



7-31-2000

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Stubbs, Brian (2000) "Was There Hebrew Language in Ancient America? An Interview with Brian Stubbs," *Journal of Book of Mormon Studies*: Vol. 9 : No. 2 , Article 9.

Available at: <https://scholarsarchive.byu.edu/jbms/vol9/iss2/9>

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**Title** Was There Hebrew Language in Ancient America? An Interview with Brian Stubbs

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**Reference** *Journal of Book of Mormon Studies* 9/2 (2000): 54-63, 83.

**ISSN** 1065-9366 (print), 2168-3158 (online)

**Abstract** In an interview with John L. Sorenson, linguist Brian Stubbs discusses the evidence he has used to establish that at least one language family in Mesoamerica is related to Semitic languages. Stubbs explains how his studies of Near Eastern languages, coupled with his studies of Uto-Aztecan, helped him find related word pairs in the two language families. The evidence for a link between Uto-Aztecan and Semitic languages, or even Egyptian or Arabic, is still tentative, although the evidence includes all the standard requirements of comparative or historical linguistic research: sound correspondences or consistent sound shifts, morphological correspondences, and a substantial lexicon consisting of as many as 1,000 words that exemplify those correspondences.

# WAS THERE HEBREW LANGUAGE IN ANCIENT AMERICA?

## AN INTERVIEW WITH BRIAN STUBBS

*A long-standing question of interest for students of the Book of Mormon is whether traces of Semitic or Egyptian language are preserved in New World languages. The following observations on this complex question are by Brian Stubbs, a specialist in Near Eastern and Native American languages who was interviewed by JBMS editor John L. Sorenson.*

### **How did you come to study the question of the connection between American and Near Eastern languages?**

Serving a Navajo-speaking mission sparked my interest in Native American origins and languages. In light of the Book of Mormon, I began studying Near Eastern languages, in addition to briefer looks at some in East Asia and scores of Native American languages throughout North and South America. Language similarities between the Americas and the Near East did not seem obvious, though I did find some language families that offered promising leads. I later earned an M.A. from the University of Utah in linguistics. That school had one of the strongest programs in the nation for Uto-Aztecan [hereafter UA] studies when Professors Wick Miller and Ray Freeze were there. UA was one of the language families in which I had noted what looked like possible Near Eastern ties. As I learned linguistic methodology and became better acquainted with both Near Eastern languages and UA linguistics, additional parallels emerged.

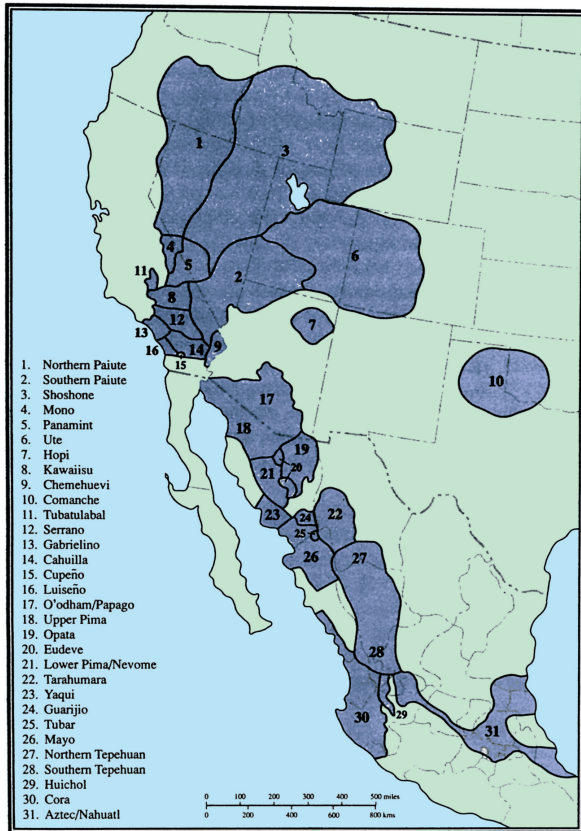
### **Your study has concentrated on the UA languages, but at the same time you have been studying languages of the Middle East, including Hebrew, Arabic, and Egyptian. Did you begin by assuming that these Old World and New World language groups are related to each other?**

The Book of Mormon certainly made me curious to know whether traces or evidences of Near Eastern languages might be discernible among New World languages. On the other hand, I was also aware of the possibility that all such evidence could have been obliterated. For example, outside of the British Isles, the Celtic languages that once domi-

nated much of continental Europe have nearly disappeared, except in some loanwords surviving in other European languages, even though Celtic ancestry and genes would be well represented in the mix that constitutes western European peoples today. So I did not assume anything in particular, but surmised that some Amerindian tongues might be recognizable as partly descended from or influenced by Near Eastern elements in fragmented, mixed, or diluted forms.

### **If Book of Mormon people spoke and wrote in a language related to Hebrew or Egyptian, where would you look for the descendants of those people?**

I began the search without any preconceived notion of most likely places, but looked at dozens of language families from Alaska to Tierra del Fuego. The Book of Mormon describes populous peoples inhabiting numerous cities. Wherever the Nephites were centered, they would likely have exerted important influence on surrounding communities. I also kept in mind that diffusions and offshoots into remote or less populated areas sometimes allow better preservation of a language than might be allowed by the heavier modification that can occur in highly populated areas. An example is Icelandic, which because of its isolation preserved Old Norse better than modern Norwegian did. In any case, there ought to be surviving indications of a former high level of civilization in the languages spoken by later peoples. Most of my research has focused on the languages in the family called Uto-Aztecan [see map on next page], for I have discovered that these languages contain data that show viable linguistic evidence of Hebrew/Near Eastern influences. Yet, as I look into other languages, I am increasingly convinced that Semitic influence has affected and permeated many groups besides UA speech communities.



## UTO-AZTECAN LANGUAGES

**Our readers may be generally familiar with the Semitic language family, which includes Arabic and Hebrew. But please describe the Uto-Aztec family better.**

Uto-Aztec is a family of about 30 languages that linguists have demonstrated to be related because they descended from a common parent language. The parent is now referred to as Proto-Uto-Aztec (PUA), much like Latin is the common parent language of Spanish, Portuguese, French, and Italian. Two broad internal groupings are Northern and Southern UA, each containing four branches. In the north, Hopi in Arizona and Tubatulabal in California are single-language branches; the other two northern branches are Takic, in southern California, and Numic, which spread from southern California throughout the Great Basin and includes the Ute and Paiute languages in Utah. Southern UA includes (from north to south) the Tepiman branch, consisting of Pima and Papago or O'odham in Arizona and others in Mexico. The Sonoran branch is spread along the coast and mountains of western Mexico, as are Cora and

Huichol, which form the Corachol branch. The various Nahuatl or Aztec dialects in central Mexico constitute the southernmost branch of UA.

