

SEMITIC PRZL/BRZL/BRDL, "IRON"*

Gary A. Rendsburg

The etymology of *przl/brzl/brdl* is among the most obscure in the Semitic lexicon. Scholars are agreed that the word is of non-Semitic origin, but beyond that there is little that has been said concerning the history of the word. The present paper will attempt to shed some light on this issue and will then demonstrate how far and wide the word spread.

The relevant Semitic words for "iron" are as follows:

Hebrew	<i>barzel</i>
Phoenician	<i>brzl</i>
Ugaritic	<i>brdl</i> ¹
Aramaic	<i>parzel</i>
Syriac	<i>parzel</i>
Mandaic	<i>parzel</i>
Akkadian	<i>parzillu</i> ²
South Arabic	<i>frzn</i> (specifically "iron fether)
Arabic	<i>firzil</i>

It is the atypical correspondence of the first and third consonants which has led scholars to conclude that our word is of non-Semitic origin.³ When the South Arabic form is highlighted, we might also note that the fourth consonant does not correspond uniformly. While an interchange involving the liquids *l* and *n* might explain this phenomenon,⁴ it is more probable that we are dealing with an original triradical root which has been expanded to a quadriradical via *-l* in most of the languages but via *-n* in South Arabic.⁵

Corroborating evidence for this may be forthcoming from the Ethiopian languages where the word for "iron" in Amharic, Gafat, Harari, Gurage, and Tigrinna is *bərät*, to which should be compared Cushitic (Afar and Saho) *birta*, "iron," and Geez *bərt*, "copper, bronze."⁶ Marcel Cohen connected these lexemes with the above Semitic ones, the third consonant *t* notwithstanding.⁷ If they are related, then we can posit an original triradical which has been expanded to a quadriradical. The reverse is

possible, that through syncope an original quadriradical was reduced to a triradical in Ethiopic and Cushitic, but this is unlikely in view of the following evidence from Hebrew and Arabic.

These two languages occasionally expand triradicals into quadriradicals by the addition of *-el/-il*. The best example of this in Hebrew is *karmel*, "choice vineyard," vs. *kerem*, "vineyard." Indeed this is the only noun in the Hebrew lexicon with the same morphological pattern as *barzel*,⁸ thus implying an original **berez* in segholate form or **barz* in pre-anaptyctic form. An example from Arabic is *hidmil*, "old, worn garment," vs. *hidm*. Such nouns, I submit, insure the priority of a form with three consonants as the basis for our Semitic reflexes of "iron."

This word, whether it be a substratum word or a Wanderwort or Kulturwort of another type, had a bilabial plosive [b,p] as its first consonant, the rolled dental [r] as its second consonant, and a fricative dental [z], fricative interdental [d] or plosive dental [t] as its third consonant.⁹ The alternation of *z*, *d* and *t* (and perhaps *ʔ*) in the third radical could be explained in a number of ways: 1) fricativization of *t* to *z/d*, 2) the reverse, defricativization of *z/d* to *t*, or 3) the non-Afroasiatic phoneme involved was rendered differently in the various languages when the foreign word was borrowed. Since the phonetic conditions involved for the first two options do not readily lend themselves to such changes, I am inclined to view the third option as the most probable.

This analysis of *przl/brzl/brdl* points to the original non-Semitic (or non-Afroasiatic) word having three consonants. The suffixed *-l* (or in South Arabic the suffixed *-n*) was added secondarily. This is the only way to account for the Ethiopic and Cushitic evidence. Moreover, it helps explain the presumed relationship with Latin *ferrum*, to be discussed below. Since it is highly unlikely that each Semitic language would independently suffix the *-l*, we should assume some sort of borrowing and/or analogy to account for this phenomenon. May we posit the following hypothesis, one of many which may be reconstructed: 1) our foreign word was borrowed as **brz* in Hebrew-Phoenician (Canaanite), **brd* in Ugaritic, **prz* in Akkadian, **irz* in South Arabic, *brt* in Cushitic and Ethiopic; 2) one of the northern languages (Canaanite, Ugaritic, or Akkadian) suffixed the *-il/-el*; by analogy the other languages did likewise, most probably due to trade communications and the like; 3) in South Arabic the *-n* was suffixed, as in many other Semitic nouns; 4) in Cushitic and Ethiopic, no suffix was added; 5) the Aramaic-Syriac-Mandaic forms derived from the Akkadian, as did many other words of a technological nature;¹⁰ 6) the Arabic word was borrowed from the Aramaic or, if direct Akkadian-Arabic contact is assumed in pre-Islamic times, from the Akkadian.

This reconstruction may at first glance seem rather tenuous (admittedly so), but it accounts for all the data nonetheless. The alternative, to assume that a form such as **p/barz/dil* was borrowed by Semitic, would have to 1) explain the lack of a fourth consonant in Ethiopic and Cushitic, or assume that *brt* is totally unrelated, an unlikely coincidence given the similarity, 2) explain the lack of a fourth consonant in *ferrum* (< **bhers-om* or **fers-om*), or assume that the Latin is totally unrelated, again an unlikely coincidence, and 3) explain the *l/n* interchange in South Arabic which is, to my knowledge, not otherwise attested. This third problem is of course only a slight one, especially given the still rather limited corpus of South Arabic texts, but the first two problems remain nonetheless.

The hypothetical reconstruction I have presented forces us to conclude that these words for "iron" derive from a common source in the 3rd millennium B.C. or earlier. There is nothing wrong with this conclusion, however, since, although we date the Iron Age from c. 1200 B.C. onward, iron was already in use at a much earlier time. Throughout the Near East objects made of both meteoric and smelted iron dated to the 3rd millennium B.C. and earlier have been found.¹¹ The use of iron at such an early time, albeit in limited quantities, militates against the common supposition that the mention of *barzel* in Gen 4:22 is anachronistic.¹²

Next we must have a look at four other words for metals: Egyptian *bī3*, Ugaritic *brr*, Sumerian BAR and Ethiopic-Cushitic *br(x)*. The first of these is usually rendered "bronze,"¹³ but it probably refers to "(meteoric) iron" in the Pyramid Texts at least.¹⁴ The second consonant of *bī3*, the semi-vowel *i*, may be regarded as little more than an indicator of the vowel;¹⁵ in the *nisbe*-form *bī3y* it is not even written.¹⁶ This datum, coupled with the well documented correspondence of Egyptian *3* and Semitic *r*,¹⁷ permits us to see in *bī3* a corresponding *br* in Semitic.

