

YEA, YEA  NAY, NAY

DNA ÜBER-APOLOGETICS: OVERSTATING SOLUTIONS— UNDERSTATING DAMAGES

By Simon G. Southerton

BLAKE T. OSTLER and D. Michael Quinn have recently taken it upon themselves to defend the Book of Mormon's antiquity in the face of DNA research (SUNSTONE, December 2004, March 2005, May 2005). While I have issues with their interpretations of the DNA science, their work also makes it increasingly difficult to distinguish the point where apologetics ends and heterodoxy begins. The underlying assumption of both writers—and they join a growing chorus of apologists—seems to be that for the last 175 years, LDS prophets have erred in doctrine concerning who the Lamanites are and where their descendants currently live. Both writers argue that these erroneous beliefs stem from an incomplete understanding of the Book of Mormon, handed down from previous generations of members and prophets, which most Latter-day Saints continue to assume as truth. As I explain in what follows, I don't believe their approach is necessarily the best one for others to follow.

I first encountered the DNA research in question in July 1998 while serving as a bishop in Brisbane, Australia. It didn't take long for me to be convinced that Native Americans and Polynesians are descended from Asians instead of Israelites, contrary to what my study of the Book of Mormon and the Doctrine and Covenants had formerly led me to believe. Because of my training as a molecular biologist, I was compelled to seriously compare what I thought I knew by faith with what I had just learned from science.

The DNA research on native populations sent barely a ripple through the scientific community because none of the findings seriously challenge major scientific theories concerning the colonization of the Americas. But the shock waves continue to move LDS apologists to defend the Book of Mormon.

And, judging from the various defenses to date, it is clear that these studies have exposed a conspicuous rift between what most Mormons believe and what apologists know about New World pre-history and the possible scale of any Israelite impact.

In this confusing time for Latter-day Saints struggling over what to decide about the DNA challenges, I believe some of the apologetic writings, including those of Ostler and Quinn, border on what I call *über-apologetics*—a win-at-all-costs approach to defending Book of Mormon historicity. That is, in their urgency to defend the Book of Mormon as a historical record, many apologists are not only misrepresenting the molecular research but also creating a climate that is forcing many Latter-day Saints out of the Church. But even more staggering to me than the smoke screens about the DNA research is the *über-apologists'* underappreciation of the damage to Mormon foundations that arises from their challenge to prophetic authority. Astoundingly, Ostler, Quinn, and others argue a heterodox position: that most Church leaders, including Joseph Smith, have misunderstood the scale of the Book of Mormon account. In making this claim, they are profoundly undermining one of Mormonism's core ideals. As I will argue below, I believe there is a better alternative to such extremism.

IN response to letters to the editor about Part I of his essay, Ostler states that recent DNA studies have “little or no bearing on the question of Book of Mormon historicity” (SUNSTONE, March 2005, 5). In taking this stand, Ostler seems to have cast his lot with the work of BYU anthropologist Michael Whiting and others in claiming that various factors such as genetic drift, founder effect, or bottleneck events make it difficult to use DNA to link the

small prehistoric Book of Mormon groups with living populations.¹ Given these factors, Ostler concludes: “Without knowing whether it is probable or improbable that today we would find Semitic genetic markers among DNA samples if there had been ancient Americans of Semitic descent, we cannot know if we should expect to find any” (SUNSTONE, December 2004, 71). I won't address these matters in this essay, but I deal directly with each of them in my book, *Losing a Lost Tribe: Native Americans, DNA, and the Mormon Church*, as well as in a Q&A section of the Signature Books website.² Suffice it to say here that Ostler and those who believe these factors make DNA studies irrelevant are mistaken.

While Quinn also fails to see much relevance in the DNA studies, he's anxious to employ it when he believes it supports the possibility of Book of Mormon historicity. In his short piece, “The Ancient Book of Mormon as Tribal Narrative,” Quinn claims that DNA evidence proves that “greater than 90 percent” of Amerindians descend exclusively from people who lived anciently in northeast Asia. But he also believes that research on the X lineage “supports” the Book of Mormon since the X lineage is present in indigenous populations at a frequency of about 7 percent and “matches DNA collected from North Africa and the Middle East” (SUNSTONE, May 2005, 67).