### How does a linguist decide if two languages are related?

Any two languages can have a few similar words by pure chance. What is called the comparative method is the linguist's tool for eliminating chance similarities and determining with confidence whether two languages are historically—that is, genetically—related. This method consists of testing for three criteria. First, consistent sound correspondences must be established, for linguists have found that sounds change in consistent patterns in related languages; for example, German *tag* and English *day* are cognates (related words), as well as German *tür* and English *door*. So one rule about sound change in this case is that German initial *t* corresponds to English initial *d*.<sup>1</sup> Some general rules of sound change that occur in family after family help the linguist feel more confident about reconstructing original forms from the descendant words or cognates, although a certain amount of guesswork is always involved.

Second, related languages show parallels in specific structures of grammar and morphology, that is, in rules that govern sentence and word formation.<sup>2</sup> Third, a sizable lexicon (vocabulary list) should demonstrate these sound correspondences and grammatical parallels.

When consistent parallels of these sorts are extensively demonstrated, we can be confident that there was a sister-sister connection between the two tongues at some earlier time.

Divisions or branches within a family can be identified when a subset of languages show shared innovations that are independent of other branches in the language family. When enough parallels have been demonstrated, a family tree can be drawn. However, the parallels are not necessarily obvious. But the similarities will prove systematic, and language features that seem different on the surface may, in fact, be found to display compelling similarities.

### How many similarities are necessary to prove a genetic connection between languages?

It would be nice if the large number of parallels typical of Latin's descendant tongues was the rule, as

most of the vocabulary of Spanish, Portuguese, French, and Italian comes from Latin. However, most linguistic relationships are not as obvious as those in the Romance languages. When two languages share more than 10 percent of their lexicon, and the parallel words show systematic sound correspondences, that pair of tongues should catch a linguist's attention as serious contenders to have descended from a common ancestral language.

**Some people believe that linguists have already shown that some American Indian languages are derived from Hebrew. Is that so? Have linguists already done a lot of the kind of research you are talking about?**

Not really. Amateur efforts (mainly in the 19th century) led to some claims of connections between Amerindian and Semitic languages, but none of those speculations have proved acceptable, or even of interest, to qualified linguists. In fact, the lack of linguistic methodology in those early efforts had the opposite effect, callousing linguists against any proposals for connections between distant languages. The mere mention of a possible Hebrew-Amerindian tie would likely evoke a “roll of the eyes” or a “not-another-one-of-these” response from most professional linguists. No, no one has yet succeeded in demonstrating any Amerindian-Semitic connection to the satisfaction of the linguistic community. Furthermore, anyone trying to connect New World peoples and civilizations with the Old World risks accusations that he or she is a religious fanatic, pseudo-scientist, or racist who wants to downgrade the independent genius of American Indians. For those concerned about professional reputation, taking up an unpopular cause can definitely hurt their careers.

Besides the desire to avoid such negative labels, there are other reasons that conventional linguists have not dealt with the issue of interhemispheric language connections. First of all, there are not that many trained linguists actively doing historical research. Many earn their degree and then do something else for a living. Second, even among active researchers, a high percentage focus on or specialize in other aspects of linguistics—grammatical theory, language acquisition and teaching, psycholinguistic research, or sociolinguistics—instead of historical

linguistics, which deals with relationships between languages. Third, of the few active historical linguists in the world, most concentrate on a single language family or area; very few acquire sufficient familiarity with language families on different continents to be in a position to undertake interhemispheric research.

**Is it a reasonable scientific hypothesis, then, to posit the connection you are investigating?**

Yes—when the evidence becomes strong enough. Science requires that we go where the facts take us. Two hundred years ago, it was shocking for the average person to be told that English was part of the same language family as Sanskrit of India. But researchers accumulated so many strong parallels that it became clear that an Indo-European family of languages had once stretched halfway around the world.

Migration across an ocean poses bigger problems, of course, but science offers stunning surprises in every field. If the data provide solid results, we pursue them further. Bad ideas hit dead ends. Yet this UA-Near East case is becoming more convincing with each year of investigation.

**From a lexical point of view, what is the best evidence you have found for Semitic influence on UA?**

The following word pairs are a sample. (An asterisk signifies a hypothetical form in the parent language, a form that has been linguistically reconstructed from forms in the descendant languages.)

| <u>Hebrew/Semitic</u>         | <u>UA</u>   |
|-------------------------------|---|
| <i>baraq</i> ‘lightning’      | <i>berok</i> (derived from * <i>pīrok</i> ) ‘lightning’ |
| <i>šekem/šikm-</i> ‘shoulder’ | * <i>sikum/sika</i> ‘shoulder’                          |
| <i>kilyah/kolyah</i> ‘kidney’ | * <i>kali</i> ‘kidney’                                  |
| <i>mayim/meem</i> ‘water’     | <i>meme-t</i> ‘ocean’                                   |

The meanings are clearly the same, or near to it, while the sounds are recognizably similar and appear in the same order. However, the real strength of this case is not in a handful of words, but in the

fact that perhaps a *thousand* comparable similarities have been identified, in accordance with phonological rules not easily explained in a short article for general audiences.

The lexical evidence is fairly extensive but not enough to suggest that Hebrew was the sole ancestor of UA. The Near Eastern element in the UA lexicon may constitute 30 percent to 40 percent, which is significant, well above the 10 percent lower limit mentioned earlier, but not as high as Latin's descendants show.

### **So you are saying that in these word parallels you find evidence for consistent sound changes of the type linguists demand?**

Yes. A substantial number of primary sound correspondences are presented in my article in volume 5 of the *Journal of Book of Mormon Studies*.<sup>3</sup> Questions remain, of course, but that is the case for every established language family. Even in the great Indo-European family, which includes most European languages and whose basic sound changes were figured out long ago, many exceptions to the major rules existed. Many of the exceptions were later explained by discoveries of secondary phonological rules applying to special conditions or phonological environments. Nonetheless, anomalies still plague analysts looking at any language family.

