CONTRIBUTIONS ON SOME REMAINING
PHONOLOGICAL ISSUES IN AUSTRONESIAN

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0 Introduction
In this concluding study I’ll review some concepts I’ve developed over the years, related to phonology, in the AN languages. The languages that I studied most intensively (Nanumanga, Tuvalu, Finney, 1983) was of more interest for its syntax than phonology.

In the first major section of this paper, we’ll examine some of the processes of decision-making by the missionaries in selecting which letters of our alphabet to use in their planned translation of the Bible into the Hawaiian language, and we’ll analyze why the decisions were made as they were made.

In the second major section of this paper, we’ll reexamine some of the reconstructions that have been made of the phonemes of the hypothetical ancestral language, Proto-Austronesian; and suggest some improvements.

In the third section we’ll review certain phonological changes noted in a previous SEALS paper, and comment on the complex diachronics of the phonology, the morphology, and the syntax.

1 Issues within Polynesian
1.1 Ambiguous Phonemes in Hawaiian
It has long been known, from the accounts by Forbender (cited in Bernice P. Bishop Museum Memoirs, 1917, 1918, which in turn is cited in Pukú’i and Elbert, 1971), that the missionaries in the second decade of the Nineteenth Century, on the Big Island of Hawaii, had difficulties in choosing the alphabetical letters for three of the phonemes in the Hawaiian language.

The three questions were: W or V?  L or R?  T or K?

According to Forbender’s study reported in Hawaiian Antiquities (available only at the University of Hawai’i library) the matters were decided by a committee of seven missionaries, and in all three instances the vote was four to three. Not having Forbender available now, I don’t know whether it was the same four each time or not.

Each of the choices involved its own problems, its own issues. Not two involved the same questions.

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1 Abbreviations used in this paper: Pan = Proto-Austronesian, MP = Malayo-Polynesian, EMP = Eastern MP, CP = Central Pacific, PN = Polynesian, EPN = East PN; all prefexable with P for Proto-.

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1.2 By Good Luck, A Helpful Source
In the spring of 1961, I was employed as Director of Research for the State Mental Health System of Hawai‘i, a job that I began in January, 1960. With permission of the State Health Department, I took two courses in the Hawaiian language at the University of Hawai‘i (and as I had been appointed an Adjunct Assistant Professor of Psychology there, I was not charged a tuition fee). The teacher, Professor Samuel H. Elbert, had done research on the tiny isolated island of Ni‘ihau, the only place where the public school was still taught in the Hawaiian language, not in English. Sam had mentioned the name of a woman who taught school there, Tini Teale (Jean Kelly). One day as I browsed in the Hawaiian language section of the University Library, reading Fornander, I encountered a Hawaiian-looking woman who turned out to be Tini, and we talked a while. I paid careful heed to the phonemes as she uttered them in conversation, and I had her repeat some words and phrases so that I could carefully record exactly how she said them. This is as close as we’ll ever get to hearing how the language was said by Hawaiians known to the missionaries on the Big Island in the 1810-1820 era.

Later, in 1963, I traveled to other Polynesian Islands, including Tahiti, the Tuamotus, the Samoas, New Zealand, and other Austronesian Islands, before moving to the University of Kentucky. In 1970-1971, on sabbatical leave, I did research in linguistics and cultural anthropology, including places such as Tonga, and spent more than half that year on Nanumanga, an isolated Polynesian island in what is now Tuvalu, where I was the only outsider living; and revisited Hawai‘i and Samoa. So my observation of the phonology of Tini and other Hawaiians in the 1960s was supplemented by observations of speakers of other Polynesian and other Austronesian languages, as well as by studying the scientific literature.

1.3 The W or V Issue
Both W and V are common phonemes, though not all languages have both. In English, W is a semivowel, which means that it can be considered to be a glide in the position of the vowel U (as in “food” [fu:d] or as in “rule” [ru:l]). The latter renderings of the long close (tense) vowels are in the system in which the Bloomfieldians had converged. In it, the English word “put” is rendered “put,” and the English words “rude” and “spoon” are rendered “ruwd” and “spuwn.” In that system the word “fit” is so spelt, but “feet” is spelt “fiyt.” Not all languages have such a distinction. Spanish speakers often say “feet” for English “fit.” Classical Latin (or certainly pre-Classical) had long vowels that were prolongations of the short ones. Later in Latin, the short vowel became more open ( lax), less close (tense), in a complex process toward the development of the Romance languages. A diachronic principle of universal grammar is that “w” often changes to “v” through an intervening bilabial voiced spirant, while “v” never changes to “w.”

In languages like English, the W is a bilabial glide (or semi-vowel), with visible protrusion of the lips. In sharp contrast, the V is a labiodental spirant (fricative), made with the lips of the upper central incisor teeth against the lower lip.

In our language, V is a voiced spirant (fricative) contrasting with F, the “same” sound but voiceless. In English, the voiceless fricatives (and voiceless stops, too) are not only voiceless but also aspirated. Likewise, the English labial stops, as we hear them, distinguish between voiceless P and voiced B. English speakers are seldom aware that the P is aspirated and the B is not. Likewise for F/V, thin/then, T/D and K/G.
That’s in contrast with Mandarin Chinese, where both bilabial stops are voiceless, differing only in aspiration. Till recently the pair was distinguished only by a diacritical mark, resembling an apostrophe, for the aspirated phoneme. So, English speakers said them the same, creating a host of false homonyms. In the recent official change of spelling, to force English speakers to make a difference, the aspirated form is written “P” and the non-aspirated form “B”. Thus the name of the capital city, formally Peking, is now Beijing. That makes the English speakers sound odd (voiced stop), but no longer ambiguous.