Quinn's portrayal of the DNA research is grossly misleading. It is more accurate to state that greater than 99 percent of Amerindians descend from Asians. Mitochondrial DNA lineages have been determined for more than 7,200 Amerindians from more than 180 tribes scattered across the Americas. Roughly 99.6 percent of their lineages fall into one of five lineage families: A, B, C, D, or X (see Table 1). Several LDS scholars now accept that this discovery is not compatible with a notion that these tribes derive from a relatively recent Middle Eastern migration to the Americas.³ The sequence diversity within all five families suggests they have been present in the Americas since the earliest migrations across the Bering Strait, which are known to have occurred more than 14,000 years ago when an ice bridge extended from Siberia to North America.

Scientific investigations of the X lineage continue but are unlikely to reveal anything specific to the Book of Mormon period.⁴ In order for the X lineage to be relevant, apologists need to explain these facts.

1. Amerindian DNA lineages belonging to the X family are at least as diverse as the lineages belonging to the A, B, C, and D lin-



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age families, meaning that they have been present in the New World for just as long.

2. The X lineage is rare, occurring at a frequency of about 1.6 percent across the New World (not 7 percent as stated by Quinn). It occurs at a frequency of 8 percent in Canadian tribes and 3 percent in tribes from the United States. The vast majority of apologists consider Mesoamerica to be the only plausible setting for the Book of Mormon narrative because of the Book of Mormon's description of major populations living in complex and literate cultures. To date, the X lineage has not been found in Central or South America, where the three major New World civilizations are located.⁵

3. There is evidence that X lineage DNA has been isolated from ancient remains that pre-date the Jaredite and Lehite time period by thousands of years.⁶

4. Amerindian X lineages are only distantly related to X lineages found in Europe, North Africa, the Middle East, and Asia; they are estimated to have separated from these populations more than 30,000 years ago—no later than 17,600 years ago.⁷ The fact that directly ancestral Asian X lineages have not been found is not evidence that they were brought into the Americas by non-Asian people. Deeper sampling of Siberian populations is likely to shed more light on this lineage's Asian ancestry.

Ostler believes “science will change drastically over the years and that what we take as established by the evidence and explained by adequate theories will be rejected and viewed as vastly inadequate in the not-too-distant-future” (SUNSTONE, March 2005, 6). This is a familiar argument but also a tired one. Such a hasty and broad application carries no force beyond a cry that no one should rush to judgment about any new evidence—something with which I wholeheartedly agree. But that said, on the topic of New World colonization, it is LDS scholars, not scientists, who have changed their views dramatically. For most of the past century, there has been a virtual consensus among scientists that the ancestors of the Amerindians migrated out of Asia more than 14,000 years ago. Claims that other ancient groups migrated to the Americas have come and gone

because the purported counter evidence has not withstood open scientific scrutiny. The molecular research reinforces theories developed earlier on the basis of research in genetics, anthropology, archaeology, and linguistics, all of which overwhelmingly substantiate a link with Asia. When evidence from multiple scientific disciplines points to one conclusion, it would be dramatic evidence indeed that would cause scientists to reverse their interpretation of the facts they now see.

The only DNA lineages present among Amerindians that probably did not arrive via an ancient migration from Asia are European and African lineages, which together occur at a frequency of about 0.4 percent in New World groups. These are the only candidates for lineages that conceivably could be connected to Book of Mormon peoples.⁸ A smattering of these lineages occurs throughout the Americas in tribes that interacted with post-Columbian colonists. Scientists assume these lineages arrived after 1492 because when investigators exclude people with known mixed ancestry, they typically do not encounter these other lineages.

To be fair, Ostler does not appear to be wedded to an American setting for the Book of Mormon narrative, suggesting instead an “islands” setting for the book (SUNSTONE, May 2005, 64–65). Such a view may not require the same sort of accommodation many apologists have undertaken in recent years.