The Ugaritic word *brr* has been the subject of much discussion; if we had to choose which metal it stands for "tin" would be the most likely candidate.¹⁸ The third of the three aforementioned words, Sumerian BAR, does not seem to have been a word unto itself, but it appears in a variety of Sumerian words for metals: ANBAR, "iron," ZABAR, "bronze," KUBABBAR, *BAR-BAR^{18a}, "silver," which leads us to assume a lexeme BAR = "metal" in the early stage of the language.¹⁹ The last of these four words, Ethiopic and Cushitic *br(x)* (vocalized differently in the various languages²⁰) means "silver".

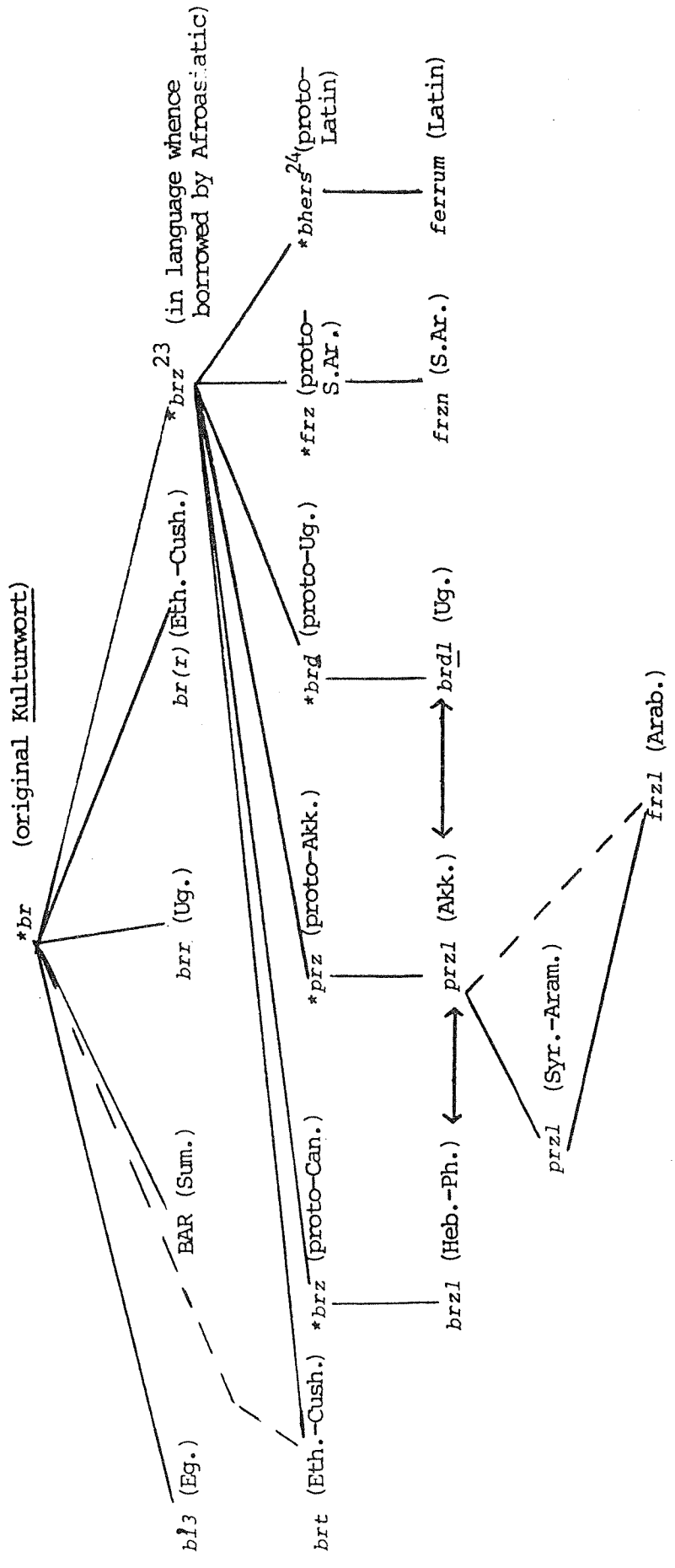
This Egyptian, Ugaritic, Sumerian, and Ethiopic-Cushitic evidence suggests that the element **br* meant "metal" in a wide array of languages at a very early time. Since **br* is also the beginning of the Semitic words for "iron," we must consider the possibility of some relationship. The fact that *brr* probably means "tin" in Ugaritic and that *br(r)* means "silver" in Ethiopic-Cushitic is no reason to dissociate these words from the others which mean "iron."²¹ As is noted above, Geez *bart* means "copper, bronze," while its cognates in the other Ethiopian languages and in Cushitic mean "iron." What we have here is the well established linguistic fact that related words need not always have the same exact meaning in their respective languages.²²

Faced with the set of facts presented here, namely Egyptian *bi3* (=br), Ugaritic *brr*, Sumerian BAR, Cushitic *brt*, Hebrew *brz-l*, etc., the historical linguist would probably conclude some ultimate relationship among all of them. The exact historical development cannot be reconstructed, but it seems clear that our earlier conclusion as to the trilateral nature of our words for "iron" is not only cogent but even understated. That is to say, since **br* is so widespread in words denoting various metals though mainly "iron," we may even postulate an original biconsonantal word. At what stage such a word existed is obviously impossible to say, though we are on safe ground in placing it in prehistoric times (i.e., prior to 3000 B.C.) when metals first make their appearance. The history of our word(s) is schematized in figure 1.

