Earl M. Wunderli is a retired attorney who has presented at the Sunstone Symposium, published in Dialogue: A Journal of Mormon Thought, and now has completed a major work. Based upon years of research, An Imperfect Book: What the Book of Mormon Tells Us about Itself is a manifesto of sorts for his rejection of the Book of Mormon as “a literal history of ancient America” (328). Beginning with an overview of the Book of Mormon, he outlines examples of what he feels are mistakes in the text and indications that it is a modern forgery by Joseph Smith. The most inventive part of An Imperfect Book is chapter 3, in which Wunderli argues that the usage of words and phrases in the Book of Mormon shows it to be the work of a single individual. After some initial observations on the questions Wunderli poses about anachronisms, we focus on evaluating his evidence for single authorship.

1. Mormon 8:17, emphasis added.
Alleged Anachronisms

“Throughout my study of the Book of Mormon,” writes the author, “I have been surprised by the anachronisms others before me have identified” (322). None of these issues are new; others have addressed them in the past. These include references in the text to Jews, steel, cimeters, silk, synagogues, and horses (36). While Wunderli views these as problematic, it is not always clear why others should agree. We will deal here briefly with a few of these topics; longer responses have in many cases been written to each of these points, if readers wish to consult them.

For example, we find nothing inconsistent about Nephi’s use of the term Jew. By the time of the divided kingdom, “the term ‘Yehudi’ applied to all residents of the Southern Kingdom, irrespective of their tribal status.” The translators of the King James Version of the Bible saw nothing wrong in rendering the term Jew in passages describing the last days of Judah, including within the book of Jeremiah, which was written by Lehi’s contemporary (2 Kgs. 16:6; 18:26, 28; 25:25; Isa. 36:11, 13; Jer. 32:12; 38:19; 40:11–12, 15; 41:3; 44:1; 52:28). Nephi says he has charity for the Jew and adds, “I say Jew, because I mean them from whence I came” (2 Ne. 33:8). The author finds this wording “jarring” (93), but the phrase makes sense in context. Nephi had been a Jew politically, but his ancestors were of Manasseh with roots in the Northern Kingdom (1 Ne. 6:2; Alma 10:3). The fact that the Jerusalem elite had tried to kill him and his family, forcing them to flee their home, makes Nephi’s language understandable.

The allegation of anachronism in the translation of a text sometimes later proves to be misguided based on unexpected new discoveries. Wunderli recycles old concerns about the use of the word steel. True, Nephi’s reference to Laban’s sword of “most precious steel” was once considered ridiculous, but the subsequent discovery of a meter-long steel sword at the ancient site of Jericho dating to the time of King Josiah, another of Lehi’s contemporaries, put Nephi’s description in a

5. Eber D. Howe, Mormonsim Unvailed [sic]: or, a Faithful Account of That Singular Imposition and Delusion, from Its Rise to the Present Time (Painesville, Ohio: By the author, 1834), 25–26.
new light. Similarly, references in the text to “cimeters,” or scimitars, which Wunderli sees as problematic, are no longer so. Historians have revealed that scimitars were known in the ancient Near East from at least 2000 B.C. The pre-Columbian repertoire of weapons in Mesoamerica also included curved swords inset with sharp obsidian blades, as can be seen in pre-Columbian art. These weapons appear to have had a long history dating back to Olmec times.

Similarly, Ezekiel refers to a substance rendered silk in our King James Bible and several other translations (Ezek. 16:10, 16). Some translators, influenced by the assumption that silk could not have been known in Bible lands so early, have rendered it otherwise. Fragments of silk textiles, however, have now been found in Eastern Turkey dating to 750 B.C., well before Ezekiel’s time. Besides, Book of Mormon references to silk, as John Sorenson and others have pointed out, need not refer to the fiber spun by the silk moth; they may simply refer to something silk-like or resembling silk in softness or texture. Pre-Columbian Mesoamerica produced a number of silk-like fabrics.