MAKING mistakes regarding DNA science is only one aspect of Ostler's and Quinn's Book of Mormon *über*-apologetics. In their desire to defend historicity at all costs, they also assert that common LDS beliefs about the scale and

historical setting of the Book of Mormon are wrong. Both authors claim that through their own careful study long ago—as early as their late teens—each concluded, independently, that the Book of Mormon implies the existence of large populations with which the small Hebrew groups interacted, intermarried, and became assimilated. In coming to this conclusion, they are not alone. Various RLDS (now Community of Christ) and LDS scholars have been reading the text in this way for nearly a century. But far more boldly than others before them, Ostler and Quinn have begun to advance this view in conjunction with a bald challenge to prophetic authority. They contend that the DNA research is causing problems for many only because members and leaders have not carefully read what the book itself says and instead accept what they have been *taught* the Book of Mormon says. This results in what Ostler calls “doctrinal overbeliefs”—a euphemism for belief in things that are not true.

I believe *über*-apologists chart precarious terrain when they lay much of the blame for today's crises of faith on well-meaning but under-informed prophets. Latter-day Saints place great faith in the ability of their leaders to interpret scripture—indeed, it is an important function of the prophetic calling. Traditionally members have not relied on the interpretations of apologists, and Church leaders even today are reluctant to bestow their official endorsement upon anything the apologists write.⁹ Furthermore, many Latter-day Saints have had what they consider very specific and clear confirmations about notions Ostler labels “overbeliefs.”

Not all LDS apologists are following the *über*-apologist path. They are now interpreting the Book of Mormon in a way that is

Table 1. Maternal DNA Lineages in the New World. This table summarizes the data contained in my book, *Losing a Lost Tribe*, 213–222, where readers will find a comprehensive list of primary source references.

POPULATIONS	Maternal Lineage (number of individuals)						Total
	A	B	C	D	X	Eur/Afr	
Alaskan	288	4	13	379	0	0	684
Greenland	82	0	0	0	0	0	82
Canadian	443	42	82	29	55	3	654
United States	554	633	379	185	61	16	1,828
Central American	291	117	77	22	0	4	511
South American	676	1,175	914	683	0	9	3,457
Total	2,334	1,971	1,465	1,298	116	32	7,216
PERCENTAGE	32.3	27.3	20.3	18.0	1.6	0.4	100

compatible with what we know from science, in particular the obvious fact that the New World was widely populated prior to and during the Lehitic and Jaredite periods. Yet they are avoiding making such direct assaults on prophetic authority or showing what seems to me an arrogant disregard for members' faith and spiritual experiences.

Before I outline my proposal for a way forward that might avoid such extremism, both Ostler and Quinn have made dubious claims about the Book of Mormon that deserve attention.

ACCORDING to Ostler, it is clear that the Lehitics mixed with indigenous people soon after their arrival, and he believes the appearance of dark skin among the Lamanites is evidence of intermarriage. He also suggests that the Nephites took wives and concubines from among the indigenous women with whom they interacted. Since, according to the Book of Mormon text, the Nephites didn't inherit the dark skin, would Ostler have us believe that there were white-skinned indigenous people? Did the Nephites mix only with white others? The Book of Mormon doesn't offer any explicit support for such a claim.¹⁰

In an effort to find support for the idea that one could reasonably expect the presence of Asian ancestry among Amerindians, Ostler cites Hugh Nibley's *The World of the Jaredites*, in which Nibley speculates that the Jaredites migrated across the steppes of Asia, mixing with Asian populations along the way (SUNSTONE, May 2005, 66). Nibley claims a Jaredite migration in an easterly direction is plausible because the steppes were a land "in which there never had man been" (Ether 2:5) and because of cultural resemblance between the surviving nomads of the steppes region and the Jaredites. Nibley believes Asia fits the description of a place of many waters and that the strong winds that drove their boats to the New World are reminiscent of the prevailing westerlies that cross the northern Pacific. Based on Nibley's speculations about the Jaredites, Ostler believes that one might "expect to find Asian DNA" in today's Amerindians (SUNSTONE, May 2005, 66).

