

## ON THE THAI EVIDENCE FOR AUSTRO-THAI

1. **Introduction.** The purpose here will be to examine the evidence on the Thai side presented by Paul K. Benedict (hereafter PKB) in his new book *Austro-Thai: Language and Culture, with a Glossary of Roots* (hereafter AT).

The book is impressive for the great industry that has gone into it, and for the author's bold imagination. Both these qualities have been in the past, and will continue to be, requisite to any substantial forward progress in our understanding of the linguistic prehistory of Southeast Asia.

It is a convenience to the reader to have included in the book PKB's earlier publications on the subject. Pages 1-33 ("Austro-Thai") first appeared in 1966; pages 35-74 ("Austro-Thai Studies: 1. Material Culture" and "2. Kinship Terms") in 1967; pages 75-133 ("Austro-Thai Studies: 3. Austro-Thai

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and Chinese") also in 1967; and pages 438-63 (the famous original article "Thai, Kadai, and Indonesian: A New Alignment in Southeastern Asia") in 1942. The rest of the book is new. From time to time items cited below will be identified by these dates where it seems relevant to do so: that is, 1942, 1966, 1967, and (for the new material) 1975.

Before proceeding further I feel compelled to make some comments of a personal nature. For over thirty years, although the author and I have been good personal friends, I have been among those not persuaded by PKB's arguments in his original 1942 paper. PKB speaks on p. 138 of AT of "unrepentant scholars" who "still inveigh against the AT hypothesis." I hope I have not "inveighed," but I have made no secret of my disbelief, and perhaps, in cases of inveighing, the inveigher is never himself conscious that he is inveighing. I have been sorry through the years to find myself unable to agree with a number of scholars, many of them old friends and valued colleagues, for whom I otherwise have great respect, in their acceptance of PKB's hypothesis of a genetic relationship between Thai and Austronesian.

I resolved, therefore, to make as careful an examination as possible of all PKB's Thai evidence now presented. (I follow PKB throughout in using the spelling Thai, although normally I prefer the form Tai as the name of the family.) I have spent some weeks in indexing every Thai form cited, and intended originally to search all PKB's sources in order to make an exhaustive check. I have found it necessary, however, to curtail this work of checking, which

turned out to be much more time-consuming than expected, especially in cases where PKB has modified the original, or where he cites a gloss from a modern language without the specific modern form, giving instead his Proto-Thai reconstruction, sometimes making the search for the modern form slow and uncertain. But, although I have had to abandon the plan to make an exhaustive search of every source, I have done a good deal of this checking, and will present examples from my findings. It will be seen that so much has turned up calling for comment that it is just as well that time did not permit further checking.

I am sorry to report that after this close study of PKB's Thai material I find myself even more unconvinced than before. I regret now that I agreed to participate in this panel, since I have no desire to appear to pick a quarrel with PKB or the others who accept his hypothesis. Time will tell, as scholarship in these areas advances, whether he is right or wrong. But, having accepted this assignment, I am obliged now to try to organize and explain the various reasons for my disbelief. These will be roughly grouped under a number of headings. It will be seen that the division among these is not always clear-cut, and that some examples might as well have been mentioned under some other heading than the one chosen.

2. **Bibliography.** Before proceeding further I wish to comment on PKB's bibliography, pp. 428-37. For accuracy and clarity, this bibliography is unusually good. Southeast Asian linguistic scholarship

is not usually so successful in its handling of references. But this bibliography, surprisingly, fails to include many of the important references cited in the original 1942 article (pp. 438-63).

PKB has made use of most of the references available up to about 1940. There are only a few gaps in this earlier material: he does not use the valuable dictionary by Savina of the variety of Thai spoken in the Ha-Giang area of North Vietnam, of great interest because of its transitional position between Southwestern Thai to the west and the Tho-Nung dialects to the east. And for Siamese one is surprised to find reference only to the early dictionaries by Pallegoix and Lajonquière. Many of the errors in the Siamese data might have been avoided, and perhaps better material would have turned up, if he had used some of the many twentieth-century dictionaries of this language.

Use of references that have appeared since about 1940 is more sporadic. Perhaps one should not be too critical on this point; so much has appeared, often in out-of-the-way places, that no worker in this field can be expected to have gotten his hands on, or had time to make full use of, every source. But much of the more recent work that PKB has failed to utilize deals systematically with comparative phonology. It is in this area that his work is weakest. One has the impression that he has been mainly interested in gleaning dictionaries and word lists for items of interest to him, rather than in studying and perhaps advancing the systematic phonological comparisons and



reconstructions upon which sound comparative work must be based.

3. **Other Arguments.** The reader of AT is left with no doubt that PKB agrees with most students of linguistic history and prehistory in regarding the comparative method as the one sure test of genetic relationship. His aim throughout is to do as any of the rest of us would do, that is, to seek to discover cognate sets showing consistent sound correspondences, which must reflect divergent developments out of a single prehistoric "parent" language. Whatever strength is to be found in the AT hypothesis has to lie in this area, and it is mainly as an exercise in the comparative method that the work has to be judged. I have no doubt that PKB would agree with this view. But he has also introduced a number of other arguments on which we must comment before proceeding to examine the comparative evidence.

3a. **Archaeology.** All students of Southeast Asia must be impressed and excited by the great advances made in recent years by archaeologists. PKB refers to these discoveries from time to time. But it seems to me that we have to conclude with regret that, at least so far, these impressive discoveries shed no light on the linguistic questions here under review, for two reasons: (1) the time depth that the archaeologists are usually talking about, tens of thousands of years, is much too early for these linguistic questions; and (2) the archaeologists' analyses of their data on the sites they have discovered tell us nothing about what language was spoken by the inhabitants.

3b. **Areal Features.** Linguists who study Southeast Asia, one of the most complex areas in the world, are constantly struck by instances of apparent convergence, where languages or language groups that are genetically unrelated (or if related, the relationship is so far back in time as to be irrelevant), for example, Thai and Mon-Khmer, or Thai and Tibeto-Burman, or Thai and Vietnamese, or any Southeast Asian language and Chinese, show similarities in grammatical structure or in the organization of the semantics of the lexicon. These convergences are clearly the result of contact; how much former bilingualism must be assumed in order to explain these similarities is not yet clear. Evidence from this sort of material is irrelevant in seeking genetic relationships, although it may help us discern facts that are perhaps of at least equal interest and importance as to prehistoric language contacts.

Syntactic structure is therefore of no help in arguing for genetic relationship. Thai languages spoken in China often exhibit the Chinese order, attributive-plus-head, rather than the usual Thai order, head-plus-attributive. Thus, for 'tears', most Thai languages in Southeast Asia proper use 'water-eye', with the attributive following the head (for example, Siamese *nam*<sup>4</sup> *taa*<sup>1</sup>), but in Thai languages spoken in China the opposite order, 'eye-water', often occurs. For some expressions some of the Thai languages in China will have both constructions in free variation; in other instances only the Chinese-like construction occurs, especially when one element or the other is a loanword from Chinese.

Although I have never looked into the question myself, I have heard on more than one occasion comments from students who have looked at the material on Khamti, a Thai language spoken far to the west, in mainly Tibeto-Burman territory, that Khamti diverges from the usual Thai order of subject-verb-object in the direction of Tibeto-Burman usage.

PKB weakened his original case for his AT hypothesis by referring (p. 460, 1942) to this question of word order, claiming that the difference in usage between Thai and Chinese argued against a genetic connection between these two groups. As a number of critics have pointed out through the years (orally; I don't recall having seen this comment in print), all one needs to do to refute this argument is to cite the case of Germanic and Romance, where two language groups known to be genetically related follow different rules in their ordering of head and attributive.

Structured lexical sets such as numerals, kinship terms, and pronouns are likewise well known to be subject to this kind of areal cross-language influence. Southeast Asia provides many instances of the borrowing of structural features of number systems, often involving also the borrowing of specific number words. No doubt the buying and selling situation at market among peoples of different languages was a cause, especially in earlier times when populations were smaller. Sometimes, as in the case of Cambodian, another factor seems also to have operated--the discarding of a native nondecimal system in favor of a foreign decimal system. This matter of numerals has rightly been used by PKB as an argument

that the occurrence of the same number-words in Chinese and Thai is not proof of genetic relationship. But, by the same token, number-words and numeral systems are of questionable validity as evidence for any other genetic relationship.