As for the word synagogue, some of what An Imperfect Book characterizes as mistakes are actually matters of vigorous scholarly debate. Why need one conclude that these are a problem for the Book of Mormon? The origins of the synagogue are unknown and may never be fully determined.\(^\text{11}\) What we do have are different competing theories. Many scholars believe the institution, as it later came to be known, arose following the Babylonian exile, but others argue that it had its origins in pre-exilic times,\(^\text{12}\) in which case Book of Mormon knowledge of some form of synagogue makes sense.\(^\text{13}\)

The author ignores or is perhaps unaware of important critiques of his work and the issues he discusses. In An Imperfect Book, he provides a truncated version of his critique of Book of Mormon geography from an earlier Dialogue article (254–67)\(^\text{14}\) but does not address Brant Gardner’s thoughtful critique of that article.\(^\text{15}\) He insists that the text

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Reviewing Wunderli’s An Imperfect Book requires readers to see Native American peoples as exclusive descend- dants of Book of Mormon peoples (267–78) and asserts that defenders of the Book of Mormon “have found little evidence of other people” in the Book of Mormon text. This claim, however, overlooks relevant literature on that matter. Knowing of possible reconciliations would probably be of interest to most readers.

Neuropathologist M. Gary Hadfield has noted that the account of the decapitation of Shiz in Ether 15:30–31 seems to describe a classic example of extensor decerebrate rigidity. Wunderli dismisses this explanation as “the stuff of fiction” (318). Oddly, he never names Dr. Hadfield, nor cites his published study, which both John Welch and Daniel Peterson have referenced (225–26). He wonders, in a case of decerebrate rigidity, “whether Shiz’s gasping for breath would also be plausible” (226). Hadfield, an authority on such cases, has explained the following:

The blood pouring into his trachea would help enhance the eerie sound of “struggling for breath.” For just as brainstem reflex activity would force the extensor muscles in Shiz’s extremities to contract and elevate his frame, it would also cause his rib cage to expand and contract automatically, as it does in all of us when we are sleeping, or not trying to control our breathing, which is most of the time. This unconscious respiratory reflex is controlled by the lower brainstem.

The author of An Imperfect Book argues that the documentary hypothesis contradicts what the Book of Mormon suggests about the compilation of the Bible. It would be wrong, he says, “to think that the documentary ‘hypothesis’ is not accepted as fact” (79–80), and he dismisses an appeal to the Book of Mormon as evidence against it as circular reasoning (81–82). We do not know exactly what version of the five books of Moses was found on the plates of brass, but the Book of Mormon suggests that much of what has been assumed about the Bible and its compilation may be inconclusive if not incorrect. The author

sees this as a problem. Others might see it as an incentive to conduct further research on the question. For instance, observations by Kenneth Kitchen are worth noting:

The basic fact is that there is no objective, independent evidence for any of these four compositions (or for any variant of them) anywhere outside the pages of our existing Hebrew Bible. . . . This very simple fact needs to be stressed. Our resourceful biblicists are not sitting on some store of papyri or parchment that contain any such works. The Dead Sea Scrolls show no sign of them whatever; stubbornly, they know only of the canonical works that we have, and of commentaries and ‘romances’ (e.g., the Genesis Apocryphon) based upon them. Modern guesswork, as we all know, is often extraordinarily and breathtakingly clever and ingenious—and one can only reverently take one’s hat off to it all, in respectful amazement, sometimes. But . . . it does not constitute fact, and cannot substitute for it. I might choose to dream up a theory that the Ramesside kings of Egypt also once built pyramids in Egypt, twice as big as the Great Pyramid. But absolutely nobody is going to believe me unless I can produce some tangible, material evidence in its favor. And we require, likewise, some kind of clear, material evidence for a J, E, D, or a P or an H, from outside of the extant Hebrew Bible. The standards of proof among biblical scholars fall massively and woefully short of the high standards that professional Orientalists and archaeologists are long accustomed to, and have a right to demand. Some MSS, please! If an excavation tomorrow produced a substantial chunk of a scroll that indubitably contained a copy of precisely J or E, and found in a clear, datable stratigraphic context, then I would welcome it with open arms and incorporate it into my overall appreciation of the history of the Hebrew Bible. But not just as unsubstantiated guesswork out of somebody’s head.19