Now, back to the Austronesian. The Hawaiian W or V sound was ancestrally a W, and very likely so in Proto-Polynesian. Early on, it probably became the ambiguous W/V. By that I mean a bilabial spirant, a fricative, made with both lips. The bilabial spirant is still heard in some Polynesian languages today.

What Tini spoke in 1961 was the old bilabial spirant, the intermediate sound, spoken in other Polynesian islands, neither a standard W nor a standard V.

In some work on East Polynesian languages, including that published by Steven Fischer, a change is asserted from F to W. If that assertion were intended to mean a change from F as in English to W as in English, it would be an impossible change. F could become voiced, to V. But the further change from V (as in English) to W (as in English) is not possible. If any change occurs it must be from V to W.

So what is the likely explanation of the changes of the voiced and the voiceless sounds in question: both in the sound that began as W and in the sound that had become something like F?

At an early stage in the development of Polynesian, a [p] had become a bilabial spirant on its way to [f]. The f-like sound (voiceless bilabial spirant) is spelt “wh” in Maori. That is no doubt the “f” that Fischer reported to change to “w” (no doubt bilabial voiced spirant) in Fischer’s SouthEast Polynesian. A change from a true “f” to a true “w” is not possible, but a voicing of a voiceless bilabial spirant is undoubtedly what happened. It’s interesting that what Tini spoke in 1961 was the same bilabial spirant (between a W and V) that must have been spoken in the days when the missionaries disagreed on whether to spell “w” or “v”.

As we see, problems that are synchronically puzzling are often easy to understand in diachronic context.

Puku’i and Elbert (1971 printing, p. xxxvii, “pronunciation of Hawaiian,” gives the sound of “w” as:

- w after “i” and “e,” usually like V; after “u” and “o” usually like W; initially and after “a” like V or W.

1.4 The L or R Issue

As said by Tini, the informant from Ni’ihau in 1961, the sound was neither a simple L nor a simple R. It could be replicated only by an L followed by an R. In other words, the tip of the tongue had to move posteriorly along the hard palate (roof of the mouth cavity) while detaching itself from contact with the hard palate.

The best guess is that this 1961 Ni’ihau pronunciation was also what was used by the inhabitants of the Big Island of Hawai’i in the early Nineteenth Century. Be that as it may, the missionaries, by the narrow vote of 4 to 3, chose the L spelling. By the 1957-1971 period, Mary Puku’i’s pronunciation of that phoneme seems to have shifted in the L direction, as shown by Puku’i and Elbert’s instruction:
\( h, l, m, n \) about as in English

1.5 The \( T \) or \( K \) Issue

Between these two sounds, there is no intermediate position. The sound must be either one or the other.

As we know now, the \( T \) was the Proto-Polynesian sound, and the \( K \) was the innovation. The change in Hawai‘i began on the Big Island, the most Southeastern of the archipelago, and spread progressively Northwest to Ni‘ihau and Kaua‘i, at the opposite end of Hawai‘i.

Again, it was only by a 4 to 3 vote of the missionary committee that the choice was made.

A reasonable surmise is that the four in the majority recognized that \( K \) was the wave of the future, and for that reason chose to go along with it, fearing to be stuck with a representation soon to go out of use.

The language at the time had a vacancy for a \( K \), because the PPN *K had become a glottal stop.

The loss of \( K \) to glottal (often later zero) happened independently in many Polynesian languages. And later, independently, many other such languages changed the \( T \) sound to a new \( K \), just as Hawaiian did.

In Samoa, on the other hand, when the missionaries created a written language, the change from \( T \) to \( K \) had not yet taken place. So, the \( T \) spelling was used in the Bible and is still used there and in dictionaries and in the written languages.

When the change to [K] took place in the spoken language, the \( T \) spelling continued. Even today, the phoneme is written \( T \) in Samoan, though pronounced \( K \) by the native speakers.

When Margaret Mead worked in Samoa in 1925, the Samoans required her to use the “correct” pronunciation (\( T \)), though they themselves, of course, used the \( K \) sound. The reason for regarding the [t] sound as correct was that the “\( t \)” spelling had been used in the Bible translation.

Likewise, though the Samoans had merged the \( N \) sound into that of the velar nasal, they required Mead to distinguish between the two. A Samoan woman called herself “Anga” though spelling it “Ana” (Ann in English). She explained that she was too “lazy” to say [ana].

When I visited Mead’s island, Ta’u, in 1970, the \( K \) sound was used in Ta’u village, but in Fitiuta (another village on the same tiny island), the \( T \) sound was still in use by the native speakers. In the rest of Samoa the native speakers always used the \( K \) sound, though they said that the \( T \) sound was correct. Likewise in their shift of \( N \) to a velar nasal, they agreed that the true [n] sound was theoretically correct. The spelling, and its use in the Bible, maintain the view that the older form is still correct, and should be spoken by foreigners, though the native people use the newer sound.

The missionaries’ choosing the innovation \( K \) over the ancestral \( T \) is not necessarily the better choice from every point of view. If we were interested in allowing the native speakers, of a broader range of Austronesian languages, to read one another’s writings, with some comprehension, a writing closer to the ancestral would be more helpful.