Pronouns in Southeast Asian languages are especially susceptible to change and innovation. Apparently, in the traditional, stratified, social situation, polite pronouns rather rapidly became "worn out," so to speak, tending to become less polite, with the result that new, fresher, more polite pronouns had to be introduced from time to time. This process has continued up to the present; Siamese *phom*<sup>5</sup> for 'I' (used by males), literally 'hair of the head', is known to be new in the last century or so.

The Thai languages of Kwangsi and adjacent parts of North Vietnam have adopted the Cantonese words for 'you' and 'I'. One suspects that this drastic change involved a rejection of the traditional social structure.

The result of all this is that each Thai language shows differences from the others in its inventory of pronouns. The semantic classifications tend, however, to agree. Thus students of Southeast Asian languages are often struck by the fact that one usually finds, whatever the language, a pronoun used exactly like Siamese *than*<sup>3</sup> (which, incidentally, is of unknown provenience; the geographical range of this word is extremely restricted).

Although all of this makes for great difficulty in trying to reconstruct earlier pronominal systems, and renders futile any attempt to use pronominal

systems as genetic evidence, there is no reason why specific pronouns that occur in more than one language may not be used in comparative work just like any other lexical data.

Kinship terms, involving sometimes specific lexical items and sometimes the semantic categories of the kinship system, are frequently borrowed. Many Thai kinship terms show tonal irregularities from one Thai group to another, suggesting the possibility of borrowing at least from one Thai group to another, if not involving non-Thai languages. PKB has examples of this; for example, 'father's younger brother' has PKB's proto-tone A in the Southwestern area [for example, Siamese ?aaw<sup>1</sup> (obsolete)], but his proto-tone C in the Tho-Nung area (p. 196). He cites 'mother's father' as \*ta with his proto-tone A, not mentioning the fact that in a large area this word has his proto-tone C. For 'mother's mother' PKB gives \*naay and also another form, \*taay, found in the Tho-Nung area, with tonal irregularities between different languages not mentioned (p. 65).

Idioms and other specific locutions recur frequently among Southeast Asian languages, regardless of genetic relationship. Such expressions as PKB's beloved 'eye-of-day' for the sun are so widespread as to carry no weight in the genetic argument.

Students who get involved in more than one Southeast Asian language often comment on how much easier it is to translate from one of these to another than it is to translate from one of them into a European language such as English. Word-for-word correspondence is common, and one frequently finds

that, whereas particular expressions have no exact equivalent in English or French, such exact equivalents are found in unrelated neighboring languages. It is as if, at various times in the past, whole groups tried to speak their language as if it were a literal translation of an unrelated neighboring language.

PKB has weakened his case by invoking from time to time some of these nonlexical and nonphonological features, which, we have argued, are especially susceptible to cross-linguistic areal influences. His case would have been stronger if he had omitted all material of this kind. But he has wisely based his hypothesis mainly on the comparative method, and the rest of this critique will deal with various aspects of his use of that method.

4. **Tonal Castration.** Comparative Thai studies since the early work of Maspero (1911) and K. Wulff (1934) have been deeply involved in the study of tonal correspondences. These phenomena are enlightening because all of these languages have undergone, at some time after the breakup of the proto-language, various tonal splits conditioned by the phonetic nature of the syllable-initial consonants, so that the comparative study of tones throws light on the earlier consonant systems in various branches of the family, as well as that of Proto-Thai. From PKB's reconstructions one sees that he is well aware of all this.

Proto-Thai is believed to have had three tones in nonchecked syllables, which scholars variously identify as ABC, 123, 012, or the like, observing a

traditional order found in Thai-speaking areas that use alphabetical writing systems (Thailand, Burma, Laos, Yunnan, and the western part of North Vietnam).

In his new 1975 material (AT pp. 190-200), PKB deals with these three Proto-Thai tones, but students must be warned that his Proto-Thai B and C tones correspond respectively to C and B in the work of other scholars. It is ironic that in this matter PKB, whose whole effort is aimed at disproving a Thai-Chinese relationship, is here following Sinological usage.

The abbreviations s.t. (same tone) and d.t. (different tone), which occur occasionally throughout the book, refer not to the modern tones of the language in question but to these three proto-tones.

The abbreviations h.t. (high tone) and l.t. (low tone) are a different matter. High tone in PKB's usage refers to a modern tone that reflects an earlier voiceless initial; the actual tone in the modern language may be any of the various tones derived in that language from A, B, or C with an earlier voiceless initial, of whatever modern phonetic tonal shape. Similarly, PKB's l.t. (for low tone) means that the form cited has in that language one of the modern tones that reflect an earlier voiced initial.

The new discussion of Proto-Thai tones (AT, pp. 190-200), and the occasional comment, s.t., d.t., h.t., or l.t., are the only concessions made by PKB to tones; otherwise he disregards tones entirely. Not only does he delete from modern forms all indication of tone, even when his sources mark tones, but

his Proto-Thai reconstructions are not marked as having had tone A, B, or C. The failure to mark tones sometimes makes it difficult to decide what actual modern form is intended, or to find the word in his sources in cases where, as is usual, the original dictionary or wordlist distinguished tones. One can think of no other published scholar who has dared to disregard tones in dealing with linguistic comparison and reconstruction in Thai, and it is difficult to understand how a man of PKB's outstanding training, intelligence, and industry can have deliberately placed himself outside the tradition established from the beginning by Maspero, Wulff, and others.

One suspects that the motivation lies in the great importance that the AT hypothesis has from the beginning placed on a few badly recorded early word lists where tones are not marked (and other distinctions are sometimes also ambiguous). It is as if a kind of Gresham's law has been at work. Although most of the material now cited comes from the sources that mark tones and carefully distinguish vowels and consonants (though sometimes using an orthography which PKB, like the rest of us, prefers to retranscribe), the tendency throughout in AT is to disregard the tonal distinctions, and sometimes to confuse segmental distinctions, just as PKB's precious, old, prescientific references did, thus reducing the better later data to the level of the inferior earlier material.

A consequence of all this is that no one can really evaluate PKB's specific citations or



comparisons without redoing completely his research in the original sources. It would be futile and foolhardy for any reader of AT to attempt, as linguists often like to do, to play around with the material as presented with a view to trying to see what more might be inferred from it, without going back to the sources to determine the exact phonological shapes, including tones. PKB has made it difficult to apply to his work the principle that scientific investigations are supposed to be susceptible of replication.

5. **Meanings.** For the most part PKB is to be complimented on his citation of meanings for specific forms. He almost always quotes the exact wording of the gloss in the original source. An especially good set of examples occurs on p. 234, under T\*kat, but this principle of verbatim citation of glosses appears throughout the work. In this respect PKB follows the practice of the older etymological dictionaries and comparative writings in such traditional fields as Indo-European. Most of the rest of us in Thai studies are not so careful. We tend to give a kind of brief common-denominator gloss for an entire set of cognates and then cite the forms in the various languages without meanings unless there is glaring deviation. PKB's practice is better, and the rest of us ought to mend our ways and follow his example.

But occasionally he allows himself to alter a gloss to strengthen his case. I will cite some examples from among those I have noticed, but in doing so I do not wish to imply that I am accusing

PKB of dishonesty. In most of these cases PKB probably believed that the word could be interpreted in the sense he gives, as if to say elliptically "[. . . , that is to say]. . ."

The word  $\text{?e}$ , with the tone that would correspond to Siamese  $\text{*?e\text{c}^3}$ , is the usual verb for sexual intercourse in the Tho-Nung area, used just like the familiar English four-letter obscenity, with the male as subject and the female as object. Diguët glosses the Tho form as 'coïter'. It does not mean, as PKB says [p. 18 (1966), p. 283 in AT] 'discharge semen'. This is a revised gloss intended to help his case, which is spurious on other grounds, because the alleged Shan cognate meaning 'to defecate' has a tone (not, of course, marked by PKB), which identifies it as a noninherited word in Shan.

Tho  $\text{thiag}^2$  means 'sugar', not 'bee' or 'honey', as claimed on pp. 45 and 229. The revision of the gloss is part of an attempt to make this cognate with Siamese  $\text{phij}^3$  'bee', which fails on phonological grounds in any case.