We now have an alternate explanation for *brt* in Ethiopic and Cushitic. Instead of forcing a phonetic relationship between the *t* of *brt* and the *z/d* in the other Semitic languages, we may postulate a direct borrowing of *brt* from the original **br*. The addition of the *t* would be the result of Analogiebildung, with the resultant leveling to the triconsonantal norm in Afroasiatic. The addition of the *z* in the step before the word's appearance in the individual Semitic languages may be analyzed in several ways: 1) the substratum language also had a triconsonantal norm, 2) the *-z* had some specialized morphological function in the substratum language,²⁵ or 3) the general growth of man's language in the early stages led to longer words being formed through whatever process.²⁶

However we may interpret the prehistory of *przl/brzl/brdl* one thing is certain: the word entered Semitic with three consonants. The appearance of *bi3* in Egyptian, BAR in Sumerian, and *br(r)* in Ugaritic, Ethiopic, and Cushitic, pointing to a **br* element for "metal, iron" at some point in time, shows conclusively that the *-l* or *barzel* etc., and the *-n* of *frzn* must be secondary (or tertiary if we see the *z/d* as secondary).²⁷

FIGURE 1



N.B. The siglum \longleftrightarrow denotes analogic borrowing (see above, p. 55) and the siglum $---$ denotes possible derivation.

The fact that Semitic "iron" is a triradical and not a quadriradical leads us to our discussion of Latin *ferrum*. Philologists are agreed that this noun is not native to the Indo-European family, there being no known cognates in any of the languages. Instead, it has been derived from **bhersom* or **fersom*, which have been related to the Semitic words *barzel*, *parzillu*, etc.²⁸ The phonological developments implied in **bhersom*/**fersom* > *ferrum* are as follows: 1) *o* > *u* regularly in Latin before *m*²⁹ 2) *rs* > *rr* via progressive assimilation as in *ferre* < **fer-se*,³⁰ and 3a) the voiced aspirated stop *bh* > *f* as in *frāter* < **bhrātēr* or 3b) the *f* of reconstructed **fersom* was simply retained.

Whether we posit **bhers-om* or **fers-om* as the source of *ferrum* makes no difference. Either of them can be readily dovetailed with the Semitic data. The *b/p* interchange in the Semitic words suggests that the initial consonant of the source word did not correspond exactly to either Semitic *b* or *p*. If this phoneme was *bh*, then we can see why some Semitic languages rendered it as *b* and others as *p*; in Latin the *bh* yielded *f* in accord with the regular phonetic law operating in that language. If this phoneme was *f*, which is also not original to Semitic,³² it would have been rendered as *p* or perhaps, with some stretch of the imagination, as *b*; in Latin where *f* is part of the phonological system this *f* would simply have been retained. Of these two possibilities, the former is more credible and thus we may posit **bhers-om* as the source of Latin *ferrum*, although there is no need to be dogmatic on this issue.

As concerns the *s* in our reconstructed **bhers-om*/**fers-om*, it should be noted that this is the only fricative in Indo-European (though *z* does occur in certain environments),³³ and therefore it is the natural reflex of the phoneme rendered in Semitic as *z* or *ḏ*. The word for "iron" apparently came to Italy as **bhers-* or **fers-*, to which was added *-*om* when the noun came to be treated as neuter in the second declension.³⁴ In short, we have no reason not to associate Latin *ferrum* with *barzel*, *parzillu*, etc. The Latin form, moreover, points to the correctness of our earlier conclusion which saw the word for "iron" as a trilateral in Semitic. If the suffixed -*l* (or -*n*) were originally part of the word, we must ask why this element is lacking in the Latin form.

Furthermore, this analysis of Latin *ferrum* corroborates what classical archaeologists have already assumed, that the use of iron was introduced into Italy from the East.³⁵

The relationship between **bhers* and Semitic "iron" raises an interesting question. Either a Mediterranean (Semitic or non-Semitic) language must have continued to use the triliteral form without -l into the early 1st Millennium B.C. when iron first makes its appearance in Italy,³⁶ or we must assume that iron was known in Italy at a much earlier date. In other words, if the knowledge and use of iron reached Italy in the 1st Millennium B.C. we would expect that the Latin word would include the fourth consonant -l, since this is the only form attested at the time in possible languages of contact (I exclude Ethiopic-Cushitic as a possibility, first because of geography and second because of the t instead of a fricative). Indeed at this very time one Mediterranean people, the Phoenicians, were in fact spreading the form with -l to the Western Mediterranean, a point to be discussed below. Our first option is to conclude that a language of the early 1st Millennium B.C. did continue to use a word for iron without the -l and that this is the source of **bhers*. Our second option is to conclude that iron was known on the Italian peninsula long before it is attested archaeologically. This would explain the form **bhers*, derived directly from the same source as the Semitic words. In lieu of any evidence for the first option, we may tentatively assume the second to be correct (as indicated on the charts).

The Lateinisches etymologisches Wörterbuch of Walde and Hofmann would relate even more European words to our reconstructed Semitic **brz*/Latin **bhers*. It lists Anglo-Saxon braes (whence Modern English brass), Old Friesian bress, "copper," and Middle Dutch bras, "metal," as derived from the same source as Latin ferrum.³⁷ We might expand the discussion and ask whether Italian bronz (whence English and French bronze) is also not derived from our widespread Kulturwort. The usual etymology suggested is from the toponym Brundisium, but J. D. Muhly has effectively demonstrated that "There is no possible philological connection between bronze and Brundisium and no historical reason why the work of Brundisium should have given its name to the metal used."³⁸

Another European vocable which might be derived from our Semitic word is the place name Fursill in the Dolomite Mountains of northern Italy where ancient ironworks have been discovered. F. Altheim used Fursill as evidence for a European origin of the Semitic words for "iron" but this is impossible in light of my statements in note 28 above. Certainly the contrary must be true, that Fursill derives from the Semitic.³⁹

The word Barsel, "iron," and its derivatives in Rotwelsch or Thieves' Latin⁴⁰ need also be discussed. It is possible that Barsel was borrowed into Germanic in antiquity and survived the millennia to surface only in Rotwelsch, a subculture dialect.⁴¹ On the other hand,

we must contend with the greater probability that Bersel was borrowed into Rotwelsch in modern times from Yiddish.⁴²

We are on firmer ground when we turn to our next topic in the philological history of *przl/brzl/brđl*. During the first few centuries of the 1st Millennium B.C. (and perhaps a bit earlier), the Phoenicians began exploring both Spain and Northwest Africa. One of their aims was certainly the extensive metal deposits of the Iberian peninsula,⁴³ a fact alluded to by Ezekiel 27:12. With the spread of the Phoenicians came the concomitant spread of their language and in particular of the word *brzl*. Thus we may note its use in a Carthaginian inscription⁴⁴ and its being borrowed by Berber. The Berber word for "iron" is *azzal*, a form which Hans Stumme showed to be borrowed from *brzl*. The *b* was lost when it was misinterpreted as a preposition and the *rz* assimilated to *zz*.⁴⁵