### **What confirmation do you have of a UA-Semitic tie from patterns of grammar and word formation in the two families?**

First of all, Semitic grammar and UA grammar are very different from each other. Certain grammatical structures in Semitic are usually found as “fossilized,” or frozen, artifacts in UA. Nevertheless, many inactive traces of Semitic grammar are apparent in UA. Here are some interesting examples: Hebrew *ya-amiin-o* ‘he believes him/it’ has three morphemes that align perfectly with UA *\*yawamino* ‘to believe him/it’, which also accords with the sound correspondences (Hebrew aleph [ʔ] becomes UA *w*); and Hebrew *makteš* ‘grinding stone’, *-ktoš* ‘grind’ (imperfect), and *kataš/kitteš* ‘grind’ (perfect) align with UA *\*maʔta* ‘grinding stone’, *\*tus* ‘grind’ (with loss of *k* in a consonant cluster), and *Yq kitte* ‘grind flour’ and *Yq kittasu* ‘make into pieces’.<sup>4</sup> But the processes of change that produced these UA terms are “fossilized” in the

sense that no new UA terms are being formed along the same lines as once was the case.

Pronouns are important in establishing language ties because they are core, conservative elements of grammar. The whole system of reconstructed UA pronouns shows considerable correspondence in sound and structure to Semitic systems. Of the six standard pronominal slots (singular and plural of first, second, and third person), recognizably Hebrew-like forms occupy five of the six slots in UA languages. The only pronoun slot totally unknown to Semitic is UA first-person plural *\*tami* ‘we’. Even though Semitic morphology may be fossilized (non-productive) in UA, it is still possible to see a variety of Semitic morphological forms in UA words.<sup>5</sup>

### **How does all this compare with what linguists have established in the way of language relationships in other language families?**

It compares very well, and in fact this evidence is much stronger than for many ties that linguists have accepted. For instance, the Zuni language is considered connected with the Penutian family, and that link has found its way into most encyclopedias on the basis of much slimmer evidence than this UA-Semitic tie.

The evidence for the UA-Semitic link is still in the rough. But the data exist for producing a solid, professional treatment. Many details remain to be worked out, yet the evidence for a Semitic element in UA includes all the standard requirements of comparative or historical linguistic research: sound correspondences or consistent sound shifts, morphological correspondences, and a substantial lexicon of as many as 1,000 words that exemplify those correspondences.

Though I have not yet written a full linguistic treatment of the proposed UA-Semitic tie, my work strictly in UA has been substantive enough to make me one of the most active contributors to historical linguistic research in that family. To garner that kind of professional standing is essential if my propositions are to be taken seriously by other linguists. Besides publishing a half dozen articles on UA in professional journals<sup>6</sup> and presenting well-received papers at conferences, I am nearing completion of the largest book ever published on the UA language family.

## Tell us about how linguists look at genetic, or mother-to-daughter, descent of languages and how that is different from language mixing.

Genetic descent means that a single language, over time, develops into areal dialects; then with further time and decreased contact, those dialects eventually become distinct languages. Different patterns of change in different areas allow multiple languages to evolve directly from one common earlier language. For example, English, German, Dutch, Swedish, Danish, and Norwegian all have roots in Old Germanic, which is a branch of Indo-European. Those genetic roots can be seen in vocabulary, sound changes, and grammar.

Also common to language change is the borrowing of words (called “loanwords”) from surrounding tongues. For example, an original Germanic \**sk* had changed to *sh* in Old English but remained *sk* in North Germanic Scandinavian languages. Because English borrowed some of those words from North Germanic, modern English has pairs such as *shirt* and *skirt*, *ship* and *skipper*. The sound correspondences reveal the source from which the terms came. Words genetically descended from Old English show *sh*, while those borrowed from North Germanic show *sk*.<sup>7</sup> Though modern English has borrowed heavily from North Germanic, French, Latin, and Greek, its proper genetic descent is through West Germanic.

Beyond borrowing and beyond genetic descent, sometimes two speech communities merge in some sort of constant contact that requires, if they are going to communicate, a special speech medium with characteristics of both languages. Sometimes one or the other language may dominate the mixed relationship. Or a creole, or distinct hybrid, language may emerge, containing more or less equal contributions from both languages. English has been so heavily influenced by Latin languages, mainly Latin and Norman French, that some consider English a mixed language, although others do not. Whether called “mixed” or not, modern English has kept only 15 percent of the Old English vocabulary; the other 85 percent was lost primarily because new rival terms came in from neighboring languages.<sup>8</sup> While most of our basic words derive from Old English, about half the vocabulary in modern written English is Latin based, and perhaps 90 percent of the words in an unabridged dictionary would be from sources other than the original ancestor, Old English.

Some of the clearest examples of creole languages developed in colonial times when, for example, French rule was imposed on speakers of some native languages. In each situation, parts of the French were absorbed into the hybrid language. Sometimes the mixing can be said to have created a new language, called a creole (for example, in Haiti).

I believe such a process may explain the combination of Semitic and non-Semitic elements apparent in UA. Whether these differing elements are the result of the sudden rise of a distinct creole language or of gradual heavy influences over time, or both, I am not yet sure. But I do see language mixing as a huge factor in the prehistory of Amerindian languages. I believe this widespread multidimensional mixing has made Amerindian languages difficult to sort out genetically. It may also partially explain the variety of views and hypotheses offered to explain their relationships.

## What is your best guess about when Semitic and UA came into contact?

I can see either of two possible scenarios: (1) that UA was at its core Near Eastern but later was heavily influenced by non-Semitic (“native”) tongues, or (2) that UA began as the result of a creole or language mix in which Semitic was a significant to dominant component from the start. Four points lead me to that opinion. First, the Semitic elements appear prominently in all eight branches of UA. If a Semitic element had joined a non-Semitic UA base after the language family began dispersing, then we would expect that only some branches would show the Semitic influence while other branches would be free from the Near East influence. Second, since pronouns are usually one of the more stable features of language, more resistant to change, the fact that Near Eastern pronouns are prominent in five of the six slots mentioned earlier also speaks for the Near Eastern component being part of the beginnings of UA. Because English third-person plural pronouns—*they*, *their*, *them*—are Scandinavian replacements of Old English *hie*, *hiera*, and *him*,<sup>9</sup> the ratio of five of six slots of modern English pronouns being from Old English parallels what we find in UA, where five of six slots come from the Semitic.