Siamese  $\text{plii}^1$  and its cognates mean 'banana blossom' (pp. 47, 196, 225). It seems rash to cite this word under the general meaning 'bud' (p. 18).

Siamese  $\text{poo}^1$  (PKB's  $\text{T*po}$ ), cited under 'hibiscus' (p. 314) and its cognates always refer to a widely used Southeast Asian fiber plant entirely different from the hibiscus.

$\text{T*?daaw}$  (Siamese  $\text{daaw}^1$ ) always means 'star', as on p. 402, never 'sky', as on p. 397.

Siamese  $\text{gaay}^5$  does not mean 'moonlight', as alleged under  $\text{T*hgaay}$  on pp. 330 and 470. In the

phrase *dian*<sup>1</sup> *gaay*<sup>5</sup> 'full moon' it is simply the familiar verb '(to lie) face up', pronounced with initial *h-*, by a regular change, in various other dialects, making it as a result of coincidence homophonous with the usual Tho-Nung word for 'moon'.

Siamese *toom*<sup>1</sup> does not mean 'to suck in' (p. 275), a revised gloss apparently intended to assist a desired Austronesian connection. The Thai word means 'to swarm on (for example, food)'.

The meaning 'paps' for *\*tau* (Siamese *taw*<sup>3</sup> [p. 69]) is a possible interpretation of the second element in the expression *luuk*<sup>3</sup> -*taw*<sup>3</sup> 'child', or this may be *taw*<sup>3</sup> in the meaning 'gourd'. In any case the gloss 'child' or 'person', as cited from Lao on pp. 335-36, is wrong.

PKB's gloss 'areca' for *\*liɟ* (Siamese *liɟ*<sup>1</sup>) involves an amusing error. This is the familiar word *liɟ*<sup>1</sup> 'monkey'. PKB has misinterpreted the Siamese expression *maak*<sup>2</sup> *liɟ*<sup>1</sup> 'wild areca', cited on p. 43 from Lajonquière; the term simply means, literally, 'monkey's areca'.

There is another error involving the word *areca*, which is perhaps more regrettable because PKB has made more use of it. Siamese has a word *miaɟ*<sup>3</sup> 'fermented tea', more often used in dialects of the areas where this substance is chewed than in the standard language. By a familiar Siamese process for expanding nouns (or sometimes verbs) by adding a word of different but related meaning, we get the expression *miaɟ*<sup>3</sup> *maak*<sup>2</sup>, glossed 'betel and areca', cited (pp. 43, 220) from Lajonquière. This idiom does not justify the inference that *miaɟ*<sup>3</sup> has an independent

meaning 'betel' or anything else than the usual meaning 'fermented tea'.

Siamese *thook*<sup>2</sup> does not mean 'penis' (p. 351). It is a verb, used in the vulgar cursing expression *thook*<sup>2</sup> *khuay*<sup>1</sup> 'to skin the penis'.

The gloss 'to be drawn toward the bottom' for Siamese *dam*<sup>1</sup> (p. 267) seems to be an ad hoc revision of the meaning 'to swim under water', designed to bring it closer to the desired Austro-Thai meaning 'deep'.

Siamese has a verb *suan*<sup>5</sup> 'to have or give an enema', homophonous with the noun *suan*<sup>5</sup> 'garden'. PKB has (so far as I can determine arbitrarily) revised this gloss to 'thrust into the anus' (pp. 37, 198, 270). This distortion permits him to associate this word with the meaning 'to dig', and so, in turn, with 'garden'. Actually the Thai usage in connection with enemas is nothing more than a special meaning of another word *suan*<sup>5</sup> 'to pass going in opposite directions', having nothing whatever to do with gardens. PKB's word groups that rest on this misinterpretation of *suan*<sup>5</sup> have to be rejected.

It is regrettable in the extreme that PKB has thus occasionally deviated from his usual practice of verbatim citation of glosses. The result is that students of AT cannot trust the meanings he gives as accurately reproducing what his sources say, though it turns out that in most cases there is no such error or distortion. The heart sinks at the thought of the apparently necessary task of locating and checking the original gloss for every one of the forms he cites.

5. **Cognates.** Although it is clear that PKB's aim, as we have already remarked, is to use the classical comparative method, using regular sound correspondences to identify items in the different languages, which are thus proven to be divergent reflexes of a single form in the parent language, and most of his specific examples *within Thai* are undoubtedly true cognates, so many impossible comparisons turn up that one is forced to suspect that his method has not always been to lay out, or at least keep in mind, the phonological correspondences and then list examples of each in order to establish cognates, or even to check suspected cognates with other items to see whether the sounds do indeed really correspond, but rather to allow himself luxuriously to search freely and at random for instances of sporadic partial similarity. I will cite some examples of alleged cognates where a quick check against the sound correspondences shown in other examples would have prevented error.

The Siamese word for 'to row' is *phaay*<sup>1</sup>. The Shan form cognate with this ought to be *\*paay*<sup>4</sup>, from an original *T\*baay*. Actually the Shan word is *phaay*<sup>4</sup>, for which PKB would have to reconstruct *T\*vaay*. For this Shan form *phaay*<sup>4</sup> there are genuine cognates with initial *f-* in a number of other Thai languages. So PKB's listing of the Shan form under *T\*baay* on p. 342, implying cognacy with the Siamese form, is wrong. The Shan form ought rather to have been put with Nung *\*vaay* on the same page.

Tho 'crest', cited under *T\*son* 'heel' on p. 226, won't do. The Tho form, according to Diguet's

dictionary, is *hɔn*<sup>2</sup>, which is exactly cognate with Siamese *ɣɔn*<sup>5</sup>, not with *son*<sup>3</sup> 'heel', which moreover fails to correspond in tone.

Under *\*ba* on pp. 246-47, the Shan form cited with the gloss 'suspend from the shoulder' involves an incorrect etymology. The actual form in Shan is *laa*<sup>1</sup>. This is cognate with a widespread Thai word that usually means 'to carry (a child) on the back', sometimes occurring in the name of the cloth used for this purpose. This would be Siamese *\*daa*<sup>1</sup> if Siamese had the word, and in PKB's system the reconstruction would be *T\*ʔda*.

There is some confusion of roots on p. 322 arising out of incorrect grouping of cognates. The Shan form 'to be even-numbered, form pairs; to be complete', cited under *\*gop*, seems to belong rather with the Siamese and Lao forms cited under *\*grop*.

Siamese *takreeŋ*<sup>1</sup> 'sieve' (p. 5) has all the earmarks of a foreign loanword. In any case, PKB's connection of it with Dioi *raŋ* 'sift; sieve, winnowing basket' is beyond belief.

Siamese *muj*<sup>4</sup> 'mosquito-net' has nothing to do with the words for 'net' cited on p. 109. It is, rather, directly cognate with the forms given under *T\*muj* 'den, lair' on pp. 12 and 268.

There is no way that Siamese *phɨŋ*<sup>3</sup> 'bee' can be made cognate with Tho *thiaŋ*<sup>2</sup> 'sugar' (pp. 45 [1967], 229 [1975]). The initials, the vowels, and the tones all fail to correspond; only the final *-ŋ* works. The semantic problem in this example has already been mentioned. Actually this Tho-Nung word for 'sugar' is so similar to Cantonese that this example may

rather belong in the category of "Alien Intruders" to be taken up below.

Siamese *raag*<sup>3</sup> 'form, frame' is made cognate with a widespread Thai word for 'body', which would be Siamese *\*daag*<sup>1</sup> if Siamese had it. The tones and initials do not correspond, and study of the meanings of the two words in Thai languages that have both (as many do) shows that they are quite distinct. They cannot be combined under a single proto-form as on p. 238.

The Saek word *thraw*<sup>3</sup> 'head' is cognate with the word for 'head' in other languages of the Northern Thai group, but not with the word represented by Siamese *klaaw*<sup>3</sup> 'topknot' (p. 312). (This incorrect identification and the preceding one involving *raag*<sup>3</sup> have been made also by other scholars, from whom PKB may have picked up the items.)