In a recent monumental and very significant work, Kitchen and Lawrence compiled and analyzed over one hundred ancient Near Eastern documents (treaties, collections of laws, and covenants) spanning three thousand years. They found “very clear affinities” in the contexts of Exodus, Leviticus, Deuteronomy, Joshua, and the legal material from the third and second millennium BC, as well as treaties from the fourteenth and thirteenth centuries BC. In contrast to these earlier materials, links between these biblical materials and documents from the

first millennium materials were “few and banal.” They allow for the possible origins of much earlier versions of those texts, and would seem consistent with what the Book of Mormon suggests.

The theory of multiple authorship of Isaiah, though widely believed, has likewise never been proven, and there are good reasons to question its usefulness as an ironclad theory. The oldest manuscripts of Isaiah date hundreds of years after the time he prophesied, and none of them support the theoretical division first proposed by nineteenth-century scholars. Latter-day students of the Book of Mormon have noted that while Nephite prophets cite portions of early Isaiah (Isa. 2–14, 29) and “Second Isaiah” (Isa. 40–55), they do not quote block texts from “Trito-Isaiah” (Isa. 56–66). This could be coincidental, but it might be interpreted as an indication that perhaps parts of Isaiah were not on the plates of brass. Richard Coggins notes, “A great deal of recent study of Isaiah renders the use of the term ‘Deutero-Isaiah’ questionable.” The proposed Babylonian exile setting for Isaiah 40–55 is increasingly seen as problematic for the theory.

We need to remember that though the existence of a prophet conventionally identified as ‘Deutero-Isaiah’ among a group of exiles in Babylon in the 540s BCE has come to be taken for granted, the onus of proof still remains with those who have argued in that sense. There is no external evidence to support the proposal. And it does appear that the readings of the evidence here briefly outlined render our knowledge of


the historical situation of that period much less certain than we have supposed.  

This unsettled issue is much more complex than it may appear.

**Single or Multiple Authorship**

Turning now to our main investigation, “defenders of the Book of Mormon,” the author observes, “believe the book is exactly what it purports to be, a history written by several men. Critics believe the Book is not authentic history and that just one person, Joseph Smith, wrote the entire text.” If the Book of Mormon is what it purports to be, he argues, differences in the vocabularies of these purported writers should be detectable (97). For those who reject Joseph Smith’s account of the origin of the Book of Mormon, the issue of single or multiple authorship has been a controversial one. In 1831, Alexander Campbell claimed, “The book professes to be written at intervals and by different persons during the long period of 1020 years. And yet for uniformity of style, there never was a book more evidently written by one set of fingers, nor more certainly conceived in one cranium . . . than this same book.”

Other writers have argued that the Book of Mormon was a composite of the writings of Sidney Rigdon and a would-be novelist named Solomon Spalding, a theory that persists among some even today. Most

27. E. D. Howe, whose book *Mormonism Unvailed* (1834) introduced the Spalding-Rigdon authorship theory, reflects confusion or inconsistency when he claims, on one hand, “that no one can be left in doubt in identifying the whole [Book of Mormon] with one individual author” (23) and that it “was framed and written by the same individual hand” (56), while also claiming that it was “the joint production of Solomon Spalding and some other designing knave,” namely Rigdon (288–90, emphasis added).
contemporary critics, however, pay little attention to the distinctions between authors suggested in the text and tend to see Joseph Smith as the sole author.

