

LINGUISTICS, TESL, AND LANGUAGE PLANNING IN MICRONESIA

Stanley Yunick, Jr.
University of Illinois at Urbana-Champaign
s-yunick@uiuc.edu

This paper examines planning for literacy in Micronesia under a United Nations-mandated Trusteeship with the United States from 1945 to the 1980s. From the outset of Micronesian-American involvement, dual language planning goals, to develop Micronesian languages for literacy and to teach English as a language of wider communication, were set out. Ideological issues were explicit, and American linguists worked both to legitimate Micronesian languages through standardization and to train teachers in second-language teaching methodology. Faith was placed in linguistics and newly developing theories of language education to solve what were thought to be 'practical' problems for Micronesia. However, over-reliance on language teaching methodologies and linguistically elegant orthographies *qua* solutions failed to promote the desired outcomes and sometimes hindered them.

1. Introduction

From 1945 to the 1980s, the island cultures of Micronesia lived as a United Nations-mandated Trusteeship, the Trust Territory of the Pacific Islands (TTPI), administered by the United States of America. The ostensible aim of the Trusteeship was to guide the islands, largely devastated by war, to a condition of self-supporting sovereignty. Already having felt the impact of three colonial powers (Spain, Germany, and Japan), the islanders were simultaneously wary and hopeful of what an association with the United States might bring.

Among the many goals to be achieved were widespread education and literacy. From the beginning of United States involvement in Micronesia, linguists were consulted regarding language in education and were brought in to assist in the development of dictionaries, grammars, and standard orthographies. This paper examines decisions influenced or made by language planners, American and Micronesian, during the period of the Trust Territory of the Pacific Islands. Decisions in language education, such as whether, when, and how to teach in indigenous ('vernacular') languages or English, were steered by theories of language pedagogy. Decisions in corpus planning were guided by linguistic principles of elegance and economy. Where outcomes based on these decisions have been less favorable, it is instructive from both an ethical and theoretical perspective to examine limitations to the practice of applying linguistics.

2. Profile of languages and literacy Micronesia

The TTPI consisted of three island chains in the Micronesian geographical area: the Marianas, the Marshalls, and the Carolines. The Carolines, culturally and linguistically diverse, were divided into the states of (from west to east): Palau, Yap, Truk (now Chuuk), Ponape (now Pohnpei) and Kusaie (now Kosrae). As the Congress of Micronesia planned the end of the Trust Territory, the Marianas, the Marshalls, and Palau negotiated for separate political status. The remaining island groups in the Carolines came together as the Federated States of Micronesia (FSM). The Marshalls, Palau, and FSM negotiated separately for status as independent nation-states in a Compact of Free Association with the United States. The Northern Marianas, with close ties to Guam and having seen greater contact with Spain and Japan, and with Americans during the war, chose to become a commonwealth of the United States. Discussion in this paper focuses for the most part on those of the Caroline Islands which would later become the FSM.

Each island grouping has a dominant language, though major islands may have minority enclaves, and their associated outlying islands may speak other languages. Table 1 shows the languages of Micronesia.

All of the languages of Micronesia belong to the Austronesian language family. The more closely related 'nuclear' Micronesian languages include, from West to East: Chuukese, Pohnpeian, Kosraean and Marshallese. The sandy atoll islands that stretch across the Carolines form a dialect continuum of roughly 12 differentiated links of Trukic dialects of varying degrees of mutual intelligibility (Quackenbush 1970).

Contact between island groups, except within the Trukic continuum, was relatively infrequent. Indigenous learning included science of navigation and arts of song, tattooing, weaving, but did not include writing. Literacy in the Carolines came largely from a concerted missionary effort by the American Board of Commissioners for Foreign Missions of Boston, beginning in the mid-19th century. The Spanish (1600s-1880s) and German (1880s-1914) colonial governments had limited interest in the Carolines and their languages, only a few word lists and grammatical sketches were produced by local governors. The American protestant missionaries were somewhat tolerated by the colonial powers because these powers did not extensively occupy the area, and because the missionaries chose to establish themselves in areas far from the centers of colonial (and Roman Catholic) authority. The missionaries were interested in learning and writing Micronesian languages and in teaching Micronesians to read and write to further their goal of spreading their Christian faith.