PKB's handling of various Thai words for 'ox, cattle' requires special discussion. The plain facts are these. Whereas for the 'water buffalo' there is a single term (represented by Siamese *khwaay*<sup>1</sup>) found in all branches of the Thai family, for the ox various terms are found in different areas, every one of them open to suspicion of being non-native. In the Tho-Nung area the term is the one represented by Tho *mo*<sup>3</sup>. In the Northern Thai languages spoken in China there is a different word with an initial sibilant. The term used in the Southwestern area is the one represented by Siamese *gwa*<sup>1</sup> or *wua*<sup>1</sup>. The peculiar Siamese alternation in initials in this word, found also in some of the other Southwestern languages, is troublesome. Matters are made worse by the Lue form

*hoo*<sup>4</sup> (presumably not available to PKB), which could only have as its regular Siamese cognate a nonexistent form *\*rua*<sup>1</sup>.

And there is no way that Siamese *ɲua*<sup>1</sup> ~ *wua*<sup>1</sup> can be made cognate with Tho *mo*<sup>3</sup> as on pp. 198, 247. Only the tones agree; the vowels and initials simply don't work. PKB's invocation of Li's cluster *\*ɲw-* on p. 46 is irrelevant; Li was dealing with other words, in which the other elements do indeed correspond regularly.

Thai uniformity in the case of the water buffalo contrasting with variety in names for the ox may turn out to have important implications for the culture of the speakers of the parent language. Meanwhile, all mention of these terms for the ox (pp. 46, 77, 101, 169, 198, 247, 248, and 452) must be disregarded.

**6. Primitivist Reductionism.** I use this term to refer to PKB's tendency to make earlier linguistic stages collapse semantic distinctions found in the modern languages.

In 1942 (p. 459) he suggested that Siamese *phii*<sup>3</sup> 'elder sibling' and *phii*<sup>1</sup> 'fat' were "perhaps etymologically related." In AT he has carried this kind of thing much further, proposing again and again that different items, kept distinct in all the modern languages, have developed out of one and the same earlier form.

'Shoulder' and 'ax' are put together (pp. 58-59), and again 'shoulder' and 'arm' (pp. 378-79).

'Moon' and one of the words for 'white' are from the same root (p. 197).

Siamese *ʔaaw*<sup>1</sup> 'father's younger brother' and



*phuu*<sup>3</sup> 'male' are from the same root.

Siamese *lia*<sup>1</sup> 'to lick' and *lin*<sup>4</sup> 'tongue' are "from the same AT etymon" (p. 195).

Siamese *klaaw*<sup>2</sup> 'to tell, accuse' and *law*<sup>3</sup> 'to narrate' are alternates of the same root (p. 195).

Siamese *klam*<sup>2</sup> 'dark (red)' and *kham*<sup>1</sup> 'gold' are put together (p. 91), and again (p. 265) the same word, *klam*<sup>2</sup>, and *kham*<sup>3</sup> 'evening, night'.

A widespread Thai word for 'dry' having a shape usually something like *khai* is combined with Siamese *heeg*<sup>3</sup> 'dry' and *leeg*<sup>4</sup> 'dry (weather), drought' (p. 275).

Particularly wondrous is the combining of 'to fly' and 'mat' on p. 394 (cf. Sinbad!).

And we are told (p. 336) that the ethnic terms Thai, Yai, Dioi, Li, Loi, and even Malay, have the same source.

The formula *\*yr(i)aaw ~ \*xriu* (p. 25) is apparently an attempt to pull together Siamese *khaaw*<sup>1</sup> 'fishy smell' and *khiaw*<sup>5</sup> 'bad-smelling' (and, of course, in this and all the other cases, all the cognates of each).

The two Siamese verbs *beek*<sup>2</sup> and *khoon*<sup>1</sup> for different methods of carrying are from the same source (p. 247).

Now, one can imagine some attempts along these lines that would be plausible. There must be some historical connection among the many Thai interrogative-indefinites ending in -ay in Siamese, -ai in languages that preserve this other diphthong, for example, Siamese *kh-ray*<sup>1</sup> 'who', *day*<sup>1</sup> or *ray*<sup>1</sup> 'which, any', *nay*<sup>5</sup> 'which, where', and the like. And

one suspects a relationship of some sort among at least some of the many Siamese words ending in -eek that refer to various actions involving separation, for example, *teek*<sup>2</sup> 'to break', *heck*<sup>2</sup> 'to part (e.g., a hedge)', *seek*<sup>2</sup> 'to part (the hair)', *seek*<sup>3</sup> 'to force one's way through (e.g., a crowd)', *ceek*<sup>2</sup> 'to distribute', *pleek*<sup>2</sup> 'strange', *leek*<sup>2</sup> 'to be crushed to pieces', and so on. The fact that no one has yet made a serious study of even these obvious sets is undoubtedly due to the difficulty in getting any sort of handle on the various alternating initials. Perhaps the best approach would be to ascertain which are old inherited forms with widespread genuine cognates, and then seek individual explanations for the more isolated forms, which are perhaps local innovations, leaving at last a residue for which one might have to assume the power of the pattern to induce new creations. This, of course, is reminiscent of the famous English set of words with initial *fl*- referring to light or fire.

But this sort of thing, of course, is not what PKB is up to. His combinations involve in only a few cases such close phonetic similarity, and in no case is any plausible explanation offered as to how the differences developed among the allegedly related forms.

Why should we assume that Proto-Thai, or the alleged Proto-Austro-Thai, was semantically so much more impoverished than the modern languages, lacking distinctions now universally observed? No doubt PKB wants these languages to work like others, such as Indo-European, where there is a "root" of sometimes

rather vague, or at least general, meaning, to which formative affixes are added to give specific nouns and verbs or whatever. But in such languages as Indo-European the form and function of the affixes have been identified with certainty. Without clearer evidence of this kind of structure at an earlier stage of our languages, this practice of making ad hoc combinations of disparate items can only suggest an assumption that the speakers of the parent language, not many thousands of years ago, had a more primitive analysis of their environment and of themselves than that enjoyed by their more sophisticated linguistic descendants.

7. **Radical Polycephaly.** By this term, for which I offer *polycephalous radicalism* as an optional equivalent, I mean the ad hoc reconstruction of roots, which I regard as two- or even three-headed monsters, if not monstrosities.

Siamese has two words for leeches, *thaak*<sup>3</sup> for land leeches and *plig*<sup>1</sup> for water leeches. Most Thai languages have cognates for each of these terms, with the same distinction in meaning. PKB does not allow this distinction to be carried all the way back. Instead he devises a proto-form that combines them, with one syllable from which *thaak*<sup>3</sup> is supposed to have developed and another which is the source of *plig*<sup>1</sup>.

The technique seems to be, if the modern languages show forms so divergent that even PKB's ingenuity cannot devise a single monosyllabic reconstruction to account for both of them, to string them out, formulating a polysyllabic proto-form, each of

whose syllables stands as the source of one of the modern forms. Page 196 has examples of such polysyllabic reconstructions for 'ear', for 'bran/chaff', and for 'jaw/chin', more impressive for their orthographic architectonics than for their credibility.

This gimmick seems to me so egregiously implausible, so outrageous to good sense, that I've found myself wondering from time to time as I study AT whether PKB may not be pulling our leg.

8. **Bastardy Ennobled.** From time to time PKB cites an item from one language or another, which is known to be, or which looks suspicious of being, a relatively late local innovation, giving it the undeserved honor of a full-blown Proto-Thai reconstruction.

A somewhat similar phenomenon in AT is the frequent citation of isolated items known (at least so far as PKB's diligent researches are able to tell us) from only a single language, with, again, a Proto-Thai reconstruction provided without evidence from occurrence in more than one language that the word is really old.

T\*[x]a 'voice of someone calling or interrupting' (Siamese, p. 389) presumably means the Siamese final particle *khaa*<sup>5</sup>, also *kha*<sup>3</sup>, *kha*<sup>4</sup> all local distortions of the old word *khaa*<sup>3</sup> 'slave'.

Siamese *baw*<sup>1</sup> 'urinate', cited as ?*bau* on p. 79, is nothing more nor less than the word 'light (in weight)' used euphemistically, paralleled by *nak*<sup>2</sup> 'heavy' used in euphemisms for defecating.

Siamese has an extra prior syllable, *sa-* in *saphay*<sup>4</sup> 'female-in-law', which is a local innovation.

probably a reduction of *saaw*<sup>5</sup> *phay*<sup>4</sup> (*saaw*<sup>5</sup> meaning 'young woman'). PKB goes to unnecessary trouble in reconstructing proto-forms that will include the Siamese, (s-) *bai* on p. 157 and \**sabai* on pp. 67 and 320.