Latter-day Saint readers of the Book of Mormon have noted distinctions in style that seem consistent with the authors identified in the text. For example, John Tanner argued that Jacob, the brother of Nephi, had a particular style that contrasts sharply with that of other writers and that this would be consistent with the events of his life as described in the account. Tanner has noted several significant findings. (1) Words such as *anxiety*, *grieve*, and *tender* are found with disproportionate frequency in Jacob’s writings. Half of the references to *anxiety* in the Book of Mormon are found in Jacob and more than two thirds of the references to *grieve* and *tender* are found there. (2) Jacob is the only person to use the words *delicate*, *loathsome*, and *contempt*. (3) Jacob is the only Nephite writer to use the word *wound* in an emotional rather than a physical sense. (4) Only Jacob uses the word *pierce* exclusively in a spiritual sense. (5) No other Nephite writer uses the words *dread* and *lonesome*. (6) He uses the word *reality* in connection with the phrase “things as they really are” and is the only Book of Mormon writer to do so (Jacob 4:13). (7) Jacob’s writings express a certain vividness of description that seems peculiar to him. (8) A distinction of style between the farewells of Jacob and Nephi is also noticeable.

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In another interesting study, Roger Keller examined the use of content words by Book of Mormon writers. He found that Mormon’s usage was distinct from others’ in significant ways. These include (1) Mormon’s use of the word *command* to mean leadership, (2) his use of the word *earth* to refer to the ground, and (3) Mormon’s almost exclusive use of directional language in connection with the land. “He is the geographer par excellence.” In contrast to other writers in the record, Mormon “has almost no emphasis in the theological arena.” Moroni speaks of the land as one of promise and inheritance, while his father focuses on the land “as a geographic, and often localized, entity.”

Grant Hardy has observed that Mormon rarely speaks of war in a figurative or metaphorical sense. Mormon is not a visionary and does not reinterpret scripture as Nephi does. These and other elements, according to some readers, seem to set him apart from other writers in the Nephite text. Recent research by John Hilton also highlights the intertextual complexity of the book. A separate approach is exemplified in the work of other scholars who have studied the use of noncontextual words in the Book of Mormon text. We have outlined the history of this approach elsewhere. Such studies indicate a diversity of style that is consistent with the idea of multiple writers behind the English text.

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35. Grant Hardy, *Understanding the Book of Mormon*, 84.
In chapter 3 of *An Imperfect Book*, Wunderli discusses the frequencies of words and phrases for several major authors in the Book of Mormon and concludes that Joseph Smith wrote the whole book. However, he describes mostly grammatical uses of words and provides only raw word counts and summaries to make comparisons. Statistical analyses today do not rely on these approaches.

The following are six more appropriate and relevant statistical methods and conclusions, each contrasted with the author’s methods and conclusions. When these methods are utilized, it becomes clear that the methods used in *An Imperfect Book* are deficient, that its conclusions are misleading, and that the evidence actually supports the assertion that the Book of Mormon is the product of multiple authors.

**Method 1: Use standardized frequencies, adjusting for total words written by an author, rather than raw counts of word usage**

For an apples-to-apples comparison of word usage, researchers must standardize all word counts to a common base rather than simply comparing the number of words that come from texts of different sizes. An analogy that illustrates this point is as follows: A rare disease kills fifty people in Dallas, Texas, and fifty people in Billings, Montana. Would the Centers for Disease Control use raw counts to conclude that the two cities have the same health status? They would not. Dallas’s population is about 1,250,000, and Billings’s is about 100,000. When looking at these deaths as standardized frequencies—deaths per hundred thousand people—Dallas would have only four deaths per hundred thousand and Billings would have fifty deaths per hundred thousand. This is a very large difference. Standardized frequencies are the most appropriate measure for comparing diseases, and the same applies to word usage.

Wunderli uses raw counts of *power, faith, blood, destruction, suffer,* and *miracles* (142–43) to assert that “these data do not show affinity on Moroni’s part for these six words over and above their usage by Mormon.” Figure 1 shows his data in chart form.

When obtained from unstandardized raw word counts as shown in figure 1, the data suggests that there is not much of a difference between the word usage of Moroni and Mormon.

Using Wunderli’s counts of total words, Mormon wrote 170,783 words and Moroni wrote 26,016 words (98). Standardizing the counts for each author to occurrences per hundred thousand words, we have the apples-to-apples comparison shown in figure 2.
Thus, when standardized, these word counts run contrary to Wunderli’s assertion. Moroni’s affinity for these six words is five to twenty-six times greater than Mormon’s.