Third, the fact that the sound changes or correspondences apply to most of the Semitic forms in all

branches of UA suggests Semitic involvement from the beginnings of PUA. The few lexical (word) exceptions to those rules may have come into UA later or may have been borrowed between branches. Many of such details remain to be worked out. Fourth, it appears that UA involves contributions from two different variants of Hebrew. Some Hebrew phonemes (basic sound units) show two sets of correspondences. That complicates the case for a presentation to linguists, but I can't help that. The data suggest the merger of two different strains of Hebrew, each with its own set of rules. The contrast between the mutually unintelligible languages of the Nephites and Mulekites naturally comes to mind, but we do not know that what happened with UA had anything to do with that particular historical relationship. Nevertheless, the fact that both Hebrew extracts appear in all branches, and for some terms in all 30 UA languages, suggests not only an original Semitic element in PUA, but possibly two such elements from the beginning of UA. For example, UA \**kwasi* 'boil, cook, ripen' (Hebrew *bašal* 'boil, ripen') and UA \**kwasiy* 'tail, penis, flesh' (Hebrew *basar* 'flesh, penis') show the change of Hebrew *b* > PUA \**kw* (the sign > means "became" or "changed to"), and they appear in all branches and nearly all the descendant UA languages. On the other hand, UA \**poow* 'road, path, way' (Hebrew *boo* 'coming, way') exemplifies Hebrew *b* > PUA \**p* and Hebrew ʔ > PUA \**w*, and this shift also appears in all 30 UA languages. Showing that same correspondence is UA \**pirok* 'lightning', which aligns with Hebrew *baraq* 'lightning'. The Semitic glottal stop similarly corresponds to both *w* (UA \**poow* 'road' above) and ʔ (glottal stop).

I hesitate to put a time frame on UA, for a number of reasons. One is that even though Uto-Aztecanists tend to throw around UA's "presumed" glottochronological time-depth of 5,000 years, many questions have been raised about the accuracy of glottochronological dating.<sup>10</sup> Isolation versus intense contact can skew—i.e., either slow or speed up—rates of change tremendously. The Old English of only 1,200 years ago has lost 85 percent of its vocabulary, leaving only 15 percent of the original Old English vocabulary intact a mere 1,000 years later.<sup>11</sup> Much of that change occurred rapidly during the intense contact of the three centuries of Norman French rule in England. So if I am seeing UA containing 30 percent Semitic, that is twice as much as

modern English has of Old English, even though the 2,600 years of a potential Lehi tie is more than twice as long as 1,200 years. In other words, UA may have retained Semitic four times better than modern English has retained Old English. So I do not see UA prehistory needing to be pushed back any further than 2,500 years necessarily. Furthermore, the rise of a sudden 50/50 mix of Semitic and some other language element(s) could easily make an actual time-depth of 2,500 years look like a glottochronological time-depth of 5,000 years. On the other hand, the Latin languages have preserved a much higher percentage of vocabulary in a comparable length of time. So it is perhaps too early to put a definite date on the appearance of PUA.

Nevertheless, my best *guess*, subject to change as more discoveries are made about the languages, is that originally UA was basically Semitic but then was heavily influenced by other languages. Another reason for that guess is that the time-depth of UA's Semitic element could not be too great, because the UA plural suffix \**-ima* agrees with the Northwest Semitic genitive plural suffix \**-iima*, which is a later development even in Semitic, not occurring at all in Akkadian or East Semitic, and is most salient in Hebrew. A derivative even from other non-Eastern Semitic languages would more likely contain the nominative vowel *-uu(ma)* instead of *-ii(ma)*, but UA shows \**-ima*, not \**-uma*.<sup>12</sup>

I have tried to answer your question fairly, even though I may have allowed myself to be drawn into giving answers that still are uncomfortably tentative.

**What Semitic language or languages appear to be involved? Your comparisons seem to depend primarily on Hebrew, but are other Semitic languages, such as Arabic mentioned earlier or Egyptian/Coptic, involved or helpful in the comparison process?**

Hebrew seems to be the Near Eastern language most represented in UA. But the longer I look, the more parallels I find to Arabic and Egyptian. But I also realize that our knowledge of Hebrew is partial. The Hebrew Old Testament is our primary source for ancient Hebrew, and while it seems like a big book, it yields only a limited sample of the ancient Hebrew language. We can be sure that many more words and variant uses of existing words were part of Israelite speech but did not happen to be used in



the scripture. Besides, there were influences from other dialects and area vocabularies not represented in the ancient Hebrew writings per se. Furthermore, the various parts of the Old Testament reflect only the dialect of the writer of that part. Hence, much remains unknown about ancient Hebrew. So noting similarities to related languages, whose forms may not be in the written records we have, is reasonable, if done with care and restraint.

Arabic seems to surface more regularly as a source for UA words than we might expect for a group, say the Nephites, who mention only Hebrew and Egyptian as languages known among them. For example, Arabic *\*ragul* is the common Arabic word for ‘man’, comparable to UA *\*tìholi* ‘man’ as found in several UA languages (and Kiowa *taguul* ‘man’). (UA *\*t* corresponds to Hebrew *r* in initial position, a natural change since both are dental consonants.)<sup>13</sup> But no sign of this Arabic word appears in the Old Testament, where words for ‘man’ occur so frequently that if *ragul* existed in the authors’ dialects, it should have appeared in the Old Testament. Enough Arabic words show up in UA to make one wonder if Lehi’s group adopted some Arabic speakers during their decade in the Arabian peninsula, or if Lehi’s dialect was like Job’s, peppered with more Arabic-like features than other Hebrew dialects. The fact that the first five male names in Lehi’s family—Lehi, Laman, Lemuel, Sam, and Nephi—are or were all more prominent in Arabic or Arabic-speaking areas south of Jerusalem or east of the Red Sea, where many Israelites used to live,<sup>14</sup> makes me wonder if some of Lehi’s or Sarah’s ancestors were from there.

The Book of Mormon mentions both Hebrew and Egyptian. An exciting dimension of this linguistic research is that, from UA and other language families offering similar data, I now consider it probable that we can eventually reconstruct, to a degree, the amount of Egyptian versus Hebrew used in Lehi’s language, if Lehi’s language is in fact the source of the apparent Semitic element in UA. Thus, the linguistic material may also tell us the kind (area and date) of Egyptian and Semitic and a basic vocabulary of each. Besides the handful of Egyptian possibilities discussed previously,<sup>15</sup> I have since noticed many other striking similarities between Egyptian and UA. A few are listed in the table below. (Keep in mind that Egyptian shows only consonants and semivowels, although we can sometimes supplement these with a later Coptic form, which descended from Egyptian and does show vowels.)

