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Title Prolegomena to the DNA Essays

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Abstract Peterson addresses Thomas Murphy's criticism of the Book of Mormon and shows that Murphy does not incorporate other scholars, whether they be in favor of or against the Book of Mormon, into his research. Rather, he uses his own opinions and previous writings as the basis for his claims.

PROLEGOMENA TO THE DNA ESSAYS

Daniel C. Peterson

The quotation from Hugh Nibley that serves as the epigraph for my overall introduction to this number of the *FARMS Review* bears repeating. “The normal way of dealing with the Book of Mormon ‘scientifically,’” he wrote in 1967, “has been first to attribute to the Book of Mormon something it did not say, and then to refute the claim by scientific statements that have not been proven.”¹

Thirty-seven years later, Professor Nibley’s words still ring true.

The Book of Mormon mentions the migration of three small colonies from the Old World to the New. Two of them consisted of Israelites who migrated to the Americas soon after 600 B.C. One of these is described rather extensively; of the other, we are told virtually nothing.² The third migration, much earlier, originated in Mesopotamia.

In his 2002 essay “Lamanite Genesis, Genealogy, and Genetics,” Thomas Murphy argues that, since evidence from current scientific studies of molecular DNA has been interpreted as showing an almost exclusively Asiatic genetic inheritance for Native Americans, the

1. Hugh Nibley, *Since Cumorah*, 2nd ed. (Salt Lake City: Deseret Book and FARMS, 1988), 214. The first edition appeared in 1967.

2. So sketchy are the details, in fact, that one prominent writer has suggested, rather intriguingly, that the “Mulekite” claim of a royal origin in Jerusalem may have been concocted by a Mesoamerican ethnic group of quite non-Israelite derivation in order to curry favor with the culturally ascendant Nephites. See Orson Scott Card, *A Storyteller in Zion* (Salt Lake City: Bookcraft, 1993), 31–33.

Book of Mormon is almost certainly not true, and that, accordingly, its claims to historicity should be abandoned.³ “So far,” notes Murphy, “DNA has lent no support to the traditional Mormon beliefs about the origins of Native Americans. Instead, genetic data have confirmed that migrations from Asia are the primary source of American Indian origins.”⁴ “To date,” he says, drawing upon the published research of geneticists pursuing entirely unrelated research goals and pressing it into service for what has clearly become a personal crusade against the doctrine and ethos of the Church of Jesus Christ of Latter-day Saints, “no intimate genetic link has been found between ancient Israelites and indigenous Americans.”⁵

As Murphy and his fellow DNA-inspired critics depict the situation, however, instead of taking the rational course of abandoning belief in historical Nephites and Lamanites, some Latter-day Saint scholars now offer desperate revisionist explanations. These include the idea that events in the Book of Mormon occurred in a limited region of Mesoamerica and that Native Americans, or Amerindians, whom Latter-day Saints have associated with the Lamanites, are not exclusively Israelite but likely include among their ancestry those of other origins. These explanations, the critics argue, contradict both the revelations of Joseph Smith and long-held traditional views, even authoritative doctrines, about the Book of Mormon.

Still, in a just-published article in *Dialogue*, Thomas Murphy claims that defenders of the Book of Mormon are slowly, inexorably, being dragged by the sheer force of reality and science toward his own position. According to Murphy,

An apparent consensus on some central issues of debate about the Book of Mormon appears to be emerging. Most Book of Mormon scholars today, including those associated

3. 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), 47–77.

4. *Ibid.*, 47–48.

5. *Ibid.*, 48.

with FAIR and FARMS, reject a literal reading of the Book of Mormon and “agree that Nephites and Lamanites never actually rode horses, traveled in chariots, used steel swords, raised cattle, or ate wheat.” We basically agree that the English text of the Book of Mormon does not accurately describe the flora and fauna of ancient America in Central America or elsewhere. We agree that the population growth attested in the Book of Mormon is mathematically impossible for groups of the size and make-up described in the text and that the descriptions of distances traveled in the scripture are not consistent with a population that spread to “cover the face of the whole earth” on the American continents “from the sea south to the sea north, from the sea west to the sea east” (see Hel. 3:8). We agree that ethnonyms like *Lamanite* from the Book of Mormon can have social and political meanings, in addition to genealogical ones. We have reached a virtual consensus that the traditional interpretation of the Book of Mormon as the history of the American Indians has been thoroughly discredited by the discoveries of anthropology, biology, and history. Thus, we would seem to agree that the teachings about Israelite and Lehigh ancestry of American Indians espoused by every LDS prophet since Joseph Smith must necessarily be disregarded as incorrect.⁶