**Method 2: For tests of hypotheses, use statistical procedures like analysis of variance, rather than just summary statistics, to make inferences**

Compelling inferences must be based on more than summary descriptive statistics. There are well-known procedures for making inferences using statistical tests of hypotheses, yet Wunderli regrettably uses none.
of these. A fundamental concept of statistical hypothesis testing that provides an objective basis for drawing conclusions about data is to compare differences among groups to the variation within those groups.\textsuperscript{38} Such statistical methods are well established and have been used over the last century in medicine, agriculture, manufacturing, and technology. These and other fields have relied heavily on statistical hypothesis testing to determine whether a proposed change actually creates a better medicine, crop, or product, for example. Similarly, statistical tests can detect differences that exist between authors based on differences in frequencies of word usage.

To analyze variance, we can break each Book of Mormon author’s writings into roughly 2,000-word blocks and calculate standardized frequencies of word usage within each block. Then we can use these frequencies to obtain measures of variation within each author. We then compare the variation among authors to the variation within each author. If the former is large compared to the latter, then there is statistical evidence of differences between authors.

Wunderli picked twenty-seven “idiomatic” words (97–115) to assert that the Book of Mormon was not written by multiple authors but by one author, Joseph Smith. Then he analyzed the use of these words with a simplistic descriptive method and found no significant difference among the writing of the different authors in any of these twenty-seven cases. When we performed analysis of variance for each of Wunderli’s twenty-seven words to see if there was evidence of differences between Nephi, Jacob, Mormon, and Moroni, we found that seven of the words actually show a statistically significant difference between authors.\textsuperscript{39} These are wherefore, therefore, O, thus, hearken, now, and concerning. Figure 3 shows the strength of evidence for a statistically significant difference across all twenty-seven words on Wunderli’s list.\textsuperscript{40} The red line

\textsuperscript{38} Two examples are the t-test, which compares the means of two groups, and analysis of variance, which compares the means of more than two groups. We used analysis of variance to test the mean usage of noncontextual words among four authors.

\textsuperscript{39} Even though the assumptions of the analysis of variance model (normality and equal variance) are not strictly met for the word frequency data, when using the robust nonparametric Kruskal-Wallis method, the results are virtually unchanged. Consequently, the requirements are sufficiently met for the analysis of variance results to be useful.

\textsuperscript{40} Strength of evidence = $1 / \text{p-value}$. The p-value is a measure of how likely we are to find the differences we found or even greater differences, if the mean
is the threshold above which there is sufficient evidence for concluding a difference probably exists between authors with respect to a word.

If Wunderli’s claim of a single author were true, the chance of seeing seven or more such significant results would be extremely small. Therefore, contrary to Wunderli’s claims, the evidence argues strongly for multiple authors.

![Figure 3. Strength of Evidence of Differences between Nephi, Jacob, Mormon and Moroni. The difference between the four major Book of Mormon authors is seen clearly in seven of Wunderli’s twenty-seven words. The strength of evidence for a word exceeding the threshold (the red line) indicates sufficient evidence of a statistical difference.](image)

Method 3: Use the truly distinguishing words and analyze them simultaneously rather than one by one

Statisticians can analyze many variables simultaneously, called the multivariate approach, or one variable at a time, called the univariate approach. Multivariate approaches are more revealing; a univariate approach can obscure differences, whereas a multivariate approach can better show both differences and similarities among variables when they exist. Of noncontextual usage rates for the authors were actually all equal. The lower the p-value, the stronger the evidence.

41. The threshold is conservatively adjusted for multiplicity of tests.
course, anyone can fail to see a difference if they choose words that do not show a difference using inappropriate analyses.

Applying a multivariate approach to Wunderli’s twenty-seven words and analyzing them all at once using discriminant analysis shows evidence of separate authors. Figure 4 shows the discriminant scores from the first and second discriminant functions.

The plot shows distinguishable groups for the four authors with very little overlap. In fact, 96 percent of the seventy-four blocks of text were correctly classified to their claimed authors. Thus Wunderli’s list of twenty-seven mostly noncontextual words turns out to differentiate between the Book of Mormon authors—when a multivariate analysis is applied, as seen in figure 4.

