetected.” For the “same reasons,” the essay’s authors contend “arguments that some defenders of the Book of Mormon make based on DNA studies are also speculative.” The essay’s introduction concludes with the thesis, “DNA studies cannot be used decisively to either affirm or reject the historical authenticity of the Book of Mormon.”²⁸

The body of the essay begins with a section entitled “The Ancestors of the American Indians.” This section immediately concedes, “The evidence assembled to date suggests that the majority of Native Americans carry largely Asian DNA.” It briefly summarizes the work of scientists who “theorize that in an era that predated

26. “Book of Mormon and DNA Studies.”

27. The Bible also has its share of problematic associations with history. For a deeper discussion of those issues, see Israel Finkelstein and Neil Asher Silberman, *The Bible Unearthed: Archaeology’s New Vision of Ancient Israel and the Origin of Its Sacred Texts* (New York: Free Press, 2001); John C. Laughlin, *Archaeology and the Bible* (London: Routledge, 2000); Murphy, “Imagining Lamanites”; “Lamanite Genetics.”

28. “Book of Mormon and DNA Studies.”

Book of Mormon accounts, a relatively small group of people migrated from northeast Asia to the Americas by way of a land bridge that connected Siberia to Alaska.” This small group of people, “scientists say, spread rapidly to fill North and South America and were likely the primary ancestors of modern American Indians.”²⁹ These statements provide the rationale behind the recent textual changes to the introduction of the Book of Mormon. Even though the essay frames the evidence as theoretical perspectives of scientists, it was compelling enough that the church changed the introduction to its central scripture.

The essay suggests that the Book of Mormon’s lack of “direct information about cultural contact between the peoples it describes and others who may have lived nearby” as reasons for LDS assumptions that Book of Mormon characters “Jared, Lehi, Mulek, and their companions were the first or the largest or even the only groups to settle the Americas.” The essay counters that assumption with the assertion that the Book of Mormon “does not claim that the peoples it describes were either the predominant or the exclusive inhabitants of the lands they occupied” and that “cultural and demographic clues in its text hint at the presence of other groups.”³⁰

The essay proceeds with the suggestion that Joseph Smith may have been open “to the idea of migrations other than those described in the Book of Mormon.” It notes that “many Latter-day Saint leaders and scholars over the past century have found the Book of Mormon account to be fully consistent with the presence of other established populations.” It concedes, though, that “nothing is known about the extent of intermarriage and genetic mixing between Book of Mormon peoples or their descendants and other inhabitants of the Americas.” It concludes this section with the claim that “the DNA of Book of Mormon peoples likely represented only a fraction of all DNA in ancient America.”³¹

The next section of the essay is entitled “Understanding the Genetic Evidence.” This section includes a brief description of DNA, explaining differences between data coming from Y chromosomes

29. Ibid.

30. Ibid.

31. Ibid.

that can be used to chart a male's paternal lineage and that of mitochondrial DNA that can be used to trace the maternal lineage of males and females. The essay concedes, "At the present time, scientific consensus holds that the vast majority of Native Americans belong to sub-branches of the Y-chromosome haplogroups C and Q and the mitochondrial DNA haplogroups A, B, C, D, and X, all of which are predominantly East Asian," not Near Eastern, which the Book of Mormon contends. Following this admission, the essay complicates the situation by pointing to admixture between European, West Asian, and Native American ancestors prior to "the earliest migration to the Americas." It also claims that there are some "Near Eastern DNA markers ... in modern native populations" but that "it is difficult to determine whether they are the result of migrations that predated Columbus, such as those described in the Book of Mormon, or whether they stem from genetic mixing that occurred after the European conquest." This section of the essay concludes with the observation that "scientists do not rule out the possibility of additional, small-scale migrations to the Americas."³²

The remainder of the essay is devoted to explanations for why the DNA of Book of Mormon populations may never be found in the Americas. Concerns raised include uncertainty about "the DNA that [Book of Mormon characters] Lehi, Sariah, Ishmael, and others brought to the Americas." If these founding populations were uncharacteristic of Near Eastern populations, this would make it more difficult to recognize their descendants. In addition to this "founder effect," the essay points to "population bottleneck" and "genetic drift" as other complicating factors. "Population bottleneck is the loss of genetic variation that occurs when a natural disaster, epidemic disease, massive war, or other calamity results in the death of a substantial part of a population." The essay claims that "the catastrophic war at the end of the Book of Mormon [and] the European conquest of the Americas in the 15th and 16th centuries touched off just such a cataclysmic chain of events." "Genetic drift" is defined as "the gradual loss of genetic

32. Ibid.

markers in small populations due to random events.”³³ Founder effect, population bottlenecks, and genetic drift are offered as possible explanations for why DNA from Book of Mormon populations is not found among today’s Native Americans.