For this idea to have any real force, Ostler needs to show us where the Book of Mormon says the Jaredites carried out such an astounding transcontinental trek (at least 5,000 miles). The book of Ether gives no details of this lengthy migration, and most Mormons are unaware that some are advancing this scenario. In addition, there is now abundant evidence that Nibley's claim about the steppes of Asia being a place largely uninhabited by

man prior to the Jaredite migration is wrong: humans have inhabited large portions of central Asia for more than 20,000 years.¹¹ It has been found that Amerindians share common ancestral DNA lineages with Asian groups that derive from that time period.¹²

The Book of Mormon text says nothing explicit about peoples in the New World who already lived there before the Jaredite and Lehitic/Mulekite periods. Quinn's explanation for this difficulty is that the Book of Mormon is a "tribal narrative," and the authors were not interested in people who were not directly relevant to the tribe's experience. According to Quinn, the Book of Mormon is similar to the Hebrew Bible, which he sees as a limited tribal narrative. However, the Bible is not silent about other groups who lived nearby. It mentions Arabs, Assyrians, Babylonians, Egyptians, Greeks, Midianites, Philistines, Phoenicians, Romans, Samaritans, and Syrians, and it mentions numerous cities outside Palestine. A substantial portion of the New Testament contains Paul's epistles to non-Israelite saints who lived considerable distances from Palestine. Is it reasonable to believe that during the thousand-year history of the Lehitics, when they supposedly interacted with and intermarried into the indigenous populations surrounding them, the Nephite writers didn't have a single occasion to mention the Native Americans who surrounded them?

Furthermore, the widespread LDS belief that essentially all Native Americans (and Polynesians, for that matter) are direct descendants of the Lamanites cannot be as easily dismissed as Ostler would have us believe simply by labeling them the personal opinions of prophets. Much more is at play here than prophets admitting they may have read more into the Book of Mormon than the text supports. This "overbelief" has had a profound impact on LDS interactions with native peoples in the Americas and the Pacific for well over a century. For most of the last 175 years, the Book of Mormon has been presented to native people as a history of their ancestors and, as such, has frequently played a major role in their conversion. For many decades, members have been reassured by successive prophets and apostles that they are the children of Lehi. Frequently, these reminders are delivered during regional, area, and stake conferences and during the dedicatory prayers at temples in areas with predominant indigenous American and Pacific cultures. The Church has invested heavily in schools in what have been thought of as Lamanite regions, particularly in Polynesia. Many Native American

and Polynesian members of the Church have received patriarchal blessings in which they have been told they belong to the tribe of Manasseh, the same tribe as Lehi. Perhaps most important of all, many Latter-day Saints have feelings attached to these beliefs that are difficult to distinguish from what they understand to be revelation received from the Holy Ghost. As a consequence, these beliefs are deeply entrenched in the Church and, at this writing, show no sign of slowing, given that all prophets, including the recent leadership, have endorsed them. Hence, I believe Ostler grossly understates the impact of his kind of open challenge to prophetic authority.

THE Church is clearly on the horns of a major dilemma, and whatever course it takes will be a painful one. Prophetic authority will certainly be undermined if leaders pull back from traditional claims about the geographical setting and Amerindian and Polynesian ancestry while still claiming the Book of Mormon is historical. It will hurt the Church if the leaders accept apologetic discourse that dismisses 175 years of prophetic utterances in favor of strained interpretations of scripture. The claim that the difficulties stem from innocent "overbeliefs" glosses over what is clearly a major contradiction between Mormon doctrine and scientific finding. If this route is taken, the contradiction with science will remain and the battleground will just shift to some obscure geographical region, who knows where.