The form \**gai* 'who, which' in the 1942 article (p. 452, n. 39) presumably was an attempt to deal with the colloquial pronunciation *khay*<sup>1</sup> of standard Siamese *khrai*<sup>1</sup>, itself a local innovation believed by linguistic scholars in Thailand to have resulted from a conflation of *khon*<sup>1</sup> 'person' and *ray*<sup>1</sup> 'which'.

T\**waay* 'molar (teeth)', cited from Nung (p. 321), is nothing more nor less than the ordinary word for 'buffalo' (Siamese *khwaay*<sup>1</sup>), used metaphorically ('buffalo teeth') for the molars in a number of Thai languages.

Modern Siamese has lengthened variants of a number of words of frequent occurrence ending in a nasal or semivowel. The explanation of this phenomenon, which affects only certain words (for example, *khaaw*<sup>3</sup> 'rice' for older *khaw*<sup>3</sup>, but *khaw*<sup>3</sup> 'to enter' never so lengthened), is unknown. That it is fairly recent is shown by the fact that even in the great nineteenth-century literary epics the words nowadays pronounced with long vowel always rhyme with short-vowel words. (My own theory, for what it's worth, is that these lengthened pronunciations are due to Southern influence. Many Southern dialects have undergone regular lengthening changes. After Bangkok was founded at the end of the eighteenth century there was presumably an influx of people from various regions, including the South; many noted figures in

early Bangkok history were Southerners. In the resulting dialectal amalgam it seems plausible that Southern pronunciations of certain frequent words could have won out.) In his reconstructions PKB has sometimes correctly ignored the modern lengthened Siamese pronunciation, as in \**may* 'tree, wood' (pp. 49, 367, 402), nowadays pronounced *maay*<sup>4</sup> in Siamese. For 'water' (modern *naam*<sup>4</sup>) he correctly reconstructs only \**nam*, on pp. 9, 453, 455, and 460, but on p. 420 he gives \**nam* ~ \**naam*, thus giving the lengthened form an undeserved pedigree, and on pp. 102 and 319 he similarly reconstructs \**law* ~ \**laaw* (Si. variant) for 'chicken coop', where only \**law* is old and \**laaw* stands for the lengthened modern pronunciation *laaw*<sup>4</sup>.

PKB (p. 147) is uncertain whether the prefix *ka-*, so common in Siamese, is to be regarded as late or ancient. The geographical distribution of this prefix is instructive. It is extremely common in the standard Siamese of Bangkok, less so in Lao, still less so in Black Tai, and rare in White Tai, vanishing entirely as one goes further in the same direction. Whether a similar geographical progression would be found moving in other directions from Bangkok I do not know.

I believe that this prefix is an innovation deserving no place in a reconstruction of Proto-Thai. It appears to me to have achieved its high frequency in the Thailand-Laos area as a result of a number of converging, mutually reinforcing factors: (1) the great influx of Indic and Cambodian loanwords of shapes that resulted in a Siamese weak-stressed *ka-* (also often *pa-*, *ta-*, *sa-*, and the like) followed by

a stressed syllable; (2) a tendency in phrases beginning with final -k words such as *luuk*<sup>3</sup> 'child; round object' or *nok*<sup>4</sup> 'bird' for a weakly stressed medial syllable *ka-* to arise, producing such unhistorical forms as *luuk*<sup>3</sup> *kadum*<sup>1</sup> and *nok*<sup>4</sup> *kacɔɔk*<sup>2</sup>, where other Thai languages have only monosyllabic *dum* or *ɔɔk* (with the appropriate tone); (3) the rise of *U-* and *-U-* as favorite stress patterns for phrases in Siamese.

*T\*hye* 'weeping countenance' and *\*ye* 'cries, weeping of children', both cited from Siamese on p. 421, are both probably onomatopoetic forms of no great antiquity.

If *T\*khrua* 'chief, superior', cited from Siamese on p. 312, stands for *khrua*<sup>5</sup>, then we have a noninherited form indicated by the initial cluster *khr-* with fifth tone.

We cannot assume that the doublet-syllable *see*<sup>3</sup> in Siamese *saaw*<sup>5</sup> *see*<sup>3</sup> 'young girls' is an old word justifying an independent reconstruction *T\*se* 'young girls' (p. 426).

PKB's *\*phiw* and *\*thiw* 'to whistle' (pp. 157, 235, 236, 476) do not cover all the Thai variants; *\*khwiiw* and *\*hwiw* also occur, and perhaps forms with other initials. These onomatopoetic variants in the various languages seem to defy efforts to discern the original form. In any case we are not justified in carrying each variant back to the parent language.

Shan, like Siamese, uses the word for 'tiger' (Siamese *sia*<sup>5</sup>) as a couplet with the word for 'war, enemy' (Siamese *sik*<sup>2</sup>). PKB is surely mistaken in

invoking the Shan usage to reconstruct an independent T\*sia 'war' (p. 281).

In some languages the term for 'star' is not the usual simple monosyllable represented by Siamese *daaw*<sup>1</sup>, but a bisyllabic expression, which would be in Siamese \**daaw*<sup>1</sup> *dii*<sup>2</sup>. The origin of this syllable *dii* is unknown, but it seems rash to posit a separate proto-form T\**di* 'star' (p. 397).

Demonstratives are dangerous territory. Siamese has a symmetrical array.

nii <sup>3</sup>	here	nii <sup>4</sup>	this
nan <sup>3</sup>	there	nan <sup>4</sup>	that
noon <sup>3</sup>	yonder	noon <sup>4</sup>	that yonder

with also an interrogative *nay*<sup>5</sup> 'which, where'. In other Thai languages one frequently finds initial *h-* in some of these forms, or occasionally *p-* or *ph-*. Shan has one demonstrative with initial glottal stop, *?un*<sup>5</sup> 'yonder', cited as T\**uun* on p. 348, but this word has a tone in Shan, which, in a word with initial *?*-, has to be an innovation. PKB reconstructs \**buun* for Siamese *phuun*<sup>4</sup> 'yonder' (pp. 198, 348), and a whole array of initial *n-* forms (pp. 29, 198, 209, 406, 408, 454, 460, and 482). What is needed is a thorough comparative study to sort out the old from the new among these demonstratives. Surely one of the findings will be that the Siamese set is the result of contamination or leveling, with original *n-* in some forms but nonoriginal *n-* in others.



We have been discussing cases of apparent late local innovation for which reconstruction of proto-forms would seem to be unjustified. Somewhat different is the use of isolated, out-of-the-way examples from a single language on the Thai side to compare with Austronesian forms, without further evidence that the Thai form has genuine cognates among more closely related languages, proving that it has a legitimate earlier history. In the above cases of innovation PKB would seem to be wrong. In these cases of isolated citations he may be merely rash. Here are a few examples of what I mean.

- T *\*tiak* ~ *\*tia* 'kick' (Lao) (p. 322)
- T *\*briak* 'to cry, vociferate' (Si.) (p. 261)
- T *\*[b]eeg* 'goat' (Ahom doublet) (p. 302)
- T *\*puag* 'idiot, without intelligence' (Lao) (p. 280)
- T *\*?bian* 'large winnowing basket' (Lao) (pp. 198, 425)
- T *\*tuum* 'to cover, envelop' (Lao) (p. 366)
- T *\*[a, aa]y* 'tree lizard' (Kh.) (p. 333)
- T *\*thaay* 'mind' (Shan lit.) (p. 332)
- T *\*[x]uay* 'crocodile, shark' (Ahom) (p. 260)
- T *\*kaaw* 'male of animals' (Lao) (pp. 196, 305)
- T *\*rek* 'tickle a person under the armpit' (Ahom) (p. 410)
- T *\*tu* 'breast' (Lao) (?) (p. 231)
- T *\*tu* 'private parts of a male child (vulgar)' (Shan) (p. 351)

T \**pru* 'hairy, covered with hair' (Si. ic.) (p. 307)

T \**hmuu* 'mother's father' (Lao) (p. 303)

One would feel less uneasy about these isolated forms if we were surer of the comparative phonological picture. One would have no objections to, indeed would welcome as solid evidence, isolated examples from, say, Black Tai or Shan cited as cognates with Siamese forms, because in these areas we have such strict phonological control as to make it likely that these would be cases of genuine cognacy, not mere coincidences.