Most interesting to me is Egyptian *hm* ‘salt’ and UA *\*homwa* ‘salt’. This is consistent with the sound correspondences of Semitic *ḥ* > UA *w* and pharyngeal *h* > *ho/w/o/u* in UA.<sup>16</sup> There are perhaps a dozen or fewer UA cognate sets (groups of related words) that show a reflex (word or form) in all 30 UA languages; *\*homwa* ‘salt’ is one of them.

| Egyptian   | UA  |
|--|---|
| <i>iʔw</i> ‘old’   | <i>*yoʔo</i> ‘old’                            |
| <i>sd</i> ‘tail’   | <i>*sari</i> ‘tail, dog’                      |
| <i>qdi/qty</i> ‘go round’<br>(Coptic <i>kote</i> ‘go round, turn self’)          | <i>*koti/koli</i> ‘turn around, return’       |
| <i>thw</i> ‘drunkard’  | <i>*tiku</i> ‘(be) drunk’                     |
| <i>dbh</i> ‘ask’   | <i>*tipina/*tipiwa</i> ‘ask’                  |
| <i>qni</i> ‘sheaf, bundle’   | <i>*kuni/kuna</i> ‘bag’                       |
| <i>bit</i> ‘bee’   | <i>*pita</i> ‘wasp, bee’                      |
| <i>km</i> ‘(be) black’<br>(Coptic <i>kmom</i> v., <i>kame</i> adj. ‘[be] black’) | <i>*koma</i> ‘dark color, black, brown, gray’ |
| <i>dqrw</i> ‘fruit’  | <i>*taka/tuku</i> ‘fruit’                     |
| <i>sbk</i> ‘crocodile god’   | <i>sipak-tli</i> ‘crocodile’ (Nahuatl)        |

**Does the nature of the Semitic influence in UA tell us anything about the range of usage in the lives of the speakers? Are the Semitic influences concentrated in a certain field, like trade relations, religion, politics, or agriculture?**

In judging genetic relationships, linguists usually give more weight to basic words that refer to body parts, nature nouns (sun, moon, land, water, stone, etc.), pronouns, and basic activities associated with family, food, and making a living. The Near Eastern lexicon definitely suggests more than trade relations because it exists in most dimensions of UA vocabulary: pronouns, persons (man, woman), body parts, clothing, nature nouns, weapons, plants, foods, verbs, adjectives, and so on. For example, Egyptian

*hmʔ* and UA *\*homwa* ‘salt’ discussed above could feasibly be a term spread through trade; however, Egyptian *smʔ* ‘lung’ with the same second and third consonants as Egyptian *hmʔ* ‘salt’, is not an item typically associated with trade or borrowing and likewise matches UA *\*somwa* ‘lung’ with the same phonological correspondences in the same languages, exhibiting the same consonant cluster as ‘salt’. Religious and mythological terms seem represented as well. However, one aspect of UA vocabulary in which Near Eastern terms seem scarce is kinship. That could indicate a merging of two peoples, or at least heavy influence, since the kinship organization patterns of UA are rather typical of Native American groups generally. The prominence of Near Eastern pronouns in all branches may suggest that the Near Eastern people(s) were at least equal to, if not dominant over, whatever other components might have constituted early UA peoples. Whether relative social strata are apparent in a possible mixing pattern of early UA is a good question to keep in mind during future work. For example, a Semitic-using social and political elite could have mixed with “native” commoners. Of course, the answer to that question for UA may not be the same for other language families that might have been influenced by Semitic or that might have received a Semitic infusion, particularly if the social relationships were very different.

**What proportion of the potential evidence for a language connection have you uncovered? Is there a prospect that the scale and scope of the evidence will be increased or strengthened by further research?**

I regularly find more evidence, which leads me to suspect that I am looking only at the tip of the language iceberg, so to speak. How big the iceberg is I could not say at this stage of the investigation.

**While a sizable Hebrew vocabulary seems to exist in UA, does this represent a relationship only between spoken languages? Or have you found anything possibly relating to written Semitic scripts?**

The great majority of the evidence is necessarily oral, for that is what linguists have been able to record of Amerindian tongues. Nevertheless, every once in a while something surfaces that makes me wonder if the spoken language did not adopt some features from a written language.

For example, in Arabic writing, the same letter—aleph—is used for the consonant pronounced as a glottal stop as well as to mark a long *aa* vowel. The aleph originally and usually signifies a glottal stop, as in Arabic *faʔr* ‘mouse’ (from Semitic *\*paʔr*), which shows up in UA *\*paʔi/puʔwi* ‘mouse’. On the other hand, the Semitic root *nwr* ‘give light, shine, flame, fire’ is the source of Hebrew *ner* ‘lamp’, Arabic *nuur* ‘light’, and Arabic *naar* ‘fire’. Arabic *naar* shows an orthographic (unpronounced, non-language) aleph as a placeholder for the long *aa* vowel. We find in the Uto-Aztecan language family no less than 14 languages exhibiting a similar stem *\*naʔay/naʔy* ‘fire’,<sup>17</sup> pronounced with a glottal stop. Where did the glottal stop come from? It is as if ancient readers who did not completely understand it imitated a written format and pronounced both of the written alephs with the same glottal-stop value.

Another case involves Arabic writing that also contains an orthographic aleph at the end of a word that has the suffix *-w* for plural verb forms. Similarly, spoken classical Nahuatl—the language of the Aztecs—added a final glottal stop at the end of many plural verb forms. However, these possible influences from written texts cause me a couple of looming doubts. First, an instance or two may be coincidence, so we would not want to try to build a case on those alone. Second, neither Hebrew nor Egyptian shows that post-verbal aleph, but only Arabic, which is not one of the written languages attributed to Book of Mormon peoples. However, taken together and added to the fact that we see other surprising Arabic kinds of things in UA, these examples are interesting enough to make one wonder and watch for other such possibilities.

**You alluded to other language families earlier. Do you think a Semitic element is as prominent in other American Indian languages or families as it appears to be in UA?**

Definitely. The more I look, the more I find languages and language families that show such similarities with Semitic, and sometimes they show the same correspondences and words as UA. The larger picture of the Americas is the iceberg, and I suspect that what I presently see is only the tip.

**Are you the only one to notice these facts?**

In the past, a few others have noted similarities

or proposed interhemispheric influences, some involving Semitic and others involving non-Semitic Old World languages. However, none of these has been generally accepted by the linguistic community.

I have not found any of the Semitic proposals convincing either, except two. One includes the observations of three persons: A prominent linguist, Morris Swadesh, once alluded to a few Hebrew-like similarities in Zapotec (a language of southern Mexico). Pierre Agrinier, under Swadesh's tutelage, produced a list of Near East–Zapotec similarities that is still unpublished. Robert F. Smith then followed up on Agrinier's work with three brief studies of his own on Egyptian/Semitic and Zapotec comparisons.<sup>18</sup> His work offers interesting leads. The other useful example is Arnold Leesburg's work on lexical similarities between Hebrew and Quechua, the language of the Incas of Peru.<sup>19</sup> Leesburg's lack of linguistic methodology means that linguists ignore it. Nevertheless, a number of his "word comparisons" could feed a competent linguistic treatment, while others may have to be discarded. Observations on Semitic in Quechua have long interested me, and becoming aware of Leesburg's work added to that interest and to previous observations I had made.