The essay concludes with caution directed towards both critics and defenders of the Book of Mormon and a reminder of the primacy of religious truth. “Much as critics and defenders of the Book of Mormon would like to use DNA studies to support their views, the evidence is simply inconclusive.” “Book of Mormon record keepers were primarily concerned with conveying religious truths and preserving the spiritual heritage of their people.” It ends with a recommendation to seek religious truth from the Holy Ghost and a reminder that the Book of Mormon’s mission is that of “a volume of sacred scripture with the power to bring” readers “closer to Jesus Christ.”³⁴

Strengths

The distinction the essay makes at its outset between history and scripture sets the LDS Church on a pathway, already forged by the Community of Christ (previously Reorganized Church of Jesus Christ of Latter Day Saints), towards the embrace of once controversial views of the Book of Mormon as scripture but not history.³⁵ This pathway has been paved in the LDS community by published scholarship, such as that contained in the anthologies *The Word of God*, *New Approaches to the Book of Mormon*, *American Apocrypha*, and *Americanist Approaches to The Book of Mormon* as well as the monographs *Digging in Cumorah* and *An Imperfect Book*.³⁶

33. Ibid.

34. Ibid.

35. William D. Russell, “Understanding Multiple Mormonisms,” in *The Oxford Handbook of Mormonism*, ed. Terryl L. Givens and Philip L. Barlow (New York: Oxford University Press, 2015); Richard P. Howard, “Latter Day Saint Scriptures and the Doctrine of Propositional Revelation,” in *The Word of God*, ed. Dan Vogel (Salt Lake City: Signature Books, 1990); Geoffrey F. Spencer, “A Reinterpretation of Inspiration, Revelation, and Scripture,” *ibid.* (1990).

36. Dan Vogel, ed., *The Word of God: Essays on Mormon Scripture* (Salt Lake City: Signature Books, 1990); Brent Lee Metcalfe, ed., *New Approaches to the Book of Mormon: Explorations in Critical Methodology* (Salt Lake City: Signature Books, 1993); Dan Vogel and Brent Lee Metcalfe, *American Apocrypha: Essays on the Book of Mormon* (Salt Lake City: Signature Books, 2002); Fenton and Hickman, eds., *Americanist*

The essay's distinction between history and scripture expands the acceptability of approaches to the Book of Mormon to now include statements such as the following from scholar Anthony Hutchinson: "The Book of Mormon should be seen as authoritative scripture, part of a larger canon, ... as not containing the real history of the ancient Americas but an account of the origins of the American Indians and their relation to ancient biblical stories as conceived by its nineteenth-century author, Joseph Smith."³⁷ By placing a priority on the book's status as scripture over its historicity, the essay offers an inclusive embrace of even those who may not find its discussion of genetics convincing but are willing to accept the Book of Mormon's sacred status.

The essay brings the LDS Church into alignment with most of its apologists and many of its critics. There is significant common ground between the perspectives of most critics and apologists that is effectively captured in the essay. LDS scientists generally concede that DNA from Native America provides no affirmative support for Book of Mormon narratives. The previously predominant interpretation that the Book of Mormon described the founding of American Indian populations across both western hemispheres is clearly refuted by the evidence and now repudiated by this essay. Critics and apologists agree that scenarios can be imagined whereby a small population in the distant past interbred on a small scale with a much larger population and left few genetic traces in modern populations. Processes such as founder effect, population bottleneck, and genetic drift would be necessary for such a scenario to be plausible.³⁸ The essay puts church leadership

Approaches; Mark D. Thomas, *Digging in Cumorah: Reclaiming Book of Mormon Narratives* (Salt Lake City: Signature Books, 1999); Earl M. Wunderli, *An Imperfect Book: What the Book of Mormon Tells Us About Itself* (Salt Lake City: Signature Books, 2013).

37. Anthony Hutchinson, "The Word of God Is Enough: The Book of Mormon as Nineteenth-Century Scripture," in *New Approaches to the Book of Mormon*, ed. Brent L. Metcalfe (Salt Lake City: Signature Books, 1993), 1.

38. Terryl L. Givens, Thomas W. Murphy, and Scott Woodward, Interview with Doug Fabrizio, Dec. 19, 2002; Michael F. Whiting, "Does DNA Evidence Refute the Authenticity of the Book of Mormon?" at www.publications.mi.byu.edu/video/does-dna-evidence-refute-the-authenticity-of-the-book-of-mormon/; Thomas W. Murphy, "Sin, Skin, and Seed: Mistakes of Men in the Book of Mormon," *Journal of the John Whitmer Historical Association* 25 (2004); "Simply Implausible: DNA and a Mesoamerican Setting for the Book of Mormon," *Dialogue: A Journal of Mormon*

in agreement with this growing consensus from its scholarly community and provides context for the recent changes to the Book of Mormon's introduction.

The church's essay offers an important caution to defenders of Book of Mormon historicity who would use DNA to support historical claims. This warning appears to be directed towards church members who advocate that the presence of the X lineage of mtDNA in some North American Indian populations provides support for the Heartland geography that places the events of the Book of Mormon among the mound building populations of Midwest and Eastern North America.³⁹ Geneticists have undermined this Heartland hypothesis by demonstrating that the X2a variant found in North America "is not found in the Middle East." In fact, "none of the X2 lineages found in the Middle East are immediately ancestral to X2a" and the Indigenous American branch separated from the others more than 10,000 years prior to the events in the Book of Mormon.⁴⁰ Furthermore, the propensity of Heartland advocates to label the broader X lineage as European or Middle Eastern, when its various branches are also found in Africa, Asia, and North America, misrepresents the scientific data and undermines the LDS Church's efforts to eradicate racism.⁴¹

The essay's acknowledgment of existing scientific data and its caution directed at defenders of the Book of Mormon helps to

Thought (2003); D. Jeffrey Meldrum and Trent D. Stephens, "Who Are the Children of Lehi?" *Journal of Book of Mormon Studies* 12, 1 (2003); *Who Are the Children of Lehi? DNA and the Book of Mormon* (Salt Lake City: Greg Kofford Books, 2007); Dean H. Leavitt, Jonathan C. Marshall, and Keith A. Crandall, "How Defining Alternative Models Helps in the Interpretation of Genetic Data," *Dialogue: A Journal of Mormon Thought* 36, 4 (2003); Ugo A. Perego, "The Book of Mormon and the Origin of Native Americans from a Maternally Inherited DNA Standpoint," *FARMS Review* 22, 1 (2010); John Charles Duffy, "The Use of 'Lamanite' in Official LDS Discourse," *Journal of Mormon History* 34, 1 (2008).