There is still another word which may be related to *brzl*, namely English brazil. In the Oxford English Dictionary one will find several listings for this word, but the one I would like to concentrate on for the moment reads "A miners' name in the [English] midland counties for iron pyrites."⁴⁶ The similarity in both phonology and semantics between *brzl* and brazil compels us to investigate whether any relationship is possible. First we should note that Phoenician *brzl* was probably vocalized the same as in Hebrew, and thus we may posit a Phoenician pronunciation *barzel* or *barzil*.⁴⁷ The former represents the Masoretic pointing while the latter may be closer to the actual Hebrew pronunciation in the 1st Millennium B.C. The two vowels, *e* and *i*, are actually but different reflexes of the same vowel, Semitic short *i*, so that *barzel* and *barzil* would be non-phonemic variants. Indeed we may note that in Greek transcription of Phoenician words can be found both Μελκ and Μελκ for *mlk*.⁴⁸

When the Phoenicians reached Spain in search of iron and other metals, among the peoples they would have encountered would have been the Celts. This would not have been so in southern Iberia where most of the Phoenician activity was concentrated, but it would have occurred in northern Iberia. This is the area where most of Spain's iron is located,⁴⁹ and where some Phoenician influences have been noted.⁵⁰ Here perhaps we can see the avenue of relationship between Phoenician *barze/il* and English brazil. If I may be permitted some speculation: the Celts of Iberia learned the Phoenician word for "iron" and adopted it for their own use. During the remarkable history of this widespread and migratory people,⁵¹ *barze/il*, which via metathesis yielded brazil, found its way to the British Isles with the meaning "iron."⁵² Eventually the range of this word was broadened and it came to mean "hard" or "hardness"

as well; hence the simile "as hard as brazil" common through much of England.⁵³

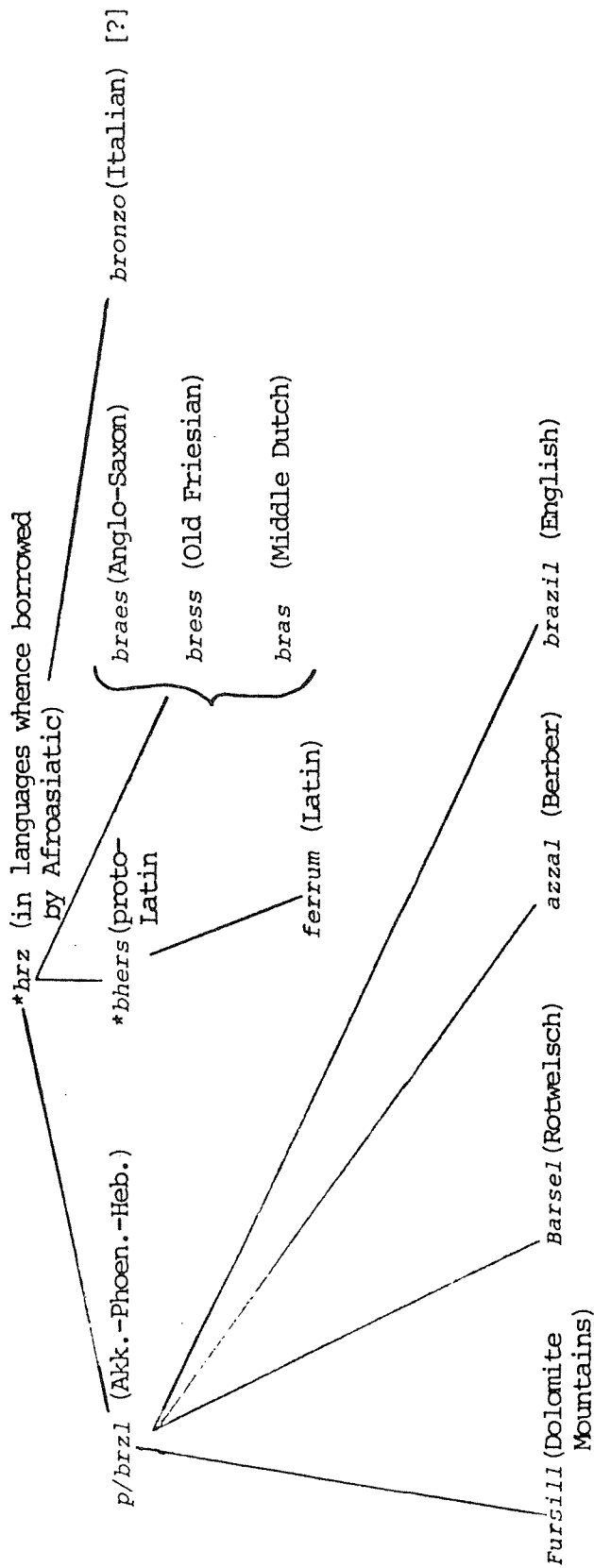
The Oxford English Dictionary lists the etymology of brazil as follows: "of unknown origin; perh. a corruption of an oriental name of the dye-wood originally so called."⁵⁴ The reference here is to a variety of hard wood commonly known as "brazil-wood" which was imported into Europe from the Far East beginning in the early Middle Ages and which first appears in English literature in the 1300's and 1400's.⁵⁵ To derive the word brazil from an oriental language because these woods originally came from East Asia is an attractive theory, but no Asian language has been able to supply even a remotely possible etymon. I would suggest the following development: brazil, "iron" > brazil, "hard" > brazil-wood, "hard wood".⁵⁶

(The material discussed in the last several pages is schematized in figure 2.)

At the outset of this paper it was stated that little is known about the history of *przl/brzl/brdl*, but the contents of the article should demonstrate that such need not be the case. In one direction, we have proposed a viable etymology, going back ultimately to a widespread *br* meaning "metal." In the other direction, we have seen that reflexes of this word can be found even in 20th Century English. In between is a remarkable philological history, unlike that of many lexemes in either Semitic or any other language family.