Other continents aside, I find John Sorenson's, Mary Ritchie Key's, and David Kelley's proposed ties between the Pacific islands and the Americas to be interesting and meriting further investigation.<sup>20</sup> While Mormons tend to focus on Hagoth's group(s) going out into the Pacific, to mix with Austronesians who came or were coming from the other direction, we must keep in mind that the Austronesian movement was mainly eastward and that the Samoan and Tongan islands were settled a half millennium before Lehi even left Jerusalem. That Polynesian eastward expansions sometimes reached American shores seems logistically very probable. How would those expert oceanic explorers find almost every inhabitable dot and speck of land in the huge Pacific expanse yet miss a land mass that extends from the North Pole to the South Pole? Further Oceania-American studies may identify larger vocabularies of various migrations from both directions. Sorenson's and Key's works note similarities in vocabulary without specifying direction. Kelley's work, on the other hand, suggests a migration from the Americas to Polynesia, and, interestingly, the language family

that he cites as the origin of that infusion into Polynesia is UA.

Returning to the original question, I am not aware of any other linguist seriously working at the present time on a Semitic–Amerindian tie. We might ask why anyone would want to, in light of 100 percent rejection by the linguistic community generally of all such efforts undertaken thus far. But I consider it important work; it is an interest I can hardly let go of, in spite of its immensity and tedium, something like moving a mountain with a shovel. I feel like I'm racing against time to see which will be finished first—me or the research projects on my to-do list. My precursory surveys of language families throughout the Americas have me interested in perhaps a dozen of them, but three or more linguist lifetimes could be spent in one language family. So I must prioritize and hurry. I would also welcome help.

### **What is needed to see that this area of study moves forward vigorously?**

A few more enthusiastic linguists, interested in the problem enough to invest the years of preparation needed to learn the discipline of historical linguistics, to immerse themselves in Near Eastern languages and an Amerindian language family or two, and to establish themselves as published authorities in the language family of their choice. It is admittedly a heavy investment, especially without prospects of earning a living at it, though I do so: teaching English, Spanish, and ESL in a community college, while working on the side at this fascinating lifetime hobby. The scale of the required investment, of course, explains why there is so little help in this matter. Nevertheless, I often think how wonderful it would be if two or three young linguists were to become interested, do the preparation, become acknowledged authorities in their languages of specialization, and then all of us collaborate on the larger historical puzzle. The work of each would shed light on the larger picture and would help one another. Three or four can do a five-million-piece jigsaw puzzle much faster than one person can, and together we could collectively accomplish as much every 5 years as I have over the last 20.

### **When will a credible case on this issue be ready to present to doubting linguists?**

Before publishing it for that audience, anyone should build an unassailably strong case, presented in standard linguistic fashion according to the comparative method. Even then it may meet with vigorous resistance. Yet even that could be a good sign, since it would take a strong case to make unbelieving linguists pay enough attention to cause a controversy, rather than to be ignored as usual. But to have the matter made public by one who has not demonstrated linguistic competence as a published scholar in any relevant language family would be counterproductive. The baby of the distant connection to Semitic would then easily be thrown out with the bathwater of inadequate methodology. To avoid such premature dumping, I aim to finish my book, *A Comparative Vocabulary of Uto-Aztecan Languages*, eight years in process, with perhaps two more to go. It contains nearly five times as many cognate sets as the last comprehensive book published on UA (about 2,400 versus 514). I hope it will serve as a cornerstone of UA linguistics and will establish my position as a linguist and Uto-Aztecanist deserving to be heard, while laying a foundation for Semitic comparisons.


I also feel the need to make professionally accepted linguistic contributions in two other language families, since the Near Eastern element in America will eventually involve several language families anyway, I am confident. Furthermore, we cannot put together the best case until the rate of discovering new Hebrew and Egyptian elements in Amerindian languages slows and the body of data stabilizes. As long as I continue discovering new evidence of this connection at the present rate, it must mean that I am nowhere near the end. The whole pattern cannot be characterized accurately until we have most of the data in hand.

Perhaps in a decade, after finishing the UA book and making other substantial contributions, I would be ready to publish on this matter (involving multiple language families) for the linguistic community. The time might be reduced if a few competent and interested linguists, willing to devote the time, would collaborate.

### **Do your observations in language agree or conflict with your reading of the Book of Mormon?**

I see no conflict whatever, and my observations agree very well with the Book of Mormon account.

The languages mentioned in that scripture are (1) a Lehi dialect of Hebrew (with Arabic, Hebrew, and Egyptian names), (2) a Mulekite Hebrew dialect, (3) Egyptian, and (4) the unknown Jaredite language or languages.<sup>21</sup> And in Amerindian languages I find two strains of Hebrew, some Egyptian, some Arabic, and many languages of improbable or unknown Old World connections. Not all of the unknowns would be Jaredite, of course. What I just said is an oversimplification of the matter, since many languages are part of America's prehistory aside from what is reported in the Book of Mormon. Undoubtedly, East Asian languages have entered the Americas, whether via the land bridge, coastal boating, transoceanic crossings, or all three. In addition, the Jaredite peoples were in the Americas some millennia before Lehi and Mulek arrived and were likely to be more widespread and more numerous than the later arrivals. Various Jaredite offshoots probably reached into North and South America, to places out of touch with the warring kingdoms, and thus were not involved in the conflicts recorded in Ether and are among the ancestors of today's Amerindians, perhaps primarily so in some language families. And perhaps others besides East Asians and Book of Mormon peoples entered pre-Columbian America as well. Nevertheless, I see enough evidence in enough language families that I am optimistic that we can eventually reconstruct some of these Book of Mormon languages to a significant degree.

The Book of Mormon text says it has not room to tell us a hundredth part of historical happenings, which would include the language histories of its peoples. So American languages offer us a tremendous potential to refine and further define Book of Mormon languages, peoples, and relocation patterns as evidenced by language connections. The Book of Mormon contains few comments on language besides its mention of Hebrew and Egyptian. Lehi's language may have been a different dialect than biblical Hebrew, so we should not jump to too many conclusions about Book of Mormon language(s). I think we are going to be surprised in many ways. For me the prospects in this area of study are exciting. 

en la costa sur de Guatemala.” in *Investigaciones Arqueológicas en la Costa Sur de Guatemala*, ed. David S. Whitley and Marilyn P. Beaudry (Los Angeles: UCLA Institute of Archaeology, 1989), 29.