39. See, for example, Rod L. Meldrum, *Rediscovering the Book of Mormon Remnant through DNA* (Mendon, New York: Digital Legend, 2009).

40. Jennifer A. Raff and Deborah A. Bolnick, "Does Mitochondrial Haplogroup X Indicate Ancient Trans-Atlantic Migration to the Americas? A Critical Re-Evaluation," *PaleoAmerica* 1, 4 (2015): 298–99; Ugo Perego, et al., "Distinctive Paleo-Indian Migration Routes from Beringia marked by two rare mtDNA haplogroups," *Current Biology* 19 (2009).

41. Thomas W Murphy and Angelo Baca, "Rejecting Racism in Any Form: Latter-Day Saint Rhetoric, Religion, and Repatriation," *Open Theology* 2 (2016).

distance the LDS Church from the lack of compassion and understanding of Native perspectives demonstrated by some Latter-day Saints in discussions of the case of Kennewick Man. Also called The Ancient One, these skeletal remains found along the Columbia River in July 1996 date to approximately 9,000 years ago. At least one prominent LDS writer expressed excitement at the discovery of the Ancient One and took a hostile rhetorical position towards the Umatilla, who, he feared, “may succeed in hiding away this skeleton that could never have belonged to a member of their or any living tribe.” This same writer accused Native Americans of displacing an ancient white civilization and expressed “pleasure” at the report of a skeleton of presumed “Caucasoid physical structure” from ancient America and its implications for “Book of Mormon culture and archaeology.”⁴² The church’s more cautious approach in its essay on DNA proved judicious when genetic tests subsequently demonstrated The Ancient One’s common ancestry with and close ties to contemporary American Indians.⁴³

While LDS scholars tend to focus on the validity of historical claims of the Book of Mormon, Native American scholars are more concerned about the usurpation of power by the colonizers over indigenous bodies. Tribal religions, as described by Vine Deloria Jr. (Standing Rock Sioux), do not require that a particular event took place in the past. No nation asserts “its history as having primacy over the accounts of any other tribe.” Sharing stories is a “social event embodying civility” and differing accounts receive credence because it is “not a matter of trying to establish power over others to claim absolute truth.”⁴⁴ Anthropologist Kim Tallbear (Dakota) notes, “Native American origin narratives are generally missing the will to convert and so are without inherent intolerance for other ontologies.” The most important issue for Native American concerns about genetic research “always focuses

42. Orson Scott Card, “Reopening the Question of the Origin of Pre-Columbian People,” *Nauvoo: A Gathering Place for Latter-day Saints*, June 12, 1997, at www.nauvoo.com/library/card-lostman.html.

43. Morten Rasmussen et al., “The Ancestry and Affiliations of Kennewick Man,” *Nature* 523, 7561 (2015), at www.nature.com/articles/nature14625.

44. Vine Deloria Jr., *God Is Red: A Native View of Religion, The Classic Work Updated* (Golden Colorado: Fulcrum Publishing, 1994), 98–100.

on who has the power to research whom and how, and who has the power to make policy that affects Native American lives.”⁴⁵ Latter-day Saint scholar P. Jane Hafen (Taos Pueblo) explains, “Recognizing that more than one origin story can co-exist with another does not require the dismissal of either.”⁴⁶ By opening itself to non-historical interpretations of the Book of Mormon, the LDS Church is creating space not just for its scientists and scholars but also for those who approach the Book of Mormon from an Indigenous perspective.

Shortcomings

The authors of the church’s essay appear mostly to avoid racialized interpretations of genetic data, but they do not go far enough, in our opinion, to repudiate the racism coming from the Book of Mormon. The essay does not offer an approach that would realize the laudable expressions in the Gospel Topics parallel essay on “Race and the Priesthood,” unequivocally condemning “all racism, past and present, in all its forms.”⁴⁷ While it is an improvement over church-sponsored pageants and the writings of some Heartland geography proponents, the church essay perpetuates racial thinking when it slips from otherwise careful language to use the phrase “Asian DNA” or “Near Eastern DNA” rather than DNA markers found in Asia or the Near East. The essay authors are in a difficult situation as they aspire to move beyond a colonial legacy of racism. The Book of Mormon itself projects a nineteenth-century, settler colonial, stereotypical, racialized, social organization of civilized (Nephite) and savage (Lamanite) peoples back into the past. This representation of ancient social groups demarcated by skin color served important social and political functions in antebellum settler colonialism, but these types of racial divisions of society never existed in the pre-Columbian Americas.⁴⁸

45. Kim Tallbear, *Native American DNA* (Minneapolis: University of Minnesota Press, 2013), 116.

46. Hafen, “Afterword.”

47. “Race and the Priesthood,” at www.lds.org/topics/race-and-the-priesthood.