Canisius College
Buffalo, New York

FIGURE 2



NOTES

*The writer is indebted to a number of scholars whose assistance in a variety of ways (personal communications, constructive criticisms, bibliographic references, etc.) is here gratefully acknowledged: Cyrus H. Gordon, James D. Muhly, Wolf Leslau, Paul-Eugène Dion, Yoël Arbeitman, David Deitz, Peter Boyd-Bowman. Their assistance does not necessarily mean agreement with all the paper's conclusions, for which I remain solely responsible.

Please note the following abbreviations used specifically in this article: Baumgartner, Lexikon = W. Baumgartner, Hebräisches und aramäisches Lexikon zum Alten Testament (Leiden, 1967); BDB = F. Brown, S.R. Driver, and C. A. Briggs, A Hebrew and English Lexicon of the Old Testament (Oxford, 1906); EM = Encyclopaedia Miqrā'it; Gordon, UT = C.H. Gordon, Ugaritic Textbook (Rome, 1967); Moscati, ICGSL = S. Moscati, An Introduction to the Comparative Grammar of the Semitic Languages (Wiesbaden, 1964); KB = L. Koehler and W. Baumgartner, Lexicon in Veteris Testamenti Libros (Leiden, 1958); Muhly, CT = J. D. Muhly, "Copper and Tin: The Distribution of Mineral Resources and the Nature of the Metals Trade in the Bronze Age," Transactions of the Connecticut Academy of Arts and Sciences 43 (1973), pp. 155-535, and J. D. Muhly, "Supplement to Copper and Tin...", Transactions... 46 (1976), pp. 77-136 (both published in monograph form: Copper and Tin... [Hamden, Conn., n.d.]); OED = Oxford English Dictionary; RLA = Reallexikon der Assyriologie; Wertime and Muhly, CAI = T. A. Wertime and J. D. Muhly, The Coming of the Age of Iron (New Haven, 1980).

- 1) It remains possible that *prt1* in Palais royal d'Ugarit II (Paris, 1957), p. 4, 1.7 (=UT 1001:7) is a byform of *brql*, though this is by no means certain. While we are on the topic of words which may be related to *barzel*, *brql* etc., let us note *prt1* which appears in P. Anastasi I. 23, 4. If this word means "iron," it would seem to be a borrowing from West Semitic or Akkadian; see J. H. Bondi, Dem hebräischen-phönizischen Sprachzweige angehörige Lehnwörter in hieroglyphischen und hieratischen Texten (Leipzig, 1886), pp. 42-43; M. Ellenbogen, Foreign Words in the Old Testament (London, 1962), p. 53. A different reading and a different translation are offered by H. Cazelles, "Trois asiatismes possibles dans Anastasi I," Comptes rendus du Groupe Linguistique d'Etudes Chamito-Sémitiques 9 (1962), pp. 1-2.
- 2) For the spelling *barzillu* in Akkadian texts from Mari and elsewhere, see P. Artzi, "On the Cuneiform Background of the Northwest-Semitic Form of the Word *brdl*, *b(a)rz(e)l*,

- 'Iron'," JNES 28 (1969), pp. 268-270. The proposal of some scholars (e.g., KB, p. 148; and C. F. Jean and J. Hoftijzer, Dictionnaire des inscriptions sémitiques de l'ouest [Leiden, 1960], p. 56) to see in Hittite a word *barzillu* or *barzilli* meaning "iron" has already been criticized by J. Friedrich, VT 11 (1961), p. 356 (in a review of Jean and Hoftijzer); see also KB, Supplementum, p. 142. The Hittite word for "iron" is *ḫapalki-* as in Hurrian.
- 3) Gordon, UT, pp. 66, 376; Samuel Abramsky, "Barzel," EM 5 (1968), col. 657 (sub "Mattakot"); E. Y. Kutscher, Millim ve-Toldotehen (Jerusalem, 1961), p. 8; and many others.
 - 4) For examples in Semitic, see Moscati, ICGSL, p. 32.
 - 5) For example of suffixed *-n* in Semitic, see Moscati, ICGSL, p. 82.
 - 6) Wolf Leslau, Gafat Documents (New Haven, 1945), p. 149.
 - 7) M. Cohen, Essai comparatif sur le vocabulaire et la phonétique du Chamito-Sémitique (Paris, 1947), pp. 171, 175. Such a relationship would help explain the presence of the emphatic dental plosive in Ugaritic *prṯl*, cited in note 1 above.
 - 8) See W. Gesenius, Thesaurus (Leipzig, 1829), p. 239; W. Gesenius and E. Robinson, A Hebrew and English Lexicon of the Old Testament (Boston, 1859), p. 157; and BDB, p. 137. Another Hebrew noun with suffixed *-el* is *caṛāpel*, "thick cloud," cp. Akkadian *erpu*, Ugaritic *Crp*. The origin of this suffixed *-el* is probably the word 'ēl, "god, God," as an intensifying epithet; see D. W. Thomas, "A Consideration of Some Unusual Ways of Expressing the Superlative in Hebrew," VT 3 (1953), p. 212. I am inclined to dissociate suffixed *-el* from suffixed *-ōl*, though the two are sometimes mentioned in the same breath as if they are derived from the same morpheme; see, e.g., B. A. Levine, "The Deir ^{ca}Calla Plaster Incriptions," JAOS 101 (1981), p. 202, no. 24. Two vocables which do include the *-ōl* suffix are discussed by M. Dijkstra and J. C. de Moor, "Problematical Passages in the Legend of Aqhātu," UF 7 (1975), pp. 203-204. A thorough examination of all nominal formations in *-l* in Semitic is certainly a desideratum; in the meantime see C. Brockelmann, "Deminutiv und Augmentativ in Semitischen," Zeitschrift für Semitistik 6 (1928), pp. 127-128. Kutscher, Millim ve-Toldotehen, p. 8, also cites *garzen*, "pick(-axe)," as having a similar morphological structure (from a root *grz*, "cut," attested in Hebrew and Arabic, with suffixed *-n*). This would be additional evidence for the trilateral nature of *barzel*, especially in light of the suffixed *-n* in South Arabic form.