Japan expanded into Micronesia through a League of Nations mandate after World War I. Thousands of Japanese settled the larger mountainous islands of Micronesia and became in some cases a demographic majority. The Japanese schooled Micronesians in order to teach Japanese customs and language. Micronesians were also taught the basics of sounding out words in the Japanese syllabaries. While there was not much migration of islanders themselves between islands, Japanese became a regionally understood language, and a good number

of Japanese lexical items were borrowed into Micronesian languages during the relatively short occupation from 1919 to 1944.

Table 1: The languages of Micronesia

REGION	MAIN LANGUAGE	FACTORS IN SOCIAL AND LINGUISTIC DIVERSITY
Marianas	Chamorro	Enclaves of islanders from the central Carolines speaking Trukic dialects (dubbed Carolinian), who had migrated by canoe; recent migrations from the Philippines and elsewhere; large English speaking population
Marshalls	Marshallese	(Important dialect variation, but dialects are mutually intelligible)
Palau	Palauan	Outlying islands speak Trukic dialects (Tobian, Sonsorolese).
Yap	Yapese	Outlying islands speak Trukic dialects (Ulithian, Woleaian, Satawalese, etc). These languages are not closely related to Yapese and are not mutually intelligible with it, though many outer islanders learn some Yapese, the language of the higher caste main-islanders, to whom they historically paid tribute.
Chuuk (Truk)	Chuukese	Outlying islands speak Trukic dialects (Mortlockese, Puluwatese, etc.) which are somewhat related to Chuukese, the dialect of the main cluster of islands (the Lagoon). Familiarity with multiple dialects is common.
Kosrae (Kusaie)	Kosraean	Rather homogeneous
Pohnpei (Ponape)	Pohnpeian	Enclaves of outliers (Mortlockese, Kapinga) on the main island; some outliers speak languages closely related to, but not mutually intelligible with, Pohnpeian (Mwoakilese, Pingilapese); other outliers are Polynesian (Nukuoran, Kapingamarangi). Outliers living on Pohnpei learn some Pohnpeian; otherwise outliers use their language and learn English in school. FSM capitol on Pohnpei has brought a diverse population.

World War II saw the complete destruction of Japanese infrastructure in the Micronesian islands. Japanese, then the language of wider communication for the region, would not be used for the education of Micronesians during American military occupation or afterward in the US-administered Trust Territory. English came to be used where a lingua franca was necessary.

In present day Micronesia, Micronesian languages are the languages of home, religion, local government, primary schools, and radio. Literacy in Micronesian tongues is perhaps still most strongly associated with Christian religious practices. English is used as a lingua franca between different cultural groups and is used in regional/national governments and in secondary education and beyond. Consumer goods, such as American films and books, are also widely available in Micronesia. Literacy in English is largely associated with participation in the Western economy and with American cultural capital. Although a regional oral variety of English is emerging, an indigenous identification with English is not evidenced in the production of creative writing.

Donald Topping (1975:4) summarizes the challenges of language and literacy planning in Micronesia:

Some of the Micronesia-specific problems are self-evident [...]: the large number of languages for a small population, the linguistic and cultural diversity of a supposed political unit, the vast distances between the islands (even those of a single district), and the history of different types of colonial education. Literacy has not been a tradition. Among those who can read and write (mostly older people), there is very little consistency in the spelling systems. In addition to these Micronesia-specific problems, there are the usual ones of lack of trained teachers, lack of materials, and the perennial lack of money.

There were many issues, both philosophical and practical, to be confronted in Micronesia. Americans largely believed they had resolved most philosophical and ideological issues even before the start of the trust territory government. Avoiding extremes either of Americanizing the region or of cutting off the region from wider communication by allowing education only in indigenous languages was explicitly discussed (U.S. Department of the Navy 1948:223-5). The methods by which the extremes would be avoided and the dual linguistic goals of vernacularization and internationalization (to use Cobarrubias's 1983 terms) were to be carried out in the face of the complexities outlined by Topping were considered a 'practical' problem (U.S. Department of the Navy 1948: 224). Scientific methods in linguistics and language teaching were to be relied upon to handle these issues.