48. Murphy, “Imagining Lamanites”; Mann, *Mounds*; Taylor, *Divided Ground*; Curtis M. Hinsley, “Digging for Identity: Reflections on the Cultural Background of Collecting,” in *Repatriation Reader: Who Owns American Indian Remains?* ed. Devon

By trying to preserve room for reading the Book of Mormon as history, the essay perpetuates the idea that American Indians could not have developed civilization without inspiration from the Old World and negates the diverse origin stories told in Indigenous communities. Nineteenth-century settler colonists had disassociated the American Indians they were displacing from the abundant evidence of sophistication in the mounds dotting the landscape of New York and Ohio. They presumed that Haudenosaunee (Iroquois) and other Indigenous peoples were incapable of the arts of civilization, and developed elaborate myths about ancient white mound builders to deflect guilt over the atrocity in which they were participating. “Settlers,” the Seneca descendant Barbara Alice Mann observed, “had an enormous stake in denying any cultural credit to Native Americans, inspiring Euroamericans to dream up a doomed, and by the time the myth was done, *white* race of Mound Builders in ancient America.” “The myth,” she continues, “was the only way, psychologically, to reconcile their ongoing genocide and land seizure—openly justified by the ‘savage’ state of Native America—with the undeniable evidence of ‘civilization’ presented by the math, astronomy, and artistry of the mounds.”⁴⁹ The essay’s attempt to use some uncertainty in scientific data to protect historical interpretations of the Book of Mormon serves the social function of perpetuating racist portrayals of the ancestors of the American Indians and displacing Indigenous histories that connect people to land.

In order to advance the idea that Native American populations experienced genetic bottlenecks, the essay points to “the catastrophic war at the end of the Book of Mormon” and European conquest as “a cataclysmic chain of events.” In the first of these claims, the essay perpetuates the unsubstantiated settler colonial myth that American Indians destroyed an ancient white civilization. Settler colonial attributions of mound building to an ancient white race destroyed by American Indians were thoroughly

A. Mihesuah (Lincoln: University of Nebraska Press, 2000); Silverberg, *Mound Builders*; Murphy and Baca, “Rejecting Racism”; Baca, *In Laman’s Terms*; Tallbear, *Native American DNA*.

49. Mann, *Mounds*, 53.

discredited in archaeological circles by the end of the nineteenth century.⁵⁰ In fact, there was ample evidence available in Joseph Smith's life time that the Haudenosaunee, Shawnee, Lenâpé, and Cherokee were responsible for the earthworks and burial mounds sometimes credited instead to immigrants from the Old World.⁵¹ This evidence, however, did not serve as a salve for subconscious angst over the treatment of Native America and, thus, was ignored in favor of a legend with more social appeal to settler colonists. The DNA evidence presents the LDS Church with a chance to repudiate these racist portrayals of the American past and embrace Indigenous People's own histories, an opportunity missed by the current version of the church's essay.

In its reference to another bottleneck coinciding with the conquest and colonization "of the fifteenth and sixteenth centuries," the essay deflects responsibility for violence against American Indians from the United States. By implying that this destruction only took place in the fifteenth and sixteenth centuries, the essay implicitly places blame for atrocities on the Spanish, Portuguese, and French while ignoring the role of the Dutch, English, and American patriots in the seventeenth through nineteenth centuries. The violence, disease, and corresponding decline of Indigenous populations continued up through the end of the nineteenth century.⁵² Mormons, themselves, would play a role in the violent colonization of the Great Basin as aptly demonstrated by the Western Shoshone historian Ned Blackhawk.⁵³ The essay's misrepresentation of this history is particularly problematic for those of us whose ancestors experienced abuse at the hands of settler colonists from the United States.

It is important to note that Joseph Smith was not the originator of the myth of ancient white mound builders that appears in the Book of Mormon. Instead, this was part of the cultural context

50. Silverberg, *Mound Builders*; Thomas, "Mound Exploration"; Murphy, "Inventing Galileo."

51. Mann, *Mounds*.

52. Catherine M. Cameron, Paul Kelton, and Alan C. Swedlund, *Beyond Germs: Native Depopulation in North America* (Tucson: University of Arizona Press, 2015).

53. Ned Blackhawk, *Violence over the Land: Indians and Empire in the Early American West* (Cambridge, Massachusetts: Harvard University Press, 2006).

that Smith brought to his mystical experiences. Ethan Smith, a Congregationalist minister in Poughkeepsie, Vermont, and no known relation to Joseph Smith, combined this popular legend with the widespread and long-standing belief that American Indians were the lost tribes of Israel in his book, *View of the Hebrews*, published in 1823 and 1825.⁵⁴ The Mormon prophet would give this racist ideology of settler colonialism the veneer of scripture and buttress it with the cultural and ecological portrayals of the Nephites in the Book of Mormon. Seeming to ignore the concerns of local Native Americans, the LDS Church continues to promote these racial mythologies indirectly in this essay and, until 2020, explicitly in its annual Hill Cumorah pageant.⁵⁵ The scripture and pageant portray Nephites as a civilized, white, Christian, agrarian nation using the domesticated plants, animals, and technology of European society and besieged by filthy, idolatrous, wandering Lamanites.