There is no denying that it would also hurt the Church if its prophets were to concede that the book might not be historical and that past interpretations are now open to revision. But wouldn't it temper the damage to prophetic authority if today's prophets were to act boldly in reiterating strong faith in a miraculous Book of Mormon without forcing a particular interpretation of what that might mean?

Though not in exactly this way, this is a path that has been trodden before. Community of Christ scholars were the first to posit a limited geography, and now many in that denomination openly view the Book of Mormon as an inspired but non-historical book.¹³ But some Community of Christ members still hold to the historical claims of the Book of Mormon—and perhaps herein lies the solution. The Community of Christ accepts diversity of opinion about claims to historicity while the LDS Church does not. Currently, Latter-day Saints who do not accept the historical claims of the Book of

Mormon cannot honestly and openly express their thoughts in Church settings and consequently feel alienated by the community that nourished them and that they love (or once loved). Until these people—many of whom are faithful and upright members—find acceptance, they will either lose their faith or choose to exercise it in other churches that do not require a belief that runs counter to well-established scientific truths.

Clearly there is no one-size-fits-all for a matter as complex as this. Perhaps choosing to defend the authority of the text over 175 years of prophetic statements and widespread spiritual convictions based on these statements is ultimately a course that would prove least damaging to faith in the Church and its foundations. Nevertheless, I'm not convinced that the momentum in this direction, being fed by arguments like Ostler's and Quinn's, is based on weighing the evidence as much as on weighing the consequences.¹⁴

Über-apologists are making direct assaults on prophetic authority and demonstrating an arrogant disregard for members' faith and spiritual experiences.

Hence, what I am arguing for is an honest acceptance that no one holds all the cards regarding this matter. LDS apologists and leaders ought to stop trying to force everyone to accept the false dilemma of a "historical-or-bust" view of the Book of Mormon and respect the right of Latter-day Saints to hold differing views—without condemnation. I believe the Community of Christ is well on its way towards achieving this healthy balance. I would hazard to guess that if the LDS Church and its defenders continue to assert historicity as the only possible view even in the face of compelling scientific findings, many who objectively follow the evidence will continue to find the case against historicity just too strong to ignore and will find it too uncomfortable to remain in the fold. ☞

NOTES

1. Most of the work in this area is being advanced by scholars from the Foundation for Ancient Research and Mormon Studies (FARMS) and the Foundation for Apologetic Information and Research (FAIR). For a comprehensive listing of this scholarship, see the appendix in part three of John Tvedtnes'

article, "Interpreting the DNA Data and the Book of Mormon," *Meridian Magazine*, <http://meridian-magazine.com/ancients/050713dna3.html> (accessed 16 September 2005).

2. Simon G. Southerton, *Losing a Lost Tribe: Native Americans, DNA, and the Mormon Church* (Salt Lake City: Signature Books, 2004), 179–98. See also, <http://www.signaturebooks.com/excerpts/Losing2.htm> (accessed 16 September 2005).

3. This is the conclusion reached recently by BYU biologist Keith A. Crandall and two of his students. See 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: A Journal of Mormon Thought* 36, no. 4 (Winter 2003): 133–50. The same conclusion was reached by LDS biologists D. Jeffrey Meldrum and Trent D. Stephens of Idaho State University. See their article, "Who are the Children of Lehi?" *Journal of Book of Mormon Studies* 12 (2003): 38–51. Possibly, Quinn's "greater than 90 percent" statement was derived from a talk given by BYU molecular biologist Scott R. Woodward at a FAIR conference in Provo, Utah, in 2001. See Scott R. Woodward, "DNA and the Book of Mormon," pre-

7. Reidla, et al., 1178–90.

8. Southerton, 129–30.

9. Currently no LDS apologetic organization can claim that its views are officially sanctioned by LDS leaders, though several apologetic articles are cited on the official Church website, www.lds.org—in the section for media—under the heading "DNA and the Book of Mormon." The website states "Recent attacks on the veracity of the Book of Mormon based on DNA evidence are ill considered. Nothing in the Book of Mormon precludes migration into the Americas by peoples of Asiatic origin." Readers are then directed to the articles but are told that they "are not official Church positions or statements." See <http://www.lds.org/newsroom/mistakes/0,15331,3885-1-18078,00.html> (accessed 24 August 2005).