3. Language education: Methodology and policy, methodology AS policy

A case has been made for considering American education in Micronesia to be an assimilating colonizer. Historian Hanlon 1998 describes American goals in the Pacific as 'development as discourse of domination'. The charismatic Jesuit educator Francis X. Hezel, as cited by Sachuo (1992:416), compares Micronesia to the British Raj in India, asserting the Americans wished to create 'Micro-Americans' of 'white mind wrapped in brown skin'.

Shortcomings in language planning and education in Micronesia have also been pointed out specifically. Despite glowing figures reported by the United States Department of Interior (U.S. Department of the Interior 1999:70) that liter-

acy is above 90% in Micronesia, literacy skills of Micronesian school children have been called into question (Spencer 1992). English-language teaching methodologies promoted in Micronesia by linguist-educators have been called into question for poor outcomes (Spencer & Langmoir 1987), and the relative predominance of English-language teaching in the overall educational budget has been criticized (Gibson 1980). Furthermore, entire printings of educational materials in some island groups have been scrapped due to dissatisfaction and confusion over how the language was committed to an orthography.

Despite these real problems, a look at planning in Micronesia from 1945 to the end of the Trusteeship does not show an assimilationist philosophy. Language planning in Micronesia is not simply a story of overt and covert domination. A speech by University of Hawaii scholar Dean Wist, cited by the military historian Dorothy Richard (1957, 3:961), summarizes the American ideology toward the trusteeship:

The thesis may be stated by asking whether the education of the Micronesian is to be for our benefit or for his. I submit that unless it is planned and developed solely in his interest there is little likelihood that it will benefit him or us.[...]The Micronesian might well have been happier and better off had we left him alone; but we did not, therefore he already differs materially from his forebears in his social practices, in his hopes and aspirations. We cannot, therefore, in his interest or ours, leave him to his own devices. We cannot, as Americans, assume trusteeship and treat him as an inferior ward. We can, on the other hand, demonstrate that we have genuine faith in American democratic precepts by assisting him to achieve self-government, to develop social institutions and practices in harmony with his needs and desires, and to attain the self-respect which can result only from economic self-dependence. None of these will result from exploitation, paternalism or restrictive socio-educational opportunities.

The difference in relative economic power was obvious and known to all. There was no pretense that the American presence in Micronesia would only bring change for the good.

Two levels of ideology relevant to language planning in Micronesia do, however, begin to emerge from Wist's speech. On a broad level, there is faith, on the part of Americans and Micronesians alike, that education would substantially contribute to economic transformation. This connection would be later contested in educational circles and has been discussed with reference to the Micronesian area (Spencer 1992).

More specifically with respect to language planning, there was faith that a proper balance between education in the mother tongue and in English would produce the ideal societal transformation. During the early days of the U.S. Naval occupation (1945-1947) and Naval administration of the Trusteeship (1947-1951), language and education policy discussions were recorded in the US Naval *Hand-*

book on the Trust Territory of the Pacific Islands (U.S. Department of the Navy, 1948). The *Handbook* states:

the ideal to work for is a bilingual situation in which the people will continue to hold to and value their own speech for carrying on their local affairs, yet will also come to know well a common language. Under present day circumstances the latter language must obviously be English (U.S. Department of the Navy 1948:47),

and that

islanders should as soon as possible become competent in their use of English, while at the same time knowing and appreciating their own local language which carries the island-type culture (U.S. Department of the Navy 1948:223).

These aims were also explicitly stated by directive of the Chief of Naval Operations:

Instruction in the English language for inhabitants of all ages is a prime necessity but this is not to be construed as discouraging instruction in native languages and culture. ... Tests and educational material should be appropriate to the local environment, should be geared to the capacity of the inhabitants to absorb (U.S. Department of the Navy 1948:240).