9. **Alien Intruders.** A good many instances have been noted, some certain and others suspected, of foreign loanwords in one Thai language or another mistakenly given a Thai pedigree.

Siamese *trog*<sup>1</sup> 'straight' (p. 337) is a loan from Cambodian.

T\**bo:t* 'rice, maize' (p. 363) is an error. This is the Sanskrit word *bhojana-* 'food'. The long /oo/ of the Siamese *phoot*<sup>3</sup> would preclude native origin even if the Sanskrit etymon were not known.

T\**baak* 'word' (Lao) (p. 341) is from Sanskrit *vākya-*.

Siamese *kadoo*<sup>1</sup> 'male genitals' (p. 460, 1942) is a loanword from Cambodian.

It's a small point, and doesn't in this case involve a foreign loanword, but the alleged Shan word \**taaw* 'knife, sword' (p. 323) is not Shan, according to Cushing's dictionary, but what he calls "Lao."

In the Tho-Nung area the word for 'to point' (p. 356) does not correspond properly with Siamese *chii*<sup>4</sup>. The Siamese reflects an earlier voiced initial, but the Tho-Nung a voiceless one. PKB might have been tempted to equate the Tho-Nung form with Siamese *cii*<sup>3</sup> 'to poke in the ribs'; the phonological match is perfect. Instead he reconstructs variant forms \**ji* ~ *ci* to account for the discrepancy. But Tho and Nung speakers, as well as Savina's Nung dictionary, identify their word as a loan from Cantonese, and Diguët's Tho dictionary tells us that Vietnamese uses the same form.

In Thailand students of language have an expression 'to drag into the monastery' (*laak*<sup>3</sup> *khaw*<sup>3</sup> *wat*<sup>4</sup>) applied to cases where a native word is given an unhistorical spelling falsely suggesting a Sanskrit or Pali origin, as in the case of the native Thai word *khaa*<sup>3</sup> 'to kill', nowadays incorrectly spelled in Siamese as if it were an Indic borrowing. PKB has, conversely, tried (pp. 60, 240) to drag out of the monastery the Siamese word *soon*<sup>5</sup> 'arrow', a well-known loan from Sanskrit *śara-* (through Cambodian, where the vowel change *a* > *ɔ* before *r* occurred). The weapon traditionally familiar to the Thai-speaking peoples was not the bow (for which Siamese again uses an Indic loanword, *thanuu*<sup>1</sup>) but the crossbow, for which there is a native term, Siamese *naa*<sup>3</sup> (treated on p. 109), found in all branches of Thai, with various terms in different branches of Thai for the arrow of the crossbow.

If T\*wan 'forest' (p. 296) is based on Siamese wan<sup>1</sup>, then this is another instance of dragging a Sanskrit loan out of the monastery.

There is a native word for 'seed' in many Thai languages, which would have the shape \*fan<sup>1</sup> in Siamese if Siamese had it, homophonous with fan<sup>1</sup> 'tooth'. (Indeed, this may be the source of Siamese fan<sup>1</sup> 'tooth'; the usual Thai word for 'tooth' is the one represented by Siamese khiaw<sup>3</sup> 'fang'.) But I had always assumed that Siamese phan<sup>1</sup> 'seed, kind', with a variant form wan<sup>1</sup>, was a loan from Sanskrit varṇa- or Pali vaṇṇa-. PKB makes it a native word: \*bǎn 'seed, kind', \*van ~ \*ban (Si., Lao) 'seed' (pp. 39, 374, 459).

The original 1942 paper made a point which has disturbed a number of us through the years and which has some relevance to this subject of foreign loan-words. PKB wrote then, "It is probably significant that almost all the Thai roots having IN correspondences are associated with a single toneme, represented in Siamese by the mid-level tone (with sonant and unaspirated surd stop initials) or the high-rising tone (with other surd initials)" (p. 460). That is to say, in modern terminology, most of these words have tones that would reflect Proto-Thai tone A.

But this is precisely one of the characteristics of Indic and Cambodian loanwords in Siamese and Lao. The bulk of them were borrowed, and the pattern established, at a time prior to the tonal split. For these nontonal Indic and Cambodian forms to have ended up almost exclusively in the A category in Thai

suggests that the Thai A tone was then the unmarked, level tone.

So, if PKB found that most of the Indonesian-like words in Thai fell into this A category, then a possible inference is that the nontonal Indonesian words, like the nontonal Indic and Cambodian words, were borrowings, and so the point would seem to be counterevidence to PKB's theory of genetic relationship.

But it may well be, in view of the large additions to the data since 1942, that PKB would no longer hold to the statement quoted above.

10. **Desperate Measures.** I would apply this term to two techniques which seem to me entirely ad hoc, unjustified by the data, and actually pernicious because their use tends to preclude further search for other empirically better-substantiated solutions to phonological problems.

One of these is the use of stress to account for variation. It is simply too easy to say that in a long reconstructed proto-form the stress was sometimes in one place, producing one later word, and at other times in another place, producing a different later word. Examples of this kind of thing abound in all the newer parts of AT. This use of stress is involved, of course, with the technique of setting up what I have earlier referred to as polycephalous roots, which in my view is also to be regarded as a desperate measure.

Another technique open, in my view, to the same criticism, has been used more by PKB's converts than by PKB himself. This is the practice, when dealing

with various Thai forms that seem to show unexplained phonological irregularities, of placing the blame on a lost prior syllable, which is supposed to have caused changes and then vanished, leaving only these traces. Such a sequence of events is, of course, conceivable, but it seems premature to dispose of our problems in so facile a manner without first trying to explore more thoroughly the possibility of finding explanations empirically provable from the actual data.

11. **Reconstructions.** Scholars differ in the way they use the term Thai or Tai. Some use the name to include only the so-called Southwestern languages (of which PKB uses data from Ahom, Khamti, Shan, Siamese, Lao, White Tai, and Black Tai) and what F. K. Li has defined as the Central group (PKB's Tho and Nung, the latter including data from the Lungchow dialect in Kwangsi described by F. K. Li). PKB follows this usage; that is, for him the term Thai generally refers to these two groups together. This usage is that of A. G. Haudricourt, who has called these languages "Thai properly so-called."

A third group, spoken mainly in southern China, includes, so far as material cited by PKB is concerned, Dioi, Yay, Wu-ming, and the displaced Sek or Saek language now spoken in a few villages in northeastern Thailand and across the Mekhong River in Laos, in the neighborhood of Tha Khek. PKB refers to this group as Northern Thai or the Dioi group, and deals with these languages separately from those he calls Thai. Others, including myself, have followed F. K. Li's usage in applying the term Tai or Thai to

the family that includes all three groups, Southwestern, Central, and Northern.

Differences in terminology in this matter are of little consequence, since there is never any doubt as to how PKB intends the term Thai to be understood. More serious are the different implications, in the one case that the Southwestern and Central languages together form an independent group as opposed to the Northern languages, and in the other case that we have three coequal branches of a single family, as F. K. Li has argued.

PKB's preference for the first of these two classifications is implied in his Thai (usually abbreviated as T) reconstructions of proto-forms for the Southwestern and Central groups taken together, and his often different reconstructions for the Dioi, or Northern, group. This practice has the advantage of avoiding, or at least deferring, some troublesome differences between the two, sometimes in vowels and sometimes in initial consonants, as when the Northern group appear from the tones to have had an original voiced-initial consonant corresponding to a voiceless one in the so-called Thai group.

PKB's Thai (and also his Northern Thai) reconstructions he calls, modestly, "provisional" (p. 146). Their tentative nature is shown by the fact that for many items he gives different reconstructions in different places, and for many others he provides two or more alternant or variant reconstructions, some examples of which follow.

'Indigo' is reconstructed *\*[t]hroom* on p. 61, *\*throom* on p. 112, *\*hroom* on p. 319.

For 'needle' we are given \**khem*, *xem*, *khim*, *xim* (p. 62).

For 'arm' we find \**xeen* (pp. 97, 379, 452), \**qeen* (p. 97), \**kheen* (p. 97).

