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### Wordprinting Isaiah and the Book of Mormon

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# Wordprinting Isaiah and the Book of Mormon

John L. Hilton

*Measuring peculiar characteristics of Book of Mormon authors has produced interesting findings, but external constraints in Isaiah's texts preclude statistically conclusive wordprints.*



The use of a tool of statistical analysis called wordprinting gives us some limited but interesting information about the authorship of the writings of Isaiah found in both the King James Version (KJV) of the Old Testament and the Book of Mormon. Comparing wordprints of these Isaiah texts with wordprints of some other texts in the Bible and Book of Mormon also reveals some interesting information.

Wordprinting is based on what appears to be a normal human phenomenon.<sup>1</sup> Without being consciously aware of it, when we speak freely or write each of us uses a different set of noncontextual words, such as *and, the, of, in, that, with,* and so on. The rest of our vocabulary is heavily influenced by context—by the subject under discussion, by the size and nature of our audience, and by many other such contextual factors. But our use of these noncontextual words remains relatively constant as long as we are not constrained by other factors, such as the need to quote another person or to fit our words into a formal structure like poetry. These personal free flow writing patterns of using noncontextual words tend to be stable throughout a person's life.

Wordprinting can be used to determine whether a particular author wrote a particular block of text. This is done by comparing the wordprint of the unascribed text with wordprints from other texts known to have been written by the suspected author and with wordprints of texts known

to have been written by various other authors.<sup>2</sup> If the wordprint for the unascribed text differs from the wordprints of texts known to have been written by the suspected author more than the wordprints of the other known texts vary among themselves, then this suspected author did not likely write the unascribed text. But if the use of noncontextual words varies the same or less between the known and unknown texts as that use varies among the known texts, then the author of the known texts is a good candidate for the author of the unascribed text. That author becomes an even better candidate if the wordprints of his known texts match the wordprint of the unknown text better than do the wordprints of the writings of other possible authors.

### **Wordprint Comparisons between Old Testament and Book of Mormon Texts**

One technique used in wordprinting, called text calibration, provides a useful measure of how alike texts are that have been translated from another language into English. If the original texts were written in the same language at about the same time and if the translation process is quite literal, wordprinting their English translations will produce text-calibration values that will form a recognizable pattern. Other texts from the same original language and time that are translated literally will consistently produce the same pattern.<sup>3</sup>

Using text calibration to compare KJV Old Testament English texts translated from the biblical Hebrew with texts from the English Book of Mormon produces some interesting conclusions. The first generation of Book of Mormon record keepers wrote about 95 percent of the small plates. The text-calibration values of their writings align very closely

with the values from the KJV English prose of Jeremiah, 2 Kings, and 2 Chronicles, whose authors wrote in Hebrew around 600 B.C., the time when that first generation of Book of Mormon writers are described as leaving Jerusalem. On the other hand, the values from texts of later writers such as Alma, Mormon, and Moroni do not align at all with the values from Jeremiah and the other biblical texts. These Book of Mormon text-calibration measurements are consistent with the supposition that the original language in which the first generation's small plate authors wrote was the same as Jeremiah's Hebrew, while the original languages of Alma, Mormon, and Moroni were something different (see Mormon 9:32).<sup>4</sup>

### **Wordprinting Isaiah**

Some Bible scholars have argued that most of the words in the first forty chapters of Isaiah may have come from Isaiah—the son of Amoz who lived in the eighth century B.C. before the Babylonian exile—but they argue that the remaining twenty-six chapters must have been written after the exile by a second writer or by some combination of writers. Unfortunately, all present wordprinting tests cannot provide conclusive answers on the question of whether there was one or more than one writer for the book of Isaiah because of the surprisingly small amount of that book that was apparently written free from external constraints.

Most of the Isaiah text is written in poetry, which forced the author to change his noncontextual words and word order to fit the poetic form. Naturally, the wordprint of the poetic sections should not measure the same as the prose sections. Writing that has a poetic cadence can still be wordprinted with some success, however, if one compares the wordprint of the poetic section only to the wordprints of

similar poetic texts by known authors. Nevertheless, wordprint testing of texts written under such constraints is less sensitive in distinguishing different authors.

For example, when Shakespeare's poetic plays are tested with wordprint procedures, all his major plays are consistent within themselves and to each other, but they are clearly independent from all the other known playwrights of his day, including Ben Jonson and Christopher Marlowe, who have left similar poem plays to compare against. However, as these lengthy plays were tested, it was found that, because of their poetic nature, the sensitivity of the wordprints for distinguishing between authors was only about one-half of the sensitivity for wordprint testing between the texts of free-flow prose writers using the same sixteenth- or seventeenth-century Elizabethan English.

Not only do Isaiah's writings contain a large amount of poetry, they also contain extensive quotations from the word of the Lord. Once again this constraint on the writer's free choice of words presumably weakens the pattern of non-contextual word choices that usually creates a recognizable personal wordprint. Together, the quotations and poetry constitute nearly 85 percent of the book of Isaiah, making successful wordprinting difficult.

The present wordprints of the biblical text of Isaiah indicate a slight distinction between the first and second halves of the text. However, the small but measurable shift in pattern is not the change expected by proponents of multiple authorship for Isaiah, since it occurs much earlier—ten chapters earlier—than is expected by their theory. The shift does make it seem likely that at some time during the text's transmission, more than one editor, or nonliteral translator, or poet, or additional writer contributed to the extant text. But at the present time, we cannot say more than that, based on the wordprinting evidence.

## Notes

1. For a more detailed and technical explanation of wordprinting and of the findings summarized here, and a discussion of the development of much of the wordprint procedures, see John L. Hilton, "An Update of Wordprinting on the English Isaiah Texts and the Book of Mormon" (Provo, Utah: FARMS, 1996), originally presented at the FARMS conference on "Isaiah and the Book of Mormon," 20 May 1995; and John L. Hilton and Kenneth D. Jenkins "On Maximizing Author Identification by Measuring 5000 Word Texts" (Provo, Utah: FARMS, 1987).

2. For example, see the discussion of Samuel Johnson as the author of Rev. Dodds' prison sermon in Hilton and Jenkins, "Maximizing," 21, 23–4; see also Noel B. Reynolds and John L. Hilton, "Thomas Hobbes and Authorship of the *Horae Subsecivae*," *History of Political Thought* 14/3 (1993); and Noel B. Reynolds and John L. Hilton, "Wordprinting Francis Bacon," *1995 Joint International Conference ACH/ALLC*, University of California, Santa Barbara, 11–15 July 1995.

3. See Hilton, "An Update," for a more detailed and technical discussion of this technique.

4. For a report of wordprinting tests that examine Book of Mormon authorship questions more extensively, see John L. Hilton, "On Verifying Wordprint Studies: Book of Mormon Authorship," *BYU Studies* 30/3 (1990); and Hilton, "An Update."