- 9) Or again if we compare Ugaritic *prt1*, an emphatic plosive dental [ṭ].
- 10) S. A. Kaufman, The Akkadian Influences on Aramaic (Chicago, 1974), p. 167, n. 107.
- 11) J. C. Waldbaum, "The First Archaeological Appearance of Iron," in Wertime and Muhly, CAI, pp. 69-74; see also Abramsky, "Barzel," col. 658.
- 12) So, for example, E. A. Speiser, Genesis (Garden City, N.Y., 1964), p. 35. In agreement with me is A. Stuart, "Mining and Metals," The New Bible Dictionary (Grand Rapids, Mich., 1962), p. 825.
- 13) R. O. Faulkner, A Concise Dictionary of Middle Egyptian (Oxford, 1976), p. 80.
- 14) E. Graeffe, Untersuchungen zur Wortfamilie bi3 (Cologne, 1971). I have been unable to consult this monograph; it is cited by Muhly, CT, pp. 106-107.
- 15) A. H. Gardiner, Egyptian Grammar (Oxford, 1957), p. 28; E. Edel, Altägyptische Grammatik (Rome, 1955), p. 61.
- 16) Faulkner, Dictionary, p. 80.
- 17) A long list of correspondences has been gathered by O. Rössler, "Das Ägyptische als Semitische Sprache," in F. Altheim and R. Stiehl, eds., Christentum am roten Meer I (Berlin, 1971), pp. 316-318.
- 18) C. Zaccagnini, "Note sulla terminologia metallurgica di Ugarit," OA 9 (1970), pp. 315-324; cf. Gordon, UT, p. 377.
- 18a) See A. Falkenstein, Das Sumerische, p. 31, §11. 1. 3.
- 19) See F. Hommel, "Review of P. de Lagarde, Register und Nachträge... Nomina," ZDMG 45 (1891), p. 340.
- 20) See most conveniently Leslau, Gafat Documents, p. 148.
- 21) As long as we are on the subject of these two Semitic words, we should make mention of the usual association of Ugaritic *brr* and Ethiopic-Cushitic *br(r)* with the Akkadian verb *barāru*, "to shine"; see Leslau, Gafat Documents, p. 148; Gordon, UT, p. 377. It would appear, in light of the *br* = "metal" equation in so many Near Eastern languages, that *barāru* is denominative in accordance with the usual formation of verbs according to linguistic theory. Hebrew *bārar*, Arabic *birr*, and their derivatives, all meaning "pure, purify, pious, etc." would be semantic developments from *brr*, "to shine," though theoretically they could derive from a homonymous but unrelated root.

- See further D. Cohen, Dictionnaire des racines sémitiques (Paris, 1976), Fasc. 2, p. 87. I have not cited this work earlier because under BRZL, Cohen writes "v. P/BRZL" (Ibid., p. 83), and the fascicle covering the letter P has not yet appeared.
- 22) E. H. Sturtevant, An Introduction to Linguistic Science (New Haven, 1947), pp. 133-135. As another (possible) example, we may note the proposal of W. Helck, Die Beziehungen Ägyptens zu Vorderasien (Wiesbaden, 1962), p. 406, that Egyptian ḥsmn, "bronze," is cognate to Hebrew ḥšmal and Akkadian ešmarū, both meaning "electrum" (or so usually translated).
- 23) This *b* was realized somewhere between Semitic *b* and *p*; this *z* was realized somewhere between Semitic *z* and *d*.
- 24) This datum and its development are discussed in detail below.
- 25) It so happens that there is a Near Eastern language where *z* seems to have some specialized morphological function, namely Hurrian. There are many Hurrian personal, local, and tribal names which end in *-izzi*, *-izzu*, *-izza*; see E. A. Speiser, Mesopotamian Origins (Philadelphia, 1930), p. 141; and H. L. Ginsberg and B. Maisler (Mazar), "Semitised Hurrians in Syria and Palestine," JPOS 14 (1934), p. 258. Of course, these suffixes are apparently limited to the Hurrian onomasticon and do not seem to occur in common nouns. Moreover, the Hurrian word for "iron" is ḥapalki-, totally unrelated to the Semitic words.
- 26) One need only look at such biconsonantal nouns in Hebrew as 'āb, "father," 'ēm, "mother," bēn, "son," yād, "hand" (from a uniconsonantal *d* [!]), dām "blood," yām "sea," etc., to realize, from the objects they denote, that they are among the most ancient elements in the language. The theory of determinants or determinatives accounts for the expansion of the vocabulary into longer words; cf. Moscati, ICGSL, pp. 72-74. A. van Selms, "Some Reflections on the Formation of the Feminine in Semitic Languages," in H. Goedicke, ed., Near Eastern Studies in Honor of William Foxwell Albright (Baltimore, 1971), pp. 421-431, is the best application of this method of historical linguistics known to the present writer.
- 27) It is for this reason as well as for others, that the theory of Ellenbogen, Foreign Words in the Old Testament, p. 52, must be discounted. Ellenbogen notes that in CT XVIII. xxix. 51a the ideographic spelling for parzillu is not the usual AN.BAR rather BAR.GAL. Since "𐎠𐎢𐎡 GAL is to a certain extent synonymous with 𐎠𐎢𐎡 NUN which ideogram can also be read S/ZIL," he suggests "the possibility that for 𐎠𐎢𐎡 there existed once also a reading S/ZIL." If we accept these two jumps, from GAL to NUN and

from NUN to S/ZIL, then BAR.GAL could be read BAR.S/ZIL, a Sumerian etymon of *parzillu*, *barzel*, etc. But these jumps are so preposterous that the entire theory, while certainly attractive, should be dismissed. ~~This is especially true in light of the cumulative evidence presented in Section II.~~ On BAR.GAL see also F. Schachermeyr, "Eisen," RLA 2 (1938), p. 316.

A. Deimel, Šumerisches Lexikon III (Rome, 1934), p. 146, suggests comparison between AN.BAR = *parzillu* and a possible BAR.ZIL, but the cross references in Šumerisches Lexikon II (Rome, 1928), p. 162 [nos. 74,230-231], read BAR.NUN = *hīlṣu* or *šiliptu*. The former term means "fortification" according to CAD 6 [H], p. 187, and the latter means "diagonal hypotenuse" according to CAD 16 [S], p. 188. Thus Deimel's suggestion should be dropped since never does BAR.ZIL/NUN mean "iron".