The DNA essay disappointingly avoids discussion of the anachronistic portrayal of European plants, animals, and technology in the Book of Mormon. LDS scholars have sought to explain away these mistakes by suggesting that Israelite immigrants had applied familiar names of plants and animals from the Old World to the unfamiliar flora and fauna they encountered in the New World.⁵⁶ One does not need to imagine such bizarre things as a tapir pulling a chariot or a deer yoked to a plow to explain these anomalies. Smith would likely have encountered ample evidence of horses, cattle, oxen, sheep, goats, wheat, barley, steel, plows, wagons, glass, etc., in the burial mounds and ruins of the Haudenosaunee he explored as a treasure hunter. By the 1820s, Haudenosaunee had been trading with Europeans for these items for nearly two centuries and had incorporated them into their everyday lives. In fact, they even preferentially buried the dead with items recently obtained through trade with Europeans because these items were

54. Smith, *View of the Hebrews*; Vogel, *Indian Origins*; Gershon Greenberg, *The Holy Land in American Religious Thought, 1620–1948* (Lanham, Maryland: University Press of America, 1994); Robert N. Hullinger, *Joseph Smith's Response to Skepticism* (Salt Lake City: Signature Books, 1992); Adair, *Adair's History of the American Indians*.

55. Baca, *In Laman's Terms*.

56. Sorenson, *An Ancient American Setting for the Book of Mormon*, 293–98.

novel and not readily available in the world of the dead.⁵⁷ These anachronisms cannot be explained away by genetic drift, founder effects, or misnomers.⁵⁸ A more forthright portrayal would consider these problems alongside the lack of evidence from DNA.

The essay does not fully realize the scripture's seemingly inspired message that the Creator "speaketh unto men according to their own language, unto their understanding" (2 Ne. 31:3). Whatever the nature of Joseph Smith's contact with divinity, his understanding of the experience was necessarily framed and articulated through his own language and cultural experiences.⁵⁹ Smith's historical setting was that of a colonizing society struggling to come to spiritual terms with the horrific violence it was unleashing upon Native America. If Mormons could find ways to read the Book of Mormon as a product of Smith's struggle with God in a settler colonial society, necessarily littered with nineteenth-century "mistakes of men," then its inclusive theology could be brought to the forefront and an ecumenical place could be created wherein Latter-day Saints might recognize the divinity of other sacred narratives from various times and places.⁶⁰ In particular, LDS could acknowledge that people of Indigenous heritage have sacred stories and histories of our own, akin to the Bible and the latter-day canon.

Besides the Book of Mormon's evident racism, the primary disagreement between apologists and critics debating DNA and the Book of Mormon is not over the genes of Native Americans. Rather, the issue is that the Book of Mormon narrative does not describe the types of possible scenarios that would lead to a loss

57. Dean R. Snow, *The Iroquois* (Cambridge, Massachusetts: Blackwell, 1996), 90; Taylor, *Cooper's Town*, 62; Barbara Graymont, *The Iroquois in the American Revolution* (Syracuse, New York: Syracuse University Press, 1972), 147, 219; Murphy and Baca, "Rejecting Racism"; Thomas W Murphy, "All the Wrong Plants and Animals: Grave-Robbery and the Book of Mormon," in *Northwest Anthropology Conference* (Tacoma, Washington, 2016); "Lee Yost to Diedrich Willers, Jr., 18 May 1897," in *Early Mormon Documents*, ed. Dan Vogel (Salt Lake City: Signature Books, 2003).

58. "Simply Implausible."

59. Murphy, "Imagining Lamanites"; "Lamanite Genetics"; Thomas W Murphy, "Other Scriptures: Restoring Voices of the Gantowisas to an Open Canon," in Hafen and Rensink, eds., *Essays on American Indian and Mormon History*, 23–40.

60. "Sin, Skin, and Seed"; "Decolonization"; "Other Scriptures"; Murphy and Baca, "Rejecting Racism."

of genetic heritage in modern populations. One must sacrifice the scripture's prophecies of Lehiite descendants surviving into the last days and disregard its descriptions, some attributed to Jesus, of populations of hundreds of thousands, and in the case of the Jaredites millions, of descendants of immigrants from the Near East.⁶¹ The plausible scenarios that might have diluted DNA of a Near Eastern origin do not coincide with the Book of Mormon narrative. While there are a few passages in the scripture that can be stretched to seem to refer to some unnamed social groups that could have been of Asian origin, the Book of Mormon clearly lacks the level of cultural diversity evident in other ancient narratives such as the Bible and the Popol Vuh.⁶² The stated purpose of the scripture to restore Lamanites to a knowledge of their forefathers, its lineage histories that all tie its population back to the Near East, and its prophecies of the continuation of these lineages into the last days collectively undermine efforts to remake the Book of Mormon societies into the types of settler communities that might have lost their distinct genetic signatures.