21. See R. E. W. Adams, “Early Classic Maya Civilization: A View from Rio Azul,” in *Emergence of Lowland Maya Civilization*, ed. Grube, 35–48.

22. See, for example, Juan Antonio Valdés, “El Proyecto Miraflores II dentro del marco preclásico de Kaminaljuyú,” in *X Simposio de Investigaciones Arqueológicas en Guatemala*, ed. Juan Pedro Laporte and Héctor L. Escobedo (Guatemala: Museo Nacional de Arqueología y Etnología, Ministerio de Cultura y Deportes, Instituto de Antropología e Historia, y Asociación Tikal, 1997), 1:81–86; Kuniaki Ohi et al., “Los resultados de las investigaciones arqueológicas en Kaminaljuyú,” in *ibid.*, 1:93–100; and Arlen F. Chase and Diane Z. Chase, “External Impetus, Internal Synthesis, and Standardization: E Group Assemblages and the Crystallization of Classic Maya Society in the Southern Lowlands,” in *Emergence of Lowland Maya Civilization*, ed. Grube, 87–101.

23. Bruce H. Dahlin, Robin Quizar, and Andrea Dahlin, “Linguistic Divergence and the Collapse of Preclassic Civilization in Southern Mesoamerica,” *American Antiquity* 52 (1987): 367.

24. *Ibid.*, 379.

25. See Valdés, “Desarrollo cultural,” 72–73.

26. See, for example, Nicholas P. Dunning, *Lords of the Hills: Ancient Maya Settlement in the Puuc Region, Yucatán, Mexico* (Madison, Wis.: Prehistory Press, 1992), 25–28; Bruce H. Dahlin, “Climate and Prehistory on the Yucatan Peninsula,” *Climatic Change* 5 (1983): 245–63; William J. Folan et al., “Paleoclimatic Patterning in Southern Mesoamerica,” *Journal of Field Archaeology* 10 (1983): 453–68; William T. Sanders et al., *The Natural Environment, Contemporary Occupation and Sixteenth Century Population of the Valley*, Occasional Papers in Anthropology, no. 3 (University Park: Pennsylvania State University Department of Anthropology, 1970), 88; and Nicholas P. Dunning, “Coming Together at the Temple Mountain: Environment, Subsistence, and the Emergence of Lowland Maya Segmentary States,” in *Emergence of Lowland Maya Civilization*, ed. Grube, 61–69.

27. See Dahlin, Quizar, and Dahlin, “Linguistic Divergence,” 379.

28. See Arthur A. Demarest et al., “Classic Maya Defensive Systems and Warfare in the Petexbatun Region: Archaeological Evidence and Interpretations,” *Ancient Mesoamerica* 8 (1997): 229–53; Takeshi Inomata, “The Last Day of a Fortified Classic Maya Center: Archaeological Investigations at Aguateca, Guatemala,” *Ancient Mesoamerica* 8 (1997): 337–51; and Arthur A. Demarest, “The Violent Saga of a Maya Kingdom,” *National Geographic*, February 1993, 95–111.

29. See Demarest et al., “Classic Maya Defensive Systems,” 231.

30. See Bruce Dahlin, “The Barricade and Abandonment of Chunchucmil: Implications for Northern Maya Warfare,” *Latin American Antiquity* 11/3 (2000): 283–98.

31. Markus Reindel, “El abandono de las ciudades Puuc en el norte de Yucatán,” in *50 Years of Americanist Studies at the University*

*of Bonn: New Contributions to the Archeology, Ethnohistory, Ethnolinguistics and Ethnography of the Americas*, Bonn Americanist Studies, vol. 30 (Markt Schwaben, Germany: Verlag Anton Saurwein, 1998), 239–56.

32. See Sorenson, “Fortifications in the Book of Mormon,” 425–44, regarding instances of early militarism.

#### Was There Hebrew Language in Ancient America? An Interview with Brian Stubbs

1. For other examples, see Brian D. Stubbs, “Looking Over vs. Overlooking Native American Languages: Let’s Void the Void,” *JMBS* 5/1 (1995): 16. This article may be purchased from FARMS in reprint form.

2. See *ibid.*, 27–32, for examples.

3. See *ibid.*, 17.

4. See *ibid.*, 24, 25, 28.

5. Details can be found in *ibid.*

6. See, for example, Brian D. Stubbs, “The Labial Labyrinth in Uto-Aztecan,” *International Journal of American Linguistics* 61/4 (1995), 396–422; and “More Palatable Reconstructions for Uto-Aztecan Palatals,” *International Journal of American Linguistics* 66/1 (2000): 125–37.

7. See Albert C. Baugh and Thomas Cable, *A History of the English Language*, 2nd ed. (New York: Alfred A. Knopf, 1967), 96.

8. See *ibid.*, 55.

9. See *ibid.*, 101.

10. See Martha Schulte and Beverly Seckinger, “The Dating Game: One Last Look at Glottochronology: The Case of Some Arabic Dialects,” in *Atlas Occasional Papers*, No. 5, ed. Barbara Roth and Susannah Hexer (Tucson: University of Arizona, 1984–85), 41–77.

11. See Baugh and Cable, *History of the English Language*, 55.

12. See the discussion in Stubbs, “Native American Languages,” 13.

13. See Stubbs, *ibid.*, 26.

14. Brian D. Stubbs, “The Male Names in Lehi’s Family,” unpublished MS in FARMS library.

15. See Stubbs, “Native American Languages,” 36.

16. See *ibid.*, 21, 24.

17. For \*r > y, see *ibid.*, 17–19.

18. Pierre Agrinier compiled an unpublished list of similarities between Hebrew and Zapotec. Robert Smith’s unpublished papers of 1969, 1971, and 1977 followed up on Agrinier’s work with further comparisons under the title “Sawi-Zaa Word Comparisons.”

19. See Arnold Leesburg, *Comparative Philology: A Comparison between Semitic and American Languages* (Leyden: Brill, 1908).

20. See John L. Sorenson, “Evidences of Culture Contacts between Polynesia and the Americas in Precolumbian Times” (master’s thesis, BYU, 1952); Mary Ritchie Key, *Polynesian and American Linguistic Connections* (Lake Bluff, Ill.: Juniper Press, 1984); and David H. Kelley, “Tane and Sina: A Uto-Aztecan Astronomical Cult in Polynesia,” in *Circumpacifica: Festschrift für Thomas S. Barthel*, ed. Bruno Illius and Matthias Laubscher (Frankfurt: Peter Lang, 1990), 2:137–56.

21. For further discussion, see Brian D. Stubbs, “Book of Mormon Language,” in *Encyclopedia of Mormonism*, ed. Daniel H.

Ludlow (New York: Macmillan, 1992), 1:179–81.