N. Slouschz, "Meḡqarim ^CIvriyim-Kena^Canim," Leshonenu 4 (1931-1932), pp. 115-119, skips the jumps which Ellenbogen proposes and simply suggests a relationship between Sumerian BAR.GAL and Semitic *barzel*, *parzillu*, etc., though he is unable to decide which way the borrowing went. Naturally, this whole theory is off base since BAR.GAL is attested only once and AN.BAR is the usual writing. See also Hommel, "Review of P. de Lagarde....," ZDMG 45 (1891), p. 340.

There are other problems with Slouschz's article, e.g., his citing an Egyptian word *prznš* and an Old English *fersem*, both of which are unknown to me. I must also humbly contend with his theory that several times in the Bible *barzel* refers to basalt, which is usually *bazzelet* in Hebrew. The latter may indeed be derived from the former, but I seriously doubt that people in a technologically advanced world such as the 1st Millennium B.C. Near East confused the hard metal and the hard stone. *Barzel* in Deut 8:9, for example, can hardly refer to basalt when parallel to a mention of copper.

- 28) L. R. Palmer, The Latin Language (London, 1954), p. 36; Kutscher, Millim ve-Toldotehen, p. 8; A. Walde and J. B. Hofmann, Lateinisches etymologisches Wörterbuch (Heidelberg, 1965), p. 486; and A. Ernout and A. Meillet, Dictionnaire étymologique de la langue Latine (Paris, 1951), p. 409. The latter are quoted by Baumgartner, Lexikon, p. 148, superseding the inferior material in KB, pp. 148-149. All of these scholars assume, as do I, that the Latin word has a Near Eastern origin. The view of F. Altheim, Geschichte der lateinischen Sprache (Frankfurt, 1951), pp. 52-53, that the Semitic words are derived from a reconstructed **bherso-* or **bhorsilli-* native to the Dolomite Mountains region is most improbable. The

facts that iron usage is attested so early in the Near East and that the Akkadian word *parzillu* is attested so early as c.1900 B.C. in the Cappadocian tablets militate against Altheim's theory. Absolutely impossible is Altheim's suggestion that the Illyrian Philistines were the ones who brought this word to the Near East; unless we posit Philistine-Akkadian contact before c. 1900 B.C. this view cannot be upheld.

- 29) Palmer, The Latin Language, p. 215.
- 30) Ibid., p. 231.
- 31) Ibid., p. 227.
- 32) As assumed by most comparative Semitists; see Moscati ICGSL, p. 25.
- 33) Palmer, The Latin Language, p. 224.
- 34) Ibid., pp. 243-244.
- 35) See the many references cited by R. Pleiner, "Early Iron Metallurgy in Europe," in Wertime and Muhly, CAI, pp. 360-363.
- 36) A. M. Snodgrass, "Iron and Early Metallurgy in the Mediterranean," in Wertime and Muhly, CAI, pp. 360-363.
- 37) Walde and Hofmann, Lateinisches etymologisches Wörterbuch, p. 486; see also Kutscher, Millim ve-Toldotehen, p. 9. OED 1 (1933), p. 1058, states simply "of unknown origin."
- 38) Muhly, CT, p. 356, n. 45a. OED 1 (1933), p. 1126, states that "The origin of the It. [*bronzo*] is uncertain."
- 39) Kutscher, Millim ve-Toldotehen, p. 9.
- 40) S. A. Wolf, Wörterbuch des Rotwelschen: Deutsche Gaunersprache (Mannheim, 1956), p. 45.
- 41) This seems to be the assumption of Baumgartner, Lexikon, p. 149, where *Bartel*, "crowbar," one of the derivatives, is cited in the discussion of *barzel*. Baumgartner's reference to Wolf, Wörterbuch des Rotwelschen, no. 4248, is apparently an error for no. 329.
- 42) Professor George Jochnowitz informs me, however, that to his knowledge Hebrew *barzel* is never used in any Yiddish dialect. On the contact between Rotwelsch and Yiddish, see S. Landmann, Jiddisch: Abenteuer einer Sprache (Munich, 1964), pp. 73-95 [=chapter 4, "Rotwelsch und Jiddisch"].

- 43) On specifically the iron ore reserves in Spain, see. R. H. Chilcote, Spain's Iron and Steel Industry (Austin, Tex., 1968), pp. 50-53. On early Phoenician involvement with Iberian iron, see W. C. Atkinson, A History of Spain and Portugal (Harmondsworth, 1960), pp. 17-18.
- 44) See R. S. Tomback, A Comparative Semitic Lexicon of the Phoenician and Punic Languages (Missoula, Mont., 1978), p. 55.
- 45) H. Stumme, "Gedanken über libyisch-phönizische Anklänge," ZA 27 (1912), p. 126; see also S. Gsell, Histoire de l'Afrique du Nord I (Paris, 1921), p. 212, n. 4, p. 368, n. 4; and Baumgartner, Lexikon, p. 148.
- 46) OED 1 (1933), p. 1067.
- 47) The first vowel a is also indicated by Berber *azzal*, though the same cannot be said of the second vowel where the Berber form has a versus Hebrew-Phoenician *e/i*.
- 48) Z. Harris, A Grammar of the Phoenician Language (New Haven, 1936), p. 25.
- 49) Chilcote, Spain's Iron and Steel Industry, pp. 51-53.
- 50) See the convenient maps in Pleiner, "Early Iron Metallurgy in Europe," p. 382; and J. M. Sola-Sole, "Semitic Elements in Ancient Hispania," CBQ 29 (1967), p. 490 [=p. 184 of the particular issue, Studies in Honor of Louis F. Hartman].
- 51) See M. Dillon and N. K. Chadwick, The Celtic Realms (New York, 1967), especially pp. 1-42.
- 52) A number of place names in northern Spain, all in the iron-producing region near the Bay of Biscay, are strikingly similar to *barze/il*, to wit, Barcela, La Barcella, Barcena, Barcenilla, Barcina, Barcenas, Barzana; see R. Menendes-Pidal, Toponimia Prerrománica Hispana (Madrid, 1968), p. 57. Could they in any way be related to *barze/il*? We might ask the same question regarding Barcelona, not in the iron-producing region itself, but the Mediterranean port most likely used for shipping north Iberian iron. There are problems with the phonetics, e.g., the *c* in Barcelona probably represents an original [k] and not a fricative, plus we must contend with the popular etymology which derives this toponym from Barca father of Hannibal, but a scholar more qualified than I might wish to investigate the possibility of some connection.
- 53) OED 1 (1933), p. 1066.
- 54) Ibid.