The *Handbook* provides a candid discussion of the evils of the over-emphasizing of the use of 'world language' (i.e., English) or of the 'vernacular'. Early practices however operated under the assumption that education was a limited resource and that the most exposure to English possible in school would be of most benefit.

It is important to note that linguists, already in Micronesia since the beginning of the United States military take-over from Japan under the CIMA (Coordinated Investigation of Micronesian Anthropology), exerted influence, and their opinions were stated explicitly in the *Handbook*. There would later be a Supervisor of Linguistics in the Department of Education (U.S. Department of the Navy 1951:61). Linguists P. Garvin and I. Dyen are quoted as recommending that literacy initially be taught in indigenous languages and that indigenous languages be used as medium of instruction, in opposition to the very early cram-in-as-much-English-as-possible strategy. Dyen is further reported as recommending that 'spoken English should be learned before written English'. (U.S. Department of the Navy 1948:225) Linguist-educators from the outset promoted a 'scientifically' based language-education strategy (the audio-lingual method), which dictated oral mastery before the introduction of literacy.

The audio-lingual method for teaching used in Micronesia and throughout much of the Pacific was the Tate Oral Syllabus, versions of which were used into the 1970s. Spencer & Langmoir (1987: 3) cite Tate's *Oral English Handbook* (1971, 1979), which encouraged putting off reading and writing until pupils had been exposed to enough English so that they would not misapprehend:

If reading is to be correct, fluent, and immediately meaningful, no structural feature should be included in material for reading until it has been practised orally.

The danger of this type lies in its occasional need to express ideas in language which goes beyond the children's understanding, even if the context makes the general meaning clear. They are likely to try to use this language themselves at other times and form habits of error. ...

The Oral English programme should control the Reading programme, and both should control the Written English programme. It is doubtful whether free composition should ever be attempted in the Primary School, as the writing of errors is of little or no value in learning. Oral preparation should precede all written work to lessen the possibility of making errors.

As Spencer & Langmoir 1987 point out, adherence to this Oral Programme, in light of the fact the the orthographies had not yet been standardized and few mother tongue materials had been produced, there was effectively no teaching of reading and writing beyond the alphabet until the third grade or later. The accepted pedagogical technique of the time, combined with language planning procedure which called for the development of orthography before the development of written materials, meant that Micronesian students got a very late start in reading and writing.

The belief in the power of English teaching to transform remained. Over the course of the TTPI, a Micronesian advisory body, the Council of Micronesia, was instituted and gradually began, as the later Congress of Micronesia, to take over the functioning of the Trust Territory. The 1962 TTPI Annual Report to the United Nations revealed a major turn in the policy of language in education (U.S. Department of State 1962:127):

During the year under review a major and far-reaching change was the adoption of a new policy establishing English as the medium of instruction at the elementary school level in contrast tot the former policy which held that all instruction should be conducted in the vernacular. This change was made in conformance with the desire of the Micronesian people as expressed by the Council of Micronesia, and by Micronesian teachers and students. ... A linguist has been recruited for the Headquarters education staff and his primary function will be to expand and expedite the teaching of English in the elementary schools.

Faith in linguists in the burgeoning field of English as a Second Language to accomplish this end was also evidence in the report (U.S. Department of State 1962: 139): 'Scientific linguistic techniques are used so as to improve the teaching of English'. By 1964, the importation of American teachers for the primary schools to fulfill the official English-language education policy had begun.

Some linguists were critical of this move. Gibson 1980 criticizes the amount of energy and money spent on English teaching relative to other areas. Topping 1992 outlines his role in trying to counterbalance this tendency by beginning more rigorous efforts toward the development of orthographies, dictionaries, grammars of indigenous languages.

The burgeoning faith in ESL teacher-training techniques and in the power of teaching in English to improve the lot of Micronesians continued. The shortage of English-speaking teachers was soon to be handily (and cheaply) filled by the advent of the Peace Corps. Beginning in 1966, Peace Corps teachers were sent out en masse to fulfill the Micronesian mandate. 265 Peace Corps Volunteers become teachers in Micronesia (in a total of 186 public schools, i.e., more than one per school), alongside 179 other non-indigenous teachers and just over 1000 Micronesian teachers (U.S. Department of State 1967). The same year the Annual Report to the United Nations refers specifically to 'TESL' and states its goals as: 'a. Oral English b. Literacy in English' (U.S. Department of State 1967:124).