To give the impression that these new views of the Book of Mormon might be compatible with the text of the book itself, the essay advance some rather incredulous interpretations. Particularly problematic is the assertion that the Book of Mormon "does not claim that the peoples it describes were either the predominant or the exclusive inhabitants of the lands they occupied."⁶³ This declaration ignores the Lord's commandment to the party of Jared to gather "thy flocks, both male and female, of every kind; and also of the seed of the earth of every kind" and "go forth into the

61. For prophecies, see 1 Ne. 13:30–31, 15:14; 2 Ne. 4:3–7, Eth. 13:5–8; Morm. 7:1–5. For numerous Israelite populations, see 1 Ne. 12:1–20, 13: 10; Mos. 11:19, 12:34; Alma 56:3; 3 Ne. 15–17; Eth. 15:2. For dozens more similar passages cited in the scripture and a more extended version of this argument, see Murphy, "Simply Implausible"; Duffy, "Lamanite"; Brent Lee Metcalfe, "Reinventing Lamanite Identity," *Sunstone* 131 (2004); Meldrum, *Rediscovering the Book of Mormon*; Southerton, *Losing a Lost Tribe*.

62. Johnson and Kramer, "The Bible Vs. The Book of Mormon"; Finkelstein and Silberman, *Bible Unearthed*; Richard Elliot Friedman, *Who Wrote the Bible?* (New York: Summit Books, 1987); Laughlin, *Archaeology and the Bible*; Dennis Tedlock, *Popol Vuh: The Definitive Edition of the Mayan Book of the Dawn of Life and the Glories of Gods and Kings*, trans. Dennis Tedlock, revised and expanded (New York: Touchstone, 1996).

63. "Book of Mormon and DNA Studies."

wilderness, yea, into that quarter where never had man been.”⁶⁴ It also neglects Lehi’s prophetic claim “that this land should be kept as yet from the knowledge of other nations” or that as long as “they shall keep his commandments” there “shall be none to molest them.”⁶⁵ The essay offers no alternative explanation for these passages from the Book of Mormon that obviously contradict the interpretations it advances.

The essay exaggerates the likelihood that the Book of Mormon migrations would leave no genetic traces. In the scientific literature, there are ample examples of small migrations entering larger populations and leaving their signature behind in modern populations. Genetic evidence indicative of pre-Columbian Native American migrations to Iceland and Easter Island have been documented.⁶⁶ Similarly, evidence of Polynesian connections to the Americas has been found in Brazil.⁶⁷ Genetic traces of Hebrew migrations into southern African has been found in the Bantu-speaking Lemba population.⁶⁸ Additionally, distinctions between pre- and post-Columbian admixture appear to be easier to identify than implied by the essay authors.⁶⁹ The essay thus

64. Eth. 1:41, 2:5; Murphy, “Simply Implausible,” 126.

65. 2 Ne. 1:8–9; Metcalfe, “Lamanite Identity.”

66. Sigríður Sunna Ebenesersdóttir et al., “A New Subclade of Mtdna Haplogroup C1 Found in Icelanders: Evidence of Pre-Columbian Contact?” *American Journal of Physical Anthropology* 144, 1 (2011); J. Victor Moreno-Mayar et al., “Genome-Wide Ancestry Patterns in Rapanui Suggest Pre-European Admixture with Native Americans,” *Current Biology* 24, 21; Erik Thorsby, “The Polynesian Gene Pool: An Early Contribution by Amerindians to Easter Island,” *Philosophical Transactions of the Royal Society of London B: Biological Sciences* 367, 1590 (2012).

67. Vanessa Faria Gonçalves et al., “Identification of Polynesian Mtdna Haplogroups in Remains of Botocondo Amerindians from Brazil,” *Proceedings of the National Academy of Sciences* 110, 16 (2013).

68. Neil Bradman and Mark Thomas, “Why Y? The Y Chromosomes Traveling South: The Cohen Modal Haplotype and the Origins of the Lemba, the ‘Black Jews of South Africa,’” *American Journal of Human Genetics* 66 (Feb. 2000); Murphy, “Lamanite Genetics.”

69. Sriram Sankararaman et al., “Estimating Local Ancestry in Admixed Populations,” *American Journal of Human Genetics* 82, 2 (2008); Yael Baran et al., “Fast and Accurate Inference of Local Ancestry in Latino Populations,” *Bioinformatics* 28, 10 (2012); Garrett Hellenthal et al., “A Genetic Atlas of Human Admixture History,” *Science* 343, 6172 (2014); Juan-Camilo Chacón-Duque et al., “Americans Show Wide-Spread Converso Ancestry and Imprint of Local Native Ancestry on Physical Appearance” *Nature Communications* 9, 5398 (2018).

misleads when it claims, “Finding and clearly identifying . . . DNA [of Book of Mormon peoples] today may be asking more of the science of population genetics than it is capable of providing.”⁷⁰ The scientific literature provides multiple examples in similar situations of the type of evidence missing from purported Book of Mormon populations.

While scientists acknowledge that it is possible for genetic signatures to be lost over time, the Book of Mormon narrative requires that such an unlikely event must occur repeatedly. Three different migration events in the Book of Mormon would each need to result in the loss of all of each migrating population’s genetic markers. It would not be just descendants of one person from each migrations but all of the descendants of each individual migrant would have to have lost completely their numerous genetic markers indicative of Near Eastern ancestry. Their modern descendants would need to have lost all traces of their origins in the maternal mitochondrial DNA, on the paternal Y chromosome, and across hundreds of markers on the nuclear genome as well. Genetic drift and founder effects are random events. They do not occur again and again in the same way, to the same lineages, always resulting in the same pattern of genetic extinction. Because the Jaredites also brought plants and animals with them, the same unlikely scenarios would need to have been repeated for every individual of every species they brought with them. As Murphy has argued previously, the implausibility of this “model escalates exponentially with each additional genetic marker examined.”⁷¹ The Book of Mormon narrative is fundamentally incompatible with the types of scenarios that would have resulted in the loss of the genetic heritage of its peoples. To make the story plausible, one would need to presume that the creator is playing malevolent tricks on human subjects just to test their faith.