Intriguingly, though, this supposed consensus is (excepting a brief allusion to Helaman 3:8) expressed entirely in the language of Thomas Murphy. Not a single footnote connects Murphy’s assertions to any publication of either FAIR or FARMS. Even the passage that Murphy cites, according to which his opponents “agree that Nephites and Lamanites never actually rode horses, traveled in chariots, used steel swords, raised cattle, or ate wheat,” quotes nobody at either FAIR or FARMS. Instead, the quotation comes from an earlier essay

6. Thomas Murphy, “Simply Implausible: DNA and a Mesoamerican Setting for the Book of Mormon,” *Dialogue* 36/4 (2003): 111.

by Thomas Murphy himself, in which—much in the manner of the Idaho-based anti-Mormon James Spencer—he speaks for his targets, who evidently cannot be relied upon to say the things that they're supposed to say.⁷ It is rather like a chess game in which Murphy makes his opponent's moves for her. Employing such a technique, and given enough time and practice, he is quite likely to win many of his matches. Consensus is typically easier to achieve when one is attempting to persuade one's own very eager self.

Refreshingly, the following five review essays represent the authentic opinions of Latter-day Saint scientists and scholars as they actually appear in a genuine publication of the Foundation for Ancient Research and Mormon Studies.⁸

In the first, entitled "Detecting Lehi's Genetic Signature: Possible, Probable, or Not?" David A. McClellan offers a challenging but essential basic overview of the biology relevant to serious discussion of questions involving DNA. The arguments advanced by Thomas Murphy and his allies plainly assume that contemporary DNA studies are capable of either confirming or disproving the presence of an element of Israelite ancestry in Native American roots. In fact, Murphy attributes the same assumption to those whose position he is attacking. "Researchers associated with the Foundation for Ancient Research and Mormon Studies (FARMS)," he writes, "have rejected hemispheric models of the Book of Mormon but still express 'confidence in an Israelite genetic presence in Central America and perhaps as far away

7. Murphy, "Lamanite Genesis, Genealogy, and Genetics," 61–62. For two examples of James Spencer's propensity to put into the mouths of others the words that he needs or wants them to have said, see pages xxiii–xxvi of the introduction to this number of the *Review*.

8. They should be read along with the four articles appearing in *Journal of Book of Mormon Studies* 12/1 (2003): John L. Sorenson and Matthew Roper, "Before DNA" (pp. 6–23); Michael F. Whiting, "DNA and the Book of Mormon: A Phylogenetic Perspective" (pp. 24–35); John M. Butler, "A Few Thoughts from a Believing DNA Scientist" (pp. 36–37); and D. Jeffrey Meldrum and Trent D. Stephens, "Who Are the Children of Lehi?" (pp. 38–51). See now also Dean H. Leavitt, Jonathon C. Marshall, and Keith A. Crandall, "The Search for the Seed of Lehi: How Defining Alternative Models Helps in the Interpretation of Genetic Data," *Dialogue* 36/4 (2003): 133–50.

as Arizona to the north and Colombia to the south.” And yet, Murphy suggests in the next sentence, the hopes of these unnamed FARMS researchers appear doomed to disappointment: “I have found no genetic research,” he says, “to support this expectation.”⁹

Once again, though, while he seems initially to be quoting a hope actually expressed by FARMS researchers, it turns out that Murphy is really only citing himself, speaking on their behalf.¹⁰ But David McClellan, who, unlike Thomas Murphy, is an actual scientist actually specializing in human genetics and who, now, has actually written for FARMS, does *not* expect to find “an Israelite genetic presence in Central America and perhaps as far away as Arizona to the north and Colombia to the south.” (They just don’t make straw men like they used to.) McClellan points out that proper interpretation of Native American population genetic data in the context of Latter-day Saint claims about ancient migrations to the Americas by a few families from the Middle East requires a preliminary understanding of several fairly complex concepts, including scientific method, basic genomics and genetics, molecular evolution, population genetics,