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42. Discriminant analysis takes groups of items each measured in multiple dimensions and finds the best discriminant functions to categorize items by group. In this case, there are four groups (one for each author) and twenty-seven dimensions (one dimension for each word). Since using robust nonparametric methods in all other analyses in this paper shows virtually the same results as the parametric methods, the requirements for discriminant analysis (normality and equal covariance) are deemed sufficiently met for its use.
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Wunderli’s computations also failed to consider many noncontextual words that could more clearly show separations. Performing a stepwise discriminant analysis with an augmented list of noncontextual words produces the plot shown in figure 5.

The plot shows complete separation between Nephi, Jacob, Mormon, and Moroni, with 100 percent correct classification. The distances between authors (between clusters) are much larger than the variations within each author (within clusters). The stepwise procedure that we used selects the most discriminating set of noncontextual words. In this case, twenty-six words were selected, which include only three from Wunderli’s list: wherefore, O, and insomuch. The rest of Wunderli’s

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43. Stepwise discriminant analysis starts with a candidate set of variables and selects the most discriminating variable between groups of items. Then it finds the next variable that in combination with the first provides the largest increase in discrimination. The process continues until selecting another candidate variable no longer helps discriminate between the groups. The first two discriminant functions can be used to create a two-dimensional view of items categorized by group.

44. The twenty-six words in order of stepwise selection are: wherefore, I, your, has, may, nay, my, why, do, are, O, until, will, language, without, the phrase
words do not add discriminating power beyond those selected by the stepwise procedure. Despite Wunderli’s assertions, this evidence shows a clear separation of authors.

**Method 4: Use methods that lead to valid conclusions when applied in known situations**

Wunderli discusses nine “recognizably biblical” words that he claims distinguish between “two Jesuses,” one he calls “the biblical Jesus” and the other he calls “the Book of Mormon Jesus” (102–3). The words are *behold, cast, even, forth, hearken, lest, O, wo/woe*, and *yea*. He sees differences in raw counts for these words and says, “The use or non-use of these words make the two Jesuses sound like two distinct individuals.” Later, he uses others of his twenty-seven words to make similar claims.

The results of t-tests for comparing Jesus’s use of the twenty-seven words in 3 Nephi to his combined use of them in Matthew, Mark, Luke, and John are shown in figure 6 below. The strength of evidence is shown for each comparison. The red line is the threshold for concluding a statistically significant difference between the “Book of Mormon Jesus” and the “biblical Jesus.” The nine “recognizably biblical” words are shown with asterisks.

If Wunderli’s suggestion of “two Jesuses” were true, we would expect more of these words to show statistically significant differences. But, as can be seen, only one word, *behold*, shows such a difference. For the other twenty-six words there is not enough evidence to conclude a difference between the Jesus in 3 Nephi and the Jesus in Mathew, Mark, Luke, and John. Compare figure 6 to figure 3. In figure 3, the total evidence for multiple authors of the Book of Mormon is many orders of magnitude stronger than the evidence for “two Jesuses.”

Even when we recognize that there is a statistical difference for the word *behold*, this data does not provide a sufficient basis to conclude that there are “two Jesuses.” Indeed, if Wunderli wants to claim that there are “two different Jesuses” based on this level of alleged distinction, then he must also agree that Nephi, Jacob, Mormon, and Moroni are four different authors.

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45. The robust nonparametric Mann-Whitney test gives virtually the same result. Therefore the requirements for using a t-test are sufficiently met to produce useful comparative results.
For comparison, we examined the use of the word *woe* in Jesus’s words in the four Gospels. In Matthew, Jesus uses it fourteen times and in Luke he uses it fifteen times, whereas in Mark, Jesus says it only twice and in John he does not say it at all. By Wunderli’s reasoning, he should have concluded that there are “two Jesuses” in the Bible: the “Matthew and Luke Jesus” and the “Mark and John Jesus.” Unless one is willing to accept that there are two Jesuses in the Bible, one cannot conclude that there is a “different” Jesus in the Book of Mormon.