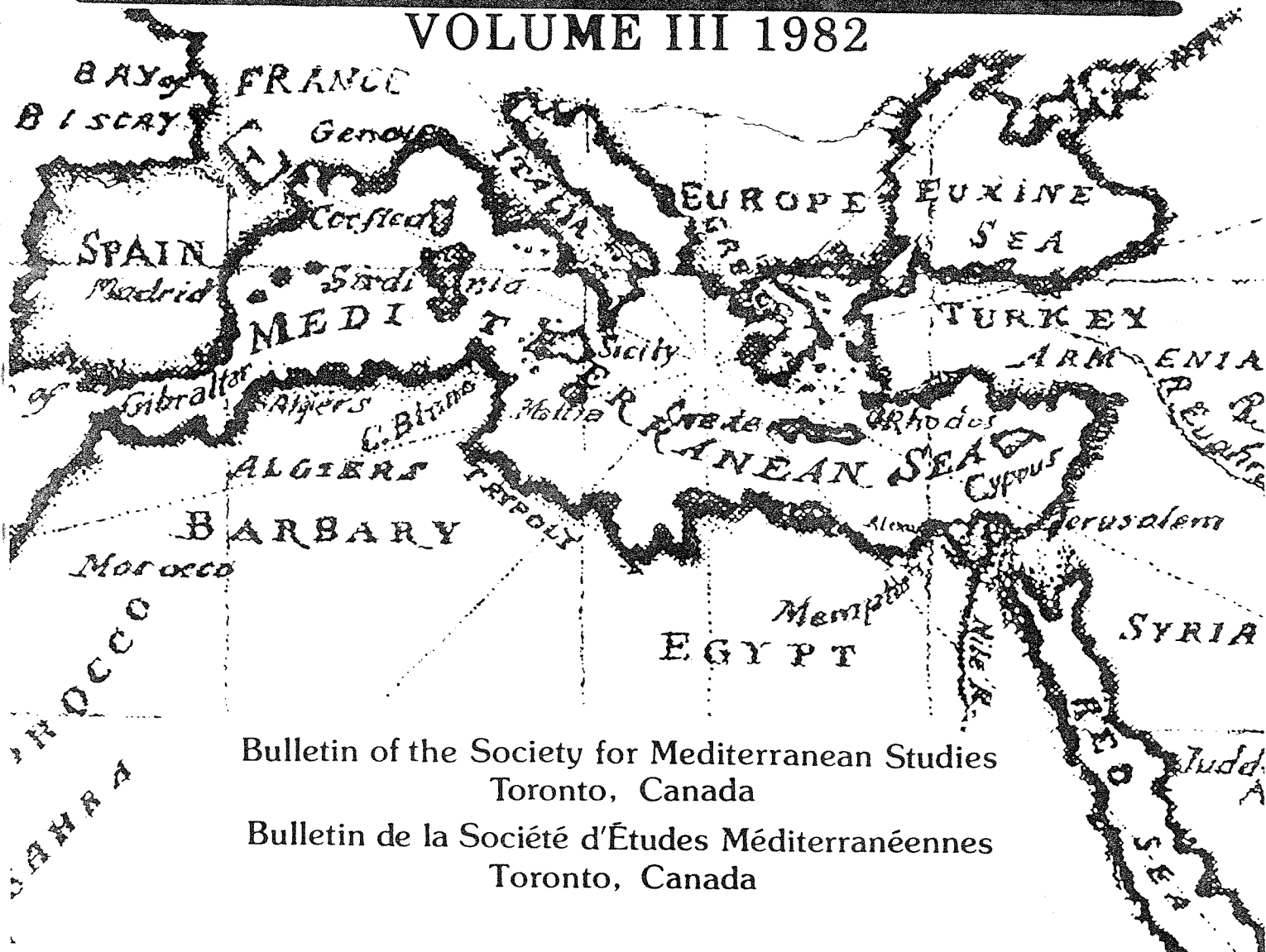
55) Ibid.

56) Whence the name of the large South American nation Brazil can be the subject of considerable speculation. Most scholars assume that because hard woods similar to brazil-wood were found there by the colonizing Portuguese, the name was extended to the country. But several factors may militate against this theory. 1) Long before the Europeans reached Brazil in the late 1400's and 1500's there are references to a Brazil in the Atlantic Ocean on pre-Columbian maps and in Irish lore; see W. H. Babcock, Legendary Islands of the Atlantic Ocean (New York, 1922), p. 50; and L. S. de Camp and C. C. de Camp, Ancient Ruins and Archaeology (Garden City, N.Y., 1964), p. 7. 2) Brazil is the most abundant source of iron in the world; see W. Baer, The Development of the Brazilian Steel Industry (Nashville, 1969); and National Geographic Society's Atlas of the World (Washington, D.C., 1966), p. 70. 3) There remains the possibility that Phoenicians reached Brazil c. 600 B.C.; see the following works all by C. H. Gordon, Riddles in History (London, 1974), pp. 71-92; Before Columbus (London, 1971), pp. 114-127; "The Authenticity of the Phoenician Text from Parahyba," Orientalia 37 (1968), pp. 75-80; "The Canannite Text from Brazil," Orientalia 37 (1968), pp. 425-436; as well as A. van den Branden, "L'inscription Phénicienne de Paraiba (Brésil)," Melto 4 (1968), pp. 55-73. How all this is to be sorted out is not the subject of this paper, but we can wonder whether Brazil too may owe its name to *barzel*. The brazil-nut presumably derives from the name of the country (so OED 1 [1933], p. 1066), but the hardness of the nut may also have led to its naming.



SCRIPTA MEDITERRANEA

VOLUME III 1982



Bulletin of the Society for Mediterranean Studies
Toronto, Canada

Bulletin de la Société d'Études Méditerranéennes
Toronto, Canada