9. Murphy, “Simply Implausible,” 109.

10. The quoted passage comes from Murphy, “Lamanite Genesis, Genealogy, and Genetics,” 63. In that essay, Murphy’s footnotes list two FARMS publications that are apparently supposed to express “this expectation” and “confidence”: John L. Sorenson, *An Ancient American Setting for the Book of Mormon* (Salt Lake City: Deseret Book and FARMS, 1985), 93–94; and William J. Hamblin, “An Apologist for the Critics: Brent Lee Metcalfe’s Assumptions and Methodologies,” *Review of Books on the Book of Mormon* 6/1 (1994): 476. Contrary to Murphy’s representation of them, however, the cited passages are actually quite cautious and reserved; they scarcely justify Murphy’s assertion. Sorenson and Hamblin both minimize the overall importance, for discussions of the Book of Mormon, of literal biological kinship; Hamblin says absolutely nothing about the prospects, one way or the other, of finding relevant modern genetic evidence, while Sorenson acknowledges that it might someday be possible to do so but doesn’t think the matter at all significant. Murphy’s summary statement that, “like Hamblin,” Sorenson “expresses optimism that Lehigh genes . . . may eventually be found” (Murphy, “Lamanite Genesis, Genealogy, and Genetics,” 62) is fundamentally misleading. Compare the case discussed on pages xxxix–xl in the introduction to this number of the *Review*, in which Murphy misrepresents both the work of Scott Woodward and an article in the *Salt Lake Tribune*, creating exaggerated, if not wholly fictional, Mormon expectations of finding “Lamanite DNA.”

and genealogical inference from molecular data. His essay seeks to outline these concepts in layman's terms and to evaluate the current status of Native American genetic data in light of these concepts in order to evaluate the plausibility of the Book of Mormon story line. McClellan's general conclusion is that, although it may be possible to recover the genetic signature of a few migrating families from 2,600 years ago, it is not probable. However, the data suggest that there has been a trickle of gene flow to the Americas from non-Asiatic source populations. Though far from verifying or proving the Book of Mormon, these data do allow for the plausibility of its story line.

In "Nephi's Neighbors: Book of Mormon Peoples and Pre-Columbian Populations," Matthew Roper addresses the assumption, emphatically imputed to the Church of Jesus Christ by its critics, that the peoples of the Book of Mormon were the only inhabitants of the pre-Columbian New World and, thus, inescapably the sole ancestors of the Amerindians. Roper's essay calls attention to a deeply problematic aspect of the DNA discussion thus far, a discouraging problem scarcely restricted to this recent dispute over Amerindian genetics: All too often, rather than addressing what the authoritative scriptural texts actually say, critics draw upon popular belief and tradition to construct a version of Mormonism that, in their depiction, resembles a sand castle beleaguered by the rising tide of scholarship and science. Clearly, though, if any test of its claims is to be fairly conducted, the text of the Book of Mormon itself, and not tradition or external commentary on it, is and must remain primary. In fact, contrary to the charge that the rise of the limited geographical view of the Book of Mormon is a recent and rather pathetic response to scientific difficulties, many close students of latter-day scripture, including prominent church leaders, have long recognized the overwhelming likelihood that contemporary Native American peoples represent a blending of various groups descended from a variety of ancestors in addition to Lehi and Sariah. Given this complexity and the extremely limited picture that contemporary genetics offers of our distant ancestral tree, it is unreasonable to insist that DNA studies alone can prove or disprove an Israelite connection. If Latter-day Saints are not obliged to attribute every Amerindian

gene to Jaredites, Lehites, and Mulekites, however, the purported DNA case against the Book of Mormon loses most if not all of its force.

In the third essay, “Swimming in the Gene Pool: Israelite Kinship Relations and Ancestry,” Matthew Roper investigates the nature of the people of ancient Near Eastern Israel and of Lehite Israel as described in the Book of Mormon, illustrating the complexity of kinship and tribal lineage terminology among the Israelites and those who were affiliated with them. Critics wishing to demonstrate that Native American populations do not have Israelite roots need to establish the genetically salient characteristics of an ancient Israelite source population. Yet when one examines the nature of ancient Israel as described in the biblical account and as it is known through later history, the fact soon becomes clear that Israel was never a biologically homogenous entity, so that it is far from obvious what an ancient Israelite genetic marker would look like. Similarly, when we examine the text of the Book of Mormon, it becomes apparent that Lehite Israel is not confined to biological descendants but also includes many others of several origins who, under varying conditions and circumstances, came to be numbered with Israel. Roper demonstrates that the approach taken to this issue by the critics, thus far at least, has been simplistic and strikingly unnuanced.