#### Nephi

Paul Y. Hoskisson

1. The suggested roots are not attested, as far as I can determine, in other North-West Semitic languages, i.e., Phoenician, Ammonite, Moabite, etc. Aramaic is another candidate, but the sources I have checked produced negative results. Someone with more expertise in Aramaic than I have should make a thorough search of the numerous Aramaic dialects.

2. See Manfred Dietrich and Oswald Loretz, *Analytic Ugaritic Bibliography*, Alter Orient und Altes Testament 6 (Neukirchen-Vluyn: Verlag Butzon & Bercker Kevelaer, 1996), 777, s.v. “npy.”

3. In South-West Semitic languages, the *p* of other Semitic languages corresponds to an *f*. As far as I am aware, Hugh Nibley was the first person to draw attention to the relevance of the personal name *nfy* to *Nephi*. See his *An Approach to the Book of Mormon*, 2nd ed. (Salt Lake City: Deseret Book, 1964), 239, n. 27 (or [Salt Lake City: Deseret Book and FARMS, 1988], 290, n. 28).

4. Cyrus H. Gordon, *Ugaritic Textbook*, Analecta Orientalia 38 (Rome: Pontificum Institutum Biblicum, 1965), 446, s.v. “npy.” See also Dietrich and Loretz, 778.

5. Not being an Egyptologist, I am not in a position to evaluate the Egyptian suggestions and so offer them here with little comment.

6. Hugh W. Nibley, *Lehi in the Desert; The World of the Jaredites; There Were Jaredites* (Salt Lake City: Deseret Book and FARMS, 1988), 27.

#### New Light

1. See Morris Swadesh, “Linguistics as an Instrument of Prehistory,” *Southwestern Journal of Anthropology* 15 (1959): 20–35.

2. See Morris Swadesh, “Lexicostatistic Classification,” in *Linguistics*, ed. N. A. McQuown, vol. 5 of *Handbook of Middle American Indians* (Austin: University of Texas Press, 1967), 79–116; and Dell H. Hymes, “Lexicostatistics So Far,” *Current Anthropology* 1 (1960), 3–44.

3. See R. E. Longacre, “Swadesh’s Macro-Mixtecan Hypothesis,” *International Journal of American Linguistics* 21/1 (1961): 9–29; K. Bergsland and H. Vogt, “On the Validity of Glottochronology,” *Current Anthropology* 3 (1962): 115–53; and D. L. Olmsted, “Lexicostatistics as ‘Proof’ of Genetic Relationship: the Case of ‘Macro-Manguean,’” *VI Congrès International des Sciences Anthropologiques et Ethnologiques*, Paris, 1960 (Paris: 1964), 2/2: 69–73.

4. See C. A. Callaghan and W. R. Miller, “Swadesh’s Macro-Mixtecan Hypothesis and English,” *Southwestern Journal of Anthropology* 18 (1962): 278–85; and K. V. Teeter, “Lexicostatistics and Genetic Relationship,” *Language* 39 (1964): 638–48.

5. J. J. Graydon, “Blood Groups and the Polynesians,” *Mankind* 4 (1952): 329–39.

6. A. E. Mourant, *The Distribution of Human Blood Groups* (Springfield, Ill.: C. C. Thomas, 1954), 144–47.

7. See R. T. Simmons et al., “A Blood Group Genetical Survey of Cook Islanders,

Polynesia, and Comparisons with American Indians,” *American Journal of Physical Anthropology* 13 (1955): 667–90.

8. See A. E. Mourant, “Blood Groups in the Pacific Area,” *Eighth Congress of the International Society of Blood Transfusion* (Tokyo 1960), *Proceedings* (Tokyo: 1962), 149–53.

9. See Rupert I. Murrill, *Cranial and Postcranial Skeletal Remains from Easter Island* (Minneapolis: University of Minnesota Press, 1968), 77–79.

10. See Frank B. Livingstone, “An Analysis of the ABO Blood Group Clines in Europe,” *American Journal of Physical Anthropology* 31 (1969): 1–10; M. Allison et al., “ABO Blood Groups in Chilean and Peruvian Mummies, II: Results of Agglutination-Inhibition Technique,” *American Journal of Physical Anthropology* 49 (1978): 139–42; and T. E. Reed, “The Evidence for Natural Selection Due to Blood Groups,” *World Population Conference* (Belgrade, 1965), *Proceedings* 2 (New York: United Nations, 1967), 498–502.

11. This is still assumed in a current anthropology textbook. See Colin Renfrew and Paul Bahn, *Archaeology: Theories, Methods, and Practice*, 2nd ed. (London and New York: Thames and Hudson, 1996), 436: “The language spoken by a human community is the best predictor of what genetic characteristics . . . that community will have.”

12. See, for example, Juan Comas, “Características físicas de la familia lingüística Maya,” *Universidad Nacional Autónoma de México, Serie Antropológica* 20 (México: UNAM, 1966). Comas compared the results of more than half a century of study of Maya-speaking groups to find marked biological differences among distinct groups within the language community, apparently due to intermarriage with non-Mayan groups, genetic drift, endogamy, and adaptive selection. See also M. Layrisse, Z. Layrisse, and J. Wilbert, “Blood Group Antigen Studies of Four Chibchan[-speaking] Tribes,” *American Anthropologist* 65 (1963): 36–55; the tribes do not form a homogeneous genetic group.

13. See R. T. Simmons, “The Biological Origin of Australian Aborigines: An Examination of Blood Group Genes and Gene Frequencies for Possible Evidence in Populations from Australia to Eurasia,” in *The Origin of the Australians*, ed. R. L. Kirk and A. G. Thorne (Canberra: Australian Institute of Aboriginal Studies and Atlantic Highlands; New Jersey: Humanities Press International, 1976), 307–28.

14. See, for example, S. M. Borgognini Torli and G. Paoli, “Survey of Paleoserological Studies,” *Homo* 33/2 (1982): 69–89; and J. Comas, *Antropología de los pueblos iberoamericanos* (Barcelona: Editorial Labor, 1972), 35: “It seems that the beginning of the second half of the twentieth century coincides with the end of the myth of the (single) ‘American homotype.’”

15. See “The Human Biology of the Western Pacific Basin,” *Yearbook of Physical Anthropology* 18 (1976): 202–45.

16. See Rubén Lisker, “El origen de los grupos humanos en América: serología y hematología en general de los Amerindios y sus posibles relaciones trans-pacíficas,” *Thirty-Sixth International Congress of Americanists* (Barcelona and Seville, 1964), *Proceedings* 1 (Barcelona and Seville: 1966), 43–51.