10. For a more thorough discussion of apologetic arguments that rely on major reinterpretations of the Book of Mormon, see Southerton, 160–65, 192–98. For an examination of apologetic arguments that give new meaning to the term "Lamanite," see Brent L. Metcalfe, "Reinventing Lamanite Identity," *SUNSTONE* (March 2004), 20–25.

11. Writing in the 1950s, Nibley asserts that Asia was essentially unpopulated when the Jaredites migrated across the steppes approximately 4,000 years ago. There is now abundant evidence that the Siberian steppe was inhabited more than 20,000 years ago, and substantial human settlements have been found from that time period. See Ted Goebel, "Pleistocene Human Colonization and Peopling of the Americas: An Ecological Approach," *Evolutionary Anthropology* 8 (1999): 208–26. The earliest evidence of farming comes from Asia, where it appears about 10,000 years ago, and the earliest pottery was produced in Asia approximately 15,000 years ago. See Gary W. Crawford and Chen Shen, "The Origins of Rice Agriculture: Recent Progress in East Asia," *Antiquity* 72 (1998): 858–66, and Kwang-Chih Chang, *The Archaeology of Ancient China*, 4th ed. (New Haven: Yale University Press, 1986). See also Yaroslav V. Kuzmin, ed., "The Nature of the Transition from the Palaeolithic to the Neolithic in East Asia and the Pacific," which is a special issue of *Review of Archaeology* 24 (2003).

12. Southerton, 91–94.

13. Most of the leaders and many rank and file members of the Community of Christ doubt the historicity of the Book of Mormon. While still part of the canon, it is not revered as highly as it once was. See William D. Russell, "The LDS Church and Community of Christ: Clearer Differences, Closer Friends," *Dialogue: A Journal of Mormon Thought* 36 (Winter 2003): 177–90.

14. As I see it, part of the shortsightedness of this approach comes from advocates counting on a certain "fundamentalism" in Mormon ranks. For the most part, Latter-day Saints still prefer to divide the world up into straightforward, black and white categories, recognizing little "gray." Given this tendency, many apologists have realized that it doesn't take much for them to persuade their audience that they and their approach are "good" whereas critics or those who don't believe the Book of Mormon is historical are "evil." Hence they have framed the discussion that way. But isn't the matter far less clear cut than this? Wouldn't dismissing prophetic authority on the Book of Mormon and overlooking members' spiritual convictions about Lamanite ancestry be gray areas?

sented at the 3rd Annual Mormon Apologetics Conference, Foundation for Apologetic Information and Research, <http://www.fairlds.org>.

4. Quinn cites an article, Maere Reidla, et al., "Origin and Diffusion of mtDNA Haplogroup X," *American Journal of Human Genetics* 73 (2003): 1178–90, which Quinn claims, says that about 7 percent of DNA from indigenous people of the Western Hemisphere matches DNA collected from North Africa and the Middle East. The article in question, which focuses on global X lineages, does not make this claim. Instead, it argues that Native American X lineages arrived in the New World no later than 11,000 years ago and shared a common ancestor with Old World X lineages no later than 17,600 years ago.

5. Cláudia L. Dornelles, et al., "Is Haplogroup X Present in Extant South American Indians?" *American Journal of Physical Anthropology*, forthcoming; published online at "Research Articles," Wiley InterScience, <http://www3.interscience.wiley.com/cgi-bin/abstract/109861152/ABSTRACT> (accessed 28 April 2004).

6. William W. Hauswirth, et al., "Inter- and Intra-population Studies of Ancient Humans," *Experientia* 50 (1994): 585–91; Anne C. Stone and Mark Stoneking, "MtDNA Analysis of a Prehistoric Oneota Population: Implications for the Peopling of the New World," *American Journal of Human Genetics* 62 (1998): 1153–70.