Gradually, and without explicit fanfare in the Annual Reports, the emphasis on TESL decreased. Many Micronesian dictionaries and reference grammars were developed in draft form by the mid-1970s, coinciding with efforts to bring United States bilingual education monies to Micronesia. Experimental bilingual education programs were eventually put into practice in all island groupings. Again, faith in a new instructional methodology, bilingual education, was hoped to solve the problem of Micronesian education. Educator Mary Spencer's investigation of a host of these programs (Spencer 1985) reveals, however, that outcomes were difficult to assess, because US bilingual-education entry-exit criteria did not make sense in the Carolines, where the entire population was of 'Limited English Proficiency' because English was not the language of the majority anywhere.

Planning efforts toward language education in Micronesia relied on the belief that language-education theory would lead to 'right' solutions for language development and education (thereby facilitating economic development). These were considered practical and logistical problems, and the belief was that applying scientific method would solve these practical problems.

4. Corpus planning issues: Orthographic development and standardization

The development of standard orthographies became a key issue in Micronesia. Without standard orthographies, literacy materials could not be developed, and the teaching of literacy to school children, as outlined above, was postponed until English reading and writing was introduced late in primary school. This section details some successes and difficulties in the planning of the orthographies for three Micronesian languages. The TTPI development of orthographies then began with the examination of, and reform of, missionary orthographies. The need for standard orthography was recognized by the early US naval administration; the *Handbook* noted that early orthographies were inconsistent: 'One sound in

Ponapean has been variously written as "ch", "s", "j", "z", and "sz" (U.S. Department of the Navy 1948:46).

Early spellings reflect some elements of orthographic conventions and of the phonological systems of Spanish, German, and English. Some Micronesian phonemic distinctions were merged, ignored, or confused; other nonphonemic (allophonic) distinctions were represented in the orthographic system (e.g. voicing vs. voicelessness). In some cases these 'misdiagnoses' were represented consistently; however, in other cases, there was inconsistency, and the same phonetic realization might be represented by more than one orthographic means. These inconsistencies were compounded by the fact that Catholic and Protestant missionaries often worked with groups from different dialect areas, providing different spelling traditions for different groups.

Despite the early recognition of problematic spelling systems for Micronesian languages and despite at least one early conference on orthography (on Pohnpeian, 1947), major progress was not made on the orthographies for two decades. This is in part attributable to a lack of knowledge of the Micronesian languages among American linguists, and a lack of knowledge of the representation of sounds according to phonemic principles by Micronesians. Bender (1984) outlines the stages of development in Western learning about Micronesian languages.

American linguists living and learning in the Pacific believed that a scientific analysis of the phonemic distribution of Micronesian languages would yield the most elegant systems of writing for these languages. This belief caused some delay in the standardization process, as an adequate knowledge of Micronesian phonological systems had to be accumulated in order to develop neat orthographies.

There would also be extra-linguistic barriers to the adoption of the new systems: resistance to the creation of a generation gap, resistance to a tradition that departs from the language used for a religion, which was by that time strongly identified with indigenous culture, and finally — ironically — resistance to a non-English-style spelling aesthetic after some years of literacy in English among the islanders.

The position of linguists that language should be 'correctly' represented graphically appears unavoidable; linguists felt that they had to prove the systematicity of Micronesian languages in order to legitimate them. They thus found themselves in a double bind: on the one hand, unappreciated by islanders who would find a new system difficult to use and might see graphization as tampering with the language, and on the other hand, compelled to convince government officials, American and Micronesian, that systematic spelling was possible and worthwhile. Goodenough et al. (1980:xiv) discuss this dilemma:

Americans were happy with the writing system that did not require them to learn to discriminate the sounds of Trukese they found difficult. Moreover, the system's inadequacies permitted them to dismiss the language as unsuitable for serious literary or expository purposes

in the schools. It is ironic, therefore, that the alphabetic reform begun in 1972 in order to do justice to Truk's language should have been perceived by some of Truk's people as an act of American interference with their language. In truth it represented a cooperative effort by Trukese in the administration and Department of Education, in consultation with language specialists, to correct the mishandling of their language by foreigners in the past.