Examine the three quotations of Jesus’s prayer in the Garden of Gethsemane, written by Matthew, Mark, and Luke, to further see the weakness in Wunderli’s reasoning. Figure 7 shows the words of Jesus’s prayer in Matthew 26:39, Mark 14:36, and Luke 22:42 aligned with each other.

The green highlighted words are the nine words common to all three authors in the same part of the quotation. The yellow highlighted words are the seven words shared by two writers at the same locations in the prayer. And the blue highlighted words are the twenty-two words used uniquely at similar locations in these accounts.

Because of the wording differences, if we applied Wunderli’s logic, we would need to conclude that this “sounds like” not two but three “distinct individuals.” Therefore, by his logic, the Bible testifies of three distinct Jesuses, each performing the same divine mission. If these small differences in wording in the Bible do not argue for three distinct Jesuses, then...
Reviewing Wunderli’s An Imperfect Book

the minor wording differences between Jesus in the Book of Mormon and Jesus in the Bible do not argue for a “different” Jesus in the Book of Mormon.

Wunderli implies that if there are “two Jesuses,” one in the Bible and one in the Book of Mormon, then the Book of Mormon Jesus must have been made up by Joseph Smith and the Book of Mormon must be a fabrication. But, as we have seen, this logic is flawed and results in assertions that would lead to a “three Jesuses” conclusion about the Bible. Are we to also conclude that Matthew, Mark, and Luke are one person, or that one or two of them fabricated their stories? We assume that Wunderli and others would not make such a claim based on such statistical computations.

Method 5: Use a standard linguistic measure of “vocabulary richness” rather than the raw number of words used uniquely by an author one, two, or three times

Because one author may use an extensive vocabulary whereas another may not, measuring the richness and breadth of vocabulary is one way to distinguish among authors. One standard measure of vocabulary richness generally accepted by analysts is called Yule’s K. It takes into

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**Figure 7.** Jesus’s Prayer in the Garden of Gethsemane as Quoted by Matthew, Mark, and Luke. Twenty-two words (in blue) are unique to an author. Only nine (in green) are shared by all three and only seven (in yellow) are shared by two. So, by Wunderli’s reasoning that “the use or nonuse of these words make the . . . Jesuses sound like . . . distinct individuals,” logic would require him to conclude that there are three different Jesuses in the New Testament.
account all the words used in a text and the frequencies with which the author used each word. Wunderli, however, uses simple word counts and focuses on words that are uniquely used by an author one, two, or three times to measure vocabulary richness (122–29). He claims that the parts of the Book of Mormon that are not biblical quotes have a consistently lower richness than the Bible, and so the Book of Mormon must be the product of only one author. As shown below, Yule’s K is a more informative measure of vocabulary richness and does not adequately support his claim.

Calculating K for 2,000-word blocks for each of the four major Book of Mormon authors and for the four Gospel writers in the Bible and calculating the average K for each author gives the results shown in figure 8.

There is a statistically significant difference between the average Book of Mormon K, 196, and the average Bible K, 146, for these authors. The King James Gospels have about a 25 percent lower average K, indicating richer vocabulary. Wunderli might take this to indicate a single author for the Book of Mormon. Note, however, that the King James Version of the Bible is the translation product of fifty-four learned men, who were also instructed by King James “to secure the suggestions of all competent persons,” and who worked for more than four years using numerous previous transcriptions and translations. In contrast, the major part of the Book of Mormon considered by Wunderli is the product of only one translator who completed the work in only three months. That the King James Version of the Bible is somewhat richer in vocabulary than the Book of Mormon is not evidence that the Book of Mormon has only a single author. It may just reflect that fifty-four or more translators together are superior to one translator in language variance.

46. Yule’s K is based on a weighted average of the number of times each word is used by an author relative to the total number of words in a text and is scaled to a range from zero to 10,000, with lower Ks indicating greater vocabulary richness. For example, if most of the words in a text are each used only once, K will be closer to zero and indicate rich vocabulary (the author is using many different words). On the other hand, if there are only a few unique words, each used many times in a text, K will be closer to 10,000, reflecting a less rich vocabulary.