DNA is problematic for Latter-day Saints because it calls into question a presumed authority to tell Native American stories. It challenges a claim to be the latter-day arbiters of Native histories. For many Mormons, it has taken genetic science to begin to

70. “Book of Mormon and DNA Studies.”

71. Murphy, “Simply Implausible,” 120.

dislodge this colonial mindset. There is a spark of a changing approach in the essay with the acknowledgement that “the primary purpose of the Book of Mormon is more spiritual than historical.”⁷² What if the essay writers had explored that concept at length rather than offer a primer on population genetics? Discussing the lack of an historical foundation is the more difficult conversation. Rather than let the Book of Mormon stand as scripture, not history, the essay uses uncertainty inherent in the scientific process to try to create wobble room. The fact of the matter remains that science provides no affirmative support from DNA for the migration of any of the Book of Mormon peoples, plants, or animals.⁷³ The essay writers do not come to terms with the sheer absence of evidence and, instead, try to salvage a sliver of authority to continue speaking authoritatively about Native America.

American Indians have not been sitting idly by (Lamanite-style) while some Mormons attempt to mold them into something more compatible with the newest science and current politics. Indigenous concerns about LDS portrayals and uses of our bodies and those of our ancestors have appeared in prominent newspapers including *Financial Times*, *L.A. Times*, *Salt Lake Tribune*, *New Zealand Herald*, *New York Times*, and *Indian Country Today*; in the documentary film *In Laman's Terms*; in the books *Native Americans, Archaeologists, and the Mounds*, *Native American DNA*, *Decolonizing Mormonism*, *Essays in American Indian and Mormon History*, and summarized in doctoral dissertations.⁷⁴

72. “Book of Mormon and DNA Studies.”

73. Thomas W Murphy and Simon G. Southerton, “Genetic Research a ‘Galileo Event’ for Mormons,” *Anthropology News*, Feb. 2003; Southerton, *Losing a Lost Tribe*; Murphy, “Simply Implausible”; John Dehlin et al., “Three Geneticists Respond to the LDS Essay on DNA and the Book of Mormon, and to Apologist Michael Ash,” podcast, *Mormon Stories*, 2015; Raff and Bolnick, “Haplogroup X.”

74. William Lobdell, “Bedrock of a Faith Is Jolted,” *Los Angeles Times*, Feb. 16, 2006; Suzan Mazur, “Mormons in the Olympic Spotlight: Polygamy and Scripture Threaten to Steal Some of the Thunder from Winter Games in Utah,” *Financial Times*, Feb. 9 2002; ICTMN Staff, “Fraud? Mormon Prez Summoned to Defend Church Teachings on Natives,” *Indian Country Today*, Feb. 5, 2014; Jon Antelope, “Living Cheap among Mormons Who Think Whites Are Natives,” *ibid.*, Nov. 17, 2015; ICTMN Staff, “Mormons Apologize for Posthumous Baptism of Holocaust Survivor Wiesenthal’s Parents,” *ibid.*, Feb. 15, 2012; Baca, *In Laman's Terms*; Colvin and Brooks, eds., *Decolonizing Mormonism*; Hafen and Rensink, eds., *Essays in*

Meanwhile Latter-day Saints have demonstrated disregard for Indigenous sovereignty in research programs emanating from BYU that include genetic sampling at LDS chapels without sufficient ethical review by Indigenous nations and foreign governments.⁷⁵ While largely ignored and overlooked, people of Native heritage have not been silent on these and similar important issues.

Conclusion

LDS fascination with Native American bodies originates in settler colonial society. Surrounded by colonial violence, the LDS prophet Joseph Smith offered his followers a sacred narrative claiming that American Indians, too, were recent immigrants from the Old World and that the losses they were experiencing were divine punishment for the sins of their fathers. He attributed dark skin to a curse from God for wickedness and linked skin color to purported moral failings, idleness, idolatry, and hunting in the wilderness. This new American Bible would credit civilization in the New World to an ancient white nation of Christian mound builders who looked, lived, and behaved much like European colonists. Smith gave these misinformed traditions the stamp of scripture. When archaeological, linguistic, and genetic evidence failed to support racist myths

American Indian and Mormon History; Murphy, "Imagining Lamanites"; Lori Elaine Taylor, "Telling Stories About Mormons and Indians," PhD diss., State University of New York, Buffalo, 2000; Tallbear, *Native American DNA*; Mann, *Mounds*; Suzan Mazur, "Mormon Scriptures on Indians Show Objectionable Side of Olympic Hosts," *Indian Country Today*, Feb. 9, 2002; Martin Johnston, "Mormons Trigger NZ Ethical Concerns over DNA," *New Zealand Herald*, May 17, 2001; ICTMN Staff, "Mormon Writer in Hot Water over Native DNA," *Indian Country Today*, Dec. 17, 2002; Roberta Jests, "Is History Repeating Itself at Ancestry?" www.dna-explained.com/2012/08/30/is-history-repeating-itself-at-ancestry/; Peggy Fletcher Stack, "Book of Mormon Change Prompts Reflection among Native American Members," *Salt Lake Tribune*, Nov. 17, 2007; Angelo Baca, "Bears Ears Is Here to Stay," *New York Times*, Dec. 8, 2017; Baca and Bsumek, "On Pioneer Day"; Farina King, "Indigenizing Mormonisms," *Mormon Studies Review* 6 (2019).