Roper’s “Swimming in the Gene Pool” and the fourth essay—“Elusive Israel and the Numerical Dynamics of Population Mixing,” by Brian Stubbs—also offer independent discussions of the complex nature of population dynamics and the factors that lead, surprisingly quickly, to extensive literal kinships among large populations and the dissemination of a distinct group into the mainstream population. Even a fairly low rate of intermarriage can transform a once homogenous group within relatively few generations. Here it is important to note what the essays published in this number of the *FARMS Review* and, recently, in the *Journal of Book of Mormon Studies* are not arguing: To recognize that the genetic contribution of Lehi or Sariah more than a hundred generations ago is, very probably, unrecognizable at this distance is not necessarily to say that the Lehi colony is genetically extinct and certainly does not deny the possibility (and perhaps

even the likelihood) that Lehi and Sariah figure among the biological ancestors of most, if not all, of today's Amerindians. As Thomas Murphy himself has admitted, "One can have descendants who do not carry particular genetic markers. For example, women do not carry their father's Y chromosome. Thus, one's genetic markers can go extinct even though one has descendants."¹¹

In the fifth essay, "The Charge of 'Racism' in the Book of Mormon," John Tvedtnes relies on passages from the Book of Mormon to argue against the culturally fashionable and politically damaging accusation that the text—and therefore, presumably, Latter-day Saint belief in it—is racist. He acknowledges that some Nephites were ethnocentric or racially prejudiced, for which they were criticized by certain of their own prophets. He further differentiates the "curse" of the Lamanites (being cut off from God on account of disobedience) from the "mark" of a "skin of blackness" and notes that despite the "curse" and "mark," the Nephites consistently considered the Lamanites to be their "brethren."

Finally, just as it is important to grasp what these essays are not saying, it is essential to understand what they are not purporting nor even attempting to accomplish. Some critics have pointed out that Latter-day Saint defenses on the issue of Amerindian DNA and the Book of Mormon have, thus far, sought only to demonstrate that DNA analysis has not proven the Book of Mormon false, and that, accordingly, it is still intellectually permissible to believe that there was indeed a historical Lehi; no particular effort has been made, in these defenses, to indicate why belief, even if it can still be maintained, might be preferable to nonbelief. In this, they are correct. To the best of my knowledge, no serious Latter-day Saint scholar or scientist contends that, to date, research on Amerindian DNA provides significant affirmative support for the Book of Mormon.

Such critics go considerably too far, however, when they then invoke the principle of parsimony, or the famous "razor" associated with William of Ockham, to contend that Latter-day Saints should conclude that the Book of Mormon is nineteenth-century frontier

11. Murphy, "Simply Implausible," 118 n. 30.

fiction because that is the simplest explanation consistent with the apparent invisibility of Sariah's mitochondrial DNA among today's Native Americans. Everything depends upon which evidence is determined to be relevant, upon how widely the evidentiary net is cast. A spectator at a New York Yankees baseball game a few generations ago might well have seen Babe Ruth go down swinging several times in the course of a single nine-inning performance. He might pardonably have concluded, if this was his first and only exposure to the home-run king, that the Babe was a terrible hitter. He could even, with a bit of research, have demonstrated that Babe Ruth consistently struck out at a very high rate. But, obviously, his overall verdict would have been spectacularly wrong, for the simple reason that his data sample was too small and too narrowly defined.

It is no valid criticism to observe that, at any given moment in a game of American football, one team is concentrating on defense rather than on offense or that, in formal debating, one side is arguing the affirmative and one side merely the negative. Anybody familiar with the rules of football understands that the teams will alternate their focus from defense to offense and back again many times in the course of a single game. Both offense and defense are useful, even essential. To use another sports image, it makes little sense to complain that a star soccer goalie never makes points for his own team but merely prevents the other side from scoring. That's his job. The point total run up by careful students of the Book of Mormon over the past few decades—a very impressive performance, in my opinion—has been scored on the basis of other issues, such as the impressive testimonies of the eleven witnesses (still not seriously countered by any critic), chiasmic literary structures, discoveries along the Arabian incense trail, Hebraisms, unexpectedly accurate echoes of preexilic Israelite religious culture, and many more topics that have been abundantly treated in hundreds of publications. These matters must also be weighed and evaluated when applying Ockham's razor. On the issue of Amerindian DNA, by contrast, faithful Latter-day Saint scientists and scholars do not believe that the current state of the research permits a score for either side; indeed, they tend to expect that it never

will. Given the grossly inflated claims of the Book of Mormon's critics on this issue, these careful and scientifically grounded defenses do precisely what they needed to do: They pop the balloon.