For 'ax', \**khwaan* (pp. 58, 97), \**xwaan* (pp. 58, 223). \**qwaan* (p. 97).

For 'to arrive', \**thiŋ* and \**theŋ* (pp. 195, 255) with, to take care of the Northern forms, \**daŋ* (p. 195).

For 'to sew', \**ńap*, *ńep*, *ńip* (pp. 63, 115).

For 'centipede', \**x[r]ep* ~ \**th[r]ep* (p. 248), \**xlep* (p. 38).

For 'to do, make', \**het* (p. 261), and \**hret* ~ \**ret* ~ \**yet* (p. 38).

There are many, many, more examples of this sort of thing throughout the book. This practice of offering alternative constructions has important implications for the validity of PKB's thesis, but before discussing those I wish to list, for whatever use they may be to him or to other users of AT, some apparent errors that I have noted.

Denuding the data of tones leads to errors that are discernible only when one goes back to PKB's sources and restores this indispensable information. A check of the tones in the original turns up such items as these.

Shan *ɲaak*<sup>5</sup> 'to call roughly', cited as T *ɲaak* (p. 246), has a tone in Shan that indicates a noninherited form. The same is true of Shan *kɔk*<sup>4</sup> 'cup' (p. 262) and of Shan *ʔe*<sup>5</sup> 'to defecate' (p. 18, 283).



Also, a check of the actual tones sometimes reveals errors in the initial consonants of the reconstructions.

Shan *lup*<sup>2</sup> 'to overwhelm, etc.' (p. 400) has to go back to a form with a voiceless initial; PKB's \**luup* won't work.

For 'to shrink', PKB's reconstruction (p. 379) \*[t]hrot accounts for the tone of the Shan form *hot*<sup>4</sup>, but \*[t]hrut won't do for the variant form *hut*<sup>5</sup>, the tone of which would require an original voiced initial.

Shan *khot*<sup>5</sup> 'to take food up' is incorrectly reconstructed \**khot* (p. 372). The Shan tone requires an original voiced initial, as does the Siamese cognate *khot*<sup>4</sup>.

The Shan word *tu*<sup>4</sup> for 'private parts of a male child' (p. 351) cannot go back to \**tu*; the tone requires an earlier voiced initial.

Another error in the reconstruction of initial consonants, this time not involving tone, turns up in PKB's handling of Siamese *klam*<sup>2</sup> 'dark (red)' and its cognates. Shan *kam*<sup>2</sup> 'dark in color' is cognate with Siamese *klam*<sup>2</sup> and so cannot be reconstructed with a simple *k*- initial as on p. 265. Moreover, Siamese *kam*<sup>2</sup> 'color of blood, red' and *klam*<sup>2</sup> 'bright cherry red' (p. 265) are the same word, pronounced *klam*<sup>2</sup> in standard speech but often *kam*<sup>2</sup> more colloquially, so that the two separate reconstructions \**kam* and \**klam* are unjustified. But there is still more trouble with regard to this word. PKB tells us (p. 466, 1942) that he agrees with the usual view that Wulff's otherwise valuable 1934 book on Chinese and Thai was

badly marred by its erroneous emphasis on alleged liquid infixes in cases where, for example, Siamese *kl-* corresponds to plain initial *k-* in other closely related languages, the correct explanation being a simple phonological reduction in these other languages of an earlier cluster that is still preserved in Siamese. But PKB has himself occasionally fallen into this error in positing an *-l-* infix, for example, in Siamese *klam*<sup>2</sup> 'dark red' (pp. 19, 265).

Another error in the reconstruction of initial consonants is found in the word for the metal 'lead' on p. 93. PKB's initial *\*j* works for Black Tai *cɛn*<sup>4</sup> but not, as incorrectly indicated, for Tho, which has the forms *yin*<sup>3</sup>, *yɛn*<sup>3</sup>. Errors of this kind are serious because they conceal deviations which argue against the validity of proto-forms for, and so against the existence in prehistoric times of, important cultural items.

The reconstruction of Proto-Thai vowels has caused scholars many headaches, especially when one tries to deal with the entire family, including the Northern Thai languages. But, without going into those complexities, one finds in AT vowel reconstructions that on the face of things won't do.

The Tho language of Cao-bang recorded in Diguët's 1910 dictionary distinguishes the vowels *o* and *ɔ*. PKB is aware of this, and for Tho *o* he normally reconstructs *T\*o*, and for Tho *ɔ* *T\*oo*. Thus, for Tho *pom*<sup>2</sup> 'hot' he reconstructs *T\*pom* (p. 365), and for Tho *kɔn*<sup>6</sup> 'to beat' he reconstructs *T\*Goon* (p. 228). (I number the Tho tones, disregarded by PKB, in the order in which Diguët lists them, and

retranscribe Diguët's vowels and consonants, as PKB does.) But elsewhere PKB sometimes confuses these two Tho vowels. Thus, on p. 226 he has T\**son* where Tho has the ɔ vowel, on p. 331 T\**foon* where Tho has the o vowel, and on p. 46 T\**mo* where Tho has the ɔ vowel. Our reconstructions will be of questionable usefulness for more remote comparisons if at the very first step we mix up phonological distinctions in this way.

Modern Siamese has, inherited from earlier stages, short medial e and o (but not ɛ and ɔ), and long medial or final ee [æ:] and oo (but not ee and oo). PKB clearly understands these facts, as we discern from his handling of reconstructions involving these Siamese sounds; he reconstructs \*e and \*o for the short pair, and \*ee and \*oo for the long pair. (The reconstruction \*?bok for 'tube', representing Siamese *kabook*<sup>2</sup> [p. 239] has to be an error, or perhaps a misprint; the Siamese vowel requires, in PKB's system, a reconstruction \*?book.)

But modern Siamese, through innovation, has also acquired the unhistorical vowels /ee/ and /oo/, as well as short medial /ɛ/ and /ɔ/, thus realigning and filling in the pattern. Reconstructions of Proto-Thai etyma for modern Siamese words having the modern vowels /ee/ and /oo/ are quite impermissible, and so we must discard PKB's proto-form for modern *takhee*<sup>3</sup> 'crocodile' (p. 259), and also T\**de* for 'jar for measuring arrack' (modern Siamese *thee*<sup>1</sup>) (p. 321).

Modern Siamese has many words having a short medial vowel followed by a final glottal stop, as -aʔ, -ɔʔ, and the like. No phonological

correspondences are found for this Siamese pattern in Thai languages outside the Siamese-Lao area, and it is impossible to reconstruct proto-forms for these Siamese words ending in  $\text{ʔ}$ ; Proto-Thai had as final voiceless stops only  $-\text{p}$ ,  $-\text{t}$ , and  $-\text{k}$ . For Siamese  $\text{kra}^2$  'tortoise-shell' PKB's  $\text{T}^*\text{kra}^?$  (p. 377) is impossible. Siamese  $\text{tho}^2$  'rabbit' (in 'year of the rabbit', not the usual name for the animal) cannot be an inherited word, and so cannot be genetically cognate with the forms with long vowel in other Thai languages (p. 359). PKB's reconstruction  $\text{T}^*\text{tho}^?$  (pp. 46, 101, 359, 452) to account for the Siamese form won't do. Siamese  $\text{kapho}^4$  'stomach' (p. 460, 1942) is another example of unhistorical final  $-\text{ʔ}$ .

Siamese  $\text{phe}^4$  'goat' is mishandled throughout (for example, on pp. 302, 459). The word for the goat has in most Thai languages a shape that ought to give Siamese  $^*\text{bee}^3$ . 'Goat' in Shan has the form  $\text{pe}^5$ , not derivable from the same proto-form as this usual Thai word, which would have to be reconstructed  $^*\text{bee}$  in PKB's system. Probably both onomatopoeia and borrowing (there are no goats in central Thailand) have been at work here, and we are lost if we allow ourselves to provide reconstructions for such innovations, with the misleading implication that these are available for more remote comparisons. The task of sorting out such innovations requires time and care, but cannot be avoided.

Below are a few more examples of errors in the reconstruction of vowels.

The reconstruction *\*bok* for Shan *mok*<sup>2</sup>, *wok*<sup>2</sup> 'tube' (p. 239) won't work. The Shan vowel requires *\*-ua-* in the reconstruction.