75. Johnston, "Ethical Concerns over DNA"; Kent Larsen, "BYU Molecular Genealogy Research Project Accused of Ethical Lapse in New Zealand," *Mormon News*, May 18, 2001; Murphy, "Lamanite Genetics," 66–67; Murphy and Baca, "Rejecting Racism." Additional concerns have been raised about the Sorenson Molecular Research Group, its affiliations with Sorenson Genomics, GeneTree, and Ancestry where appropriate permissions may not have been obtained prior to the transfer of genetic information between these entities. Jests, "History Repeating Itself"; Tallbear, *Native American DNA*, 79–82, 116; Murphy and Baca, "Rejecting Racism."

of white mound builders, Mormons would continue to hang tenaciously to these narratives to try to make them fit the latest political expediencies and newest scientific evidence.

Rather than offering a truth-telling confession of “mistakes of men,” the LDS Church’s Gospel Topics essay on “Book of Mormon and DNA Studies” minimizes the significance of findings from DNA by using a primer on population genetics to divert attention away from a lack of evidence and to give the impression that everything is okay. The essay continues the long-standing tradition of marginalizing the voices of American Indians, a pervasive practice in LDS discourse, public policy, and the academic field of Mormon Studies.⁷⁶ The failure of archaeology, linguistics, and textual analyses to support historical claims had already resulted in a paring down of Book of Mormon geography from a hemispheric to a limited setting, although disputes have arisen over whether those events might have been located in North or Mesoamerica. The essay puts the church on the side of a limited geography without explicitly endorsing a particular setting. It legitimately critiques those who would use the X lineage to support a North American setting. Yet the church’s essay continues the longstanding silencing of Native voices. Our hope here is to have brought Indigenous scholarship to the forefront of the debate where it belongs.

The LDS Church has come a long way from its effort to excommunicate Thomas Murphy for the first peer-reviewed assessment of the implications of new DNA research for LDS understandings of American Indians. In his 2002 contribution to *American Apocrypha*, Murphy advocated discontinuing the view that Lamanites were the principal ancestors of American Indians and disavowing “the offensive teaching that a dark skin is a physical trait of God’s

76. Thomas W Murphy, Review of Terryl L. Givens, *By the Hand of Mormon: The American Scripture that Launched a New World Religion*, *Journal of Mormon History* 28, 2 (2002); Review of Paul Gutjahr, *The Book of Mormon: A Biography*, *Nova Religio* 17, 3 (2014); Review of *The Oxford Handbook of Mormonism*, *Nova Religio* 20, 3 (2017); Teresa Montoya, “Where Is Rural? #WeNeedANewCounty: Enduring Division and Conquest in the Indigenous Southwest,” *Journal for the Anthropology of North America* 22, 2 (2019); John Dougherty, “How Trump’s Dismemberment of Bears Ears Was Driven by Racism, Grave Robbery and Mormon Beliefs,” *The Revelator*, Dec. 6, 2017, at www.therevelator.org/trump-bears-ears-indigenous-scholars.

malediction.”⁷⁷ Angelo Baca offered similar perspectives in his 2008 film, *In Laman’s Terms*.⁷⁸ The 2006 and 2013 changes to the introduction and chapter headings of the Book of Mormon and recent essays on DNA and race have mostly realized the first request and put the church on the path towards the second. Murphy also encouraged an acknowledgment that “the Book of Mormon’s origin is best situated in early nineteenth-century America, and . . . emerged from an antebellum perspective, out of frontier people’s struggle with their god, and not from an authentic American Indian perspective.”⁷⁹ Baca similarly drew attention to the ongoing and offensive misrepresentations of American Indians in the Book of Mormon and the Hill Cumorah Pageant.⁸⁰ A more forthright confession of a nineteenth-century origin of the Book of Mormon and a more explicit repudiation of its racism are still needed if church leaders hope to rebuild trust with skeptical members and to establish more diplomatic and equitable relationships with American Indians.

The Latter-day Saints have lost any right to speak on behalf of Native American history, a settler colonial privilege that was assumed but never granted in the first place. While the Book of Mormon does not contain history, it does present its readers with a spiritual challenge to realize that all humans are fundamentally alike before their creator and that we necessarily experience the sacred through the lens of our own language and understanding. The church’s new essay moves members in the direction of favoring a spiritual over an historical reading of the Book of Mormon and cautions against defenders who misuse DNA to perpetuate racist readings. These are positive developments worthy of praise, but much work remains undone. We recommend the diplomatic embrace of a diversity of sacred narratives, untethered by assertions of cultural superiority and factual history, as an alternative model for reading LDS scripture in a genomic age.

77. Murphy, “Lamanite Genetics,” 68.

78. Baca, *In Laman’s Terms*.

79. Murphy, “Lamanite Genetics.”

80. Baca, *In Laman’s Terms*.