47. The results are the same with parametric and nonparametric analyses.

Applying analysis of variance to each group separately shows that Matthew, Mark, Luke, and John have discernibly different average K’s in the Bible texts, and Nephi, Jacob, Mormon, and Moroni also have discernibly different average K’s in the Book of Mormon texts. The magnitudes of the strength of evidence are 2.37 and 2.14, respectively, meaning they have about the same order of magnitude. Thus the evidence for multiple authors in the Book of Mormon is about as strong as the evidence for multiple authors in the Gospels, and differences in the vocabularies of the Book of Mormon writers are detectable.

**Method 6: Ascribe reasonable talents and abilities to mortals and do not limit the abilities of God**

When we recognize from the discriminant analysis (Method 3) that the relative frequencies of twenty-six noncontextual words clearly distinguish the four main authors of the Book of Mormon, it is beyond reason to assert that Joseph Smith, or anyone for that matter, could consciously adjust his usage of so many noncontextual words in a manner consistent within many blocks of text for a given author, but differently between

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49. The Kruskal-Wallis nonparametric test gives virtually the same result, again indicating that analysis of variance can be used to make these comparisons.
blocks of text for different authors. Besides, in Joseph Smith’s day no one knew that noncontextual word frequencies could be used to identify a writer’s style. If Joseph consciously did this, he should be deemed one of the world’s greatest literary geniuses of all time. Such facts require of Joseph Smith talents that would be unexpected if he were relying exclusively on his own limited abilities. His resultant work product is consistent with his explanation that he was inspired of God.

As understood by Latter-day Saints and Christians alike, God knows all languages used by man, can readily switch between them, and can inspire words and terminology specifically tailored to his audience. Thus, even if there were more striking evidence of differences of words used by Jesus when speaking in the Holy Land as compared to speaking to the Nephites, it could simply be viewed as evidence of God’s infinite abilities to communicate with different groups of mortals.

Conclusion

Nephite prophets freely acknowledge possible imperfections in the text and its writers, but as the author of An Imperfect Book inadvertently demonstrates, not all alleged mistakes are what they first appear to be (1 Ne. 19:6; 2 Ne. 33:4; Jacob 4:18; Morm. 9:31; Ether 12:23–27). A careful analysis shows that Wunderli’s methods are statistically inadequate, his word list ill chosen, and his logic inconsistent. Consequently, his assertions are unfounded. In contrast, by using appropriate statistical techniques and a properly chosen set of words, the evidence argues strongly in favor of multiple authors in the Book of Mormon text. Of course such evidence does not prove that the Book of Mormon is true, but it does suggest that some long-held objections to the Book of Mormon are baseless. Moroni tells us, “And whoso receiveth this record, and shall not condemn it because of the imperfections which are in it, the same shall know of greater things than these” (Morm. 8:12). Those who cherish the value of faith and who are willing to dig a little deeper may be surprised by what they find.

Matthew Roper is Research Associate for the Laura F. Willes Center for Book of Mormon Studies, a part of the Maxwell Institute. He earned his MA from Brigham Young University. Roper compiled the Harold B. Lee Library’s electronic collection 19th-Century Publications about the Book of Mormon (1829–1844). His current research and publication efforts focus on questions of Book
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of Mormon authorship, historical and contemporary interpretations, and the intellectual history of Latter-day Saint scripture.

Paul Fields is a consultant specializing in research methods and statistical analysis. He earned his PhD from Pennsylvania State University. His recent publications include “Stylometric Analyses of the Book of Mormon: A Short History” (2012) and “Joseph Smith, the Times and Seasons, and Central American Ruins” (2013) in the Journal of Book of Mormon and Other Restoration Scripture (vols. 21:1 and 22:2 respectively).

Larry Bassist is a statistical analyst, consultant, and professional development trainer. He earned a master degree in statistics from Brigham Young University and has worked many years in applied statistics. His current research interests center on stylometric analysis of the Book of Mormon and other LDS historical documents.