For 'to grow' in Shan (p. 301), *\*geet* works, but not *\*ket*; the latter is intended to take care of the Shan form *ket*<sup>4</sup>, which has an unhistorical vowel.

*T\*phet* 'pungent' (p. 359) will not accommodate the vowel of the Tho form cited, which is *ɨ*.

For 'lungs' (Siamese *poot*<sup>2</sup>) the reconstruction *\*poot* (pp. 12, 85, 151, 312, 454, 455) is too simple.

On pages 151 and 312 we are given the variant *\*pot*, but this still does not account for those languages which have a vowel *ə* or *ɨ* in this word. Similarly, *\*hmot* for 'finished, complete' (p. 281) (Siamese *mot*<sup>2</sup>) is too simple. Some languages have a vowel *e* or *ə* in this word.

White Tai has raised each of the mid vowels *e*, *ə*, *o* to the corresponding high vowel *i*, *ɨ*, *u* before nasals (a change shared by Lue). So *\*pun* 'reduce to a powder by pestle' (p. 276), with a reference to White Tai, is too simple. The Siamese form *pon*<sup>2</sup> has the unchanged vowel.

The foregoing list of errors in reconstruction, it will be discerned, has resulted from only a brief check into some of the forms in only a few languages.

There is no telling how much of PKB's reconstructed material would be found faulty if a more thorough study were undertaken. I do not wish to seem unreasonably critical; errors could no doubt be found in the comparisons and reconstructions that have been formulated by any of the rest of us. But the proportion of faulty reconstructions in AT seems to

me, even after this hasty and partial check, to be so high as to place in doubt the validity of the material that PKB is using as evidence for his hypothesis.

Leaving the subject of errors in reconstruction and returning to the general topic of Thai reconstructions, it seems to me that the following observations are in order.

1. The reconstructions lack an indispensable dimension, the indication of proto-tone A, B, or C. Tone has played such a key role in our reconstruction of the parent Thai language (for PKB as well as for everyone else) that we must not discard it as we tackle problems of more remote relationship. Comparative work has reduced the modern 5-, 6-, and 7-tone systems to an earlier 3-tone system. We will no doubt someday understand how, at some earlier stage encompassing Thai and some other groups, this 3-tone system arose out of a nontonal language. But we will never make progress in the search for these earlier phenomena if we throw tones out the window at the very outset.

2. There are so many errors in reconstruction, as indicated ad nauseum above, that one feels that all the material should be reexamined.

3. In many cases the reconstructions seem to be the product of a simple transposition of the modern form in a single language, which then is sometimes found inadequate to account for all the cognates. That is, the reconstruction often seems to have been hastily formulated by a facile process of ringing the changes on a single modern form, without research

into the systematic sound correspondences among the related dialects.

4. Sometimes, and this is especially true when one gets into the Thai-Austronesian comparisons, the identification of cognates seems to be based on a superficial partial resemblance, which may be fortuitous. I believe anyone using PKB's permissive and unsystematic methods could make as good a case for a genetic relationship with almost any other language family. For English one would start with such items as Siamese *fay*<sup>1</sup> 'fire', *sig*<sup>2</sup> 'thing', *rim*<sup>1</sup> 'edge'.

5. The practice of providing a number of alternates seems to have been carried too far. No doubt the earlier stages of the language, including the proto-language, had variation, but the proliferation of alternative reconstructions throughout the book seems rather to be due mainly to the fact that the phonological comparisons and reconstructions are still only tentatively and incompletely worked out. The red flag must be raised: the various competing proto-forms provisionally posited cannot be regarded as all equally available for more remote comparisons.

Turning to the Northern, or Dioi, group, the reconstructions there frequently differ from those given for the corresponding Thai words. This shows an admirable caution, in view of the many unsolved problems in the phonological correspondences between those two groups.

But if we are going to compare Thai in the larger sense, including all three branches, Southwestern, Central, and Northern, with any other outside group, surely the first requirement is some

sort of unitary and coherent reconstruction for the whole Thai group. This PKB has not attempted, nor, apparently, regarded as necessary.

It is disturbing, incidentally, that a complete index of all PKB's Thai material (whether one uses Thai in his narrow sense or in the broader sense, including the Northern group) shows that AT deals with what is really a rather small fraction of the vocabulary known to be shared by Thai languages.

It is generally agreed that the group of languages outside Thai standing the best chance of being next most closely related genetically to Thai is the Mak-Sui-Kam group, of which PKB has made much use in AT. Attempts by very competent scholars to work out the sound correspondences between Thai on the one hand and Mak-Sui-Kam on the other have been only partially successful; for every correspondence discovered, with numerous examples, many counter-examples occur. No doubt the main reason for this lack of success is that we are not yet sure enough of the phonological structure of the proto-language on either side.

PKB has made no attempt to deal seriously with this problem. One can hardly blame him for this, but if we are going to compare Thai and Mak-Sui-Kam (taken together) with other languages, such as the various mainland languages that show enough lexical similarities with Thai to seem possibly related (such as Laqua, Lati, Lakkia, Kelao, and, on the island of Hainan, Li), surely a first requirement is a reconstructed Proto-Thai-Mak-Sui-Kam.



It is salutary and sobering to remind ourselves that all our comparative Thai work so far (including PKB's reconstructions) has tended to result in posited phonological structures for the earlier stages markedly different in many respects from the later data that we started with. Who knows, as we push even farther back, what unexpectedly different phonological structures we are going to find ourselves compelled to posit to explain the divergent developments for which we are trying to account?

Some may feel that the foregoing remarks imply too great a subservience to the traditional family-tree model. I am aware of, and agree with, the criticisms often made of the family-tree concept of genetic relationship among languages. Southeast Asia provides rich material for study of these questions. In working on Thai comparative phonology one constantly encounters cases where two geographically adjacent dialects, which various phonological criteria have required us to place in different branches of the family, are then found to have shared changes that do not extend to the sister dialects of each of the two in its own respective branch, so that there may appear to be a question whether, if we had first turned our attention to this shared sound change we might not have arranged our diagram of branches differently. But in actual practice this dilemma does not arise; if we look far enough into the matter we are always able to decide which features are older and dictate the basic bifurcations in the diagram, and which are later and therefore do not destroy these earlier branchings. But the neat family-tree

model still has troubles. For example, how can one draw a family tree with here and there twigs at the ends of different branches having to be shown as growing together in some respects but not in others? In any case these questions are really irrelevant to our present business, because there seems to be no reason to doubt that throughout AT the family-tree model is accepted as valid and basic.

But, in any case, any attempt to compare Thai and its suspected relatives in mainland Southeast Asia with other language families, whether Austro-nesian, Chinese, or whatever, requires us to have some firmly based picture of the phonology of the parent language on the mainland side. This AT does not give us.

Others may differ as to how serious are the various criticisms I have made in sections 1 through 10 of this paper. My own view is that those criticisms are very serious, perhaps mortal. But I do not see how there can be disagreement as to the seriousness of AT's shortcomings in the matter of reconstruction (section 11). AT simply does not give us a clear and coherent picture of what on the mainland side the Austronesian languages are being compared with.

Of course some are impatient, eager to establish larger groupings as quickly as possible. But, to cite a comparable problem from another science, our impatience to know whether there are intelligent beings on other planets elsewhere in the universe does not allow us, except in science fiction, to say that it's so just because we want it to be so. We

must be patient and reserve judgment while competent scientists pursue their investigations in a careful and responsible manner, step by step.

Otherwise we are in an area less like a part of science than it is like revealed religion, where belief does not necessarily depend upon empirical evidence, and the fervor of the converts is often found to be inversely proportionate to the demonstrability of the factual proof.

I have heard the comment from time to time that those of us who find ourselves unable to accept the AT hypothesis are simply old-fashioned, victims of the generation gap. In my view the situation is just the reverse. The kind of work found in the AT book has not been taken seriously since the eighteenth century, when it was fashionable to offer proofs of this sort as evidence of the relationship of one language or another to the Hebrew spoken in the Garden of Eden.

While studying AT, I have been constantly reminded of the lines by George Meredith.

Ah, what a dusty answer gets the soul  
When hot for certainties in this our life!

Of course, we are all hot for certainties, but I am surprised and grieved that so many have been satisfied with the dusty answers provided by AT.