Moreover, such was the climate in the Congress of Micronesia in favor of internationalization and the use of English that English was declared by official policy to be the language of education starting in primary school. Literacy in Micronesian languages appeared not to be a priority for Micronesians. The belief that a standard orthography and reference tools legitimate a language is a particular perception which the Micronesians did not seem to share; their languages were perfectly adequate for carrying out the social functioning of Micronesian societies as they had done for centuries.

This climate provided a context in which the successes of the proposed orthographies were ultimately decided by the scientifically trivial but socially valued criterion of aesthetics. It is, however, well within the scope of corpus planning to address the aesthetics of a writing system in terms of its cultural acceptability. Here however the linguists were caught in another sort of bind: they needed to work within the tradition of the Roman alphabet and at the same time needed to represent phonemes and phonemic distinctions which did not provide a one-to-one fit with the Roman alphabet. The linguists had at their disposal the historically tested ways of representing sound distinctions and new sounds in the Roman alphabet: by using digraphs and trigraphs or diacritics. To illustrate the relative acceptance of the orthographic systems devised by linguists in the TTPI, the cases of three Micronesian languages from the Carolines: Pohnpeian, Chuukese, and Yapese, will be examined.

A general concern for standardizing the orthographies of Micronesian languages is the representation of vowel distinctions beyond the 5 vowels of the Roman alphabet. Another is the representation of non-European consonants, such as labialized and glottalic consonants.

Pohnpeian

The language of Pohnpei has the smallest phonemic inventory of the three languages under comparison: 6 or 7 vowels (depending on the dialect), 12 consonants, and 2 glides. With its somewhat Latin-like vowel inventory, the phonemics of Pohnpeian were relatively easy for European and Japanese visitors to perceive and represent. Thus, missionary representations, though far from consistent, were not intractably erratic. Rehg & Sohl (1979:xix) note that the alphabet used in their Pohnpeian-English dictionary 'or one similar to it, had already gained widespread acceptance prior to the time the workshop was held. It represents a synthesis of at least six alphabetic traditions in Ponape'. The phonemic distinctions and their orthographic representations are presented here:

Pohnpeian (IPA)

VOWELS;

(all may be long or short)

i	u
e/ɛ	o
	ɔ
	a

CONSONANTS

p	p ^w	d	s	ts	k
m	m ^w	n	l	r	ŋ

SEMIVOWELS: y w

Pohnpeian (Spelling)

VOWELS

i	u
e	o
	oa
	a

LONG VOWELS: with *h*:

ih, uh, eh, oh, oah, ah

CONSONANTS

p	p ^w	d	s	t	k
m	m ^w	l	n	r	ng

SEMIVOWELS: i w/u

Few cases challenge the Roman alphabet. The phonemic distinction between a more rounded, higher [o], and a less rounded, lower [ɔ] was maintained by creating a digraph for the latter: *oa*. Vowel length is represented by adding an *h* (which is not a consonant in Pohnpeian) after the vowel. Long [ɔ] is thus, for example represented by *oah*, as in *soahng* 'kind, type'. Labialized consonants are represented as combinations with the letter *w*; [ŋ] is represented in English fashion by the digraph *ng* (unlike, say, the Samoan solution of using *g*). A retroflex palatal affricate is represented by the letter *t* and the slightly palatalized alveolo-palatal fricative by *s*.

In the Pohnpeian case, acceptance of the orthography was promoted by a good degree of continuity with missionary writing systems and by having a clergy as one of the proponents of the orthography. Furthermore, the spelling system that was adopted was more or less consistent with the orthographic aesthetics of the English language, which, by the time of the publication of the dictionary using the planned orthography, had been the second language of the community for over 30. No letters not necessary for Pohnpeian (*b, c, f, g, j, q, v, x, y, z*) were used to represent non-European sounds. Vowel length was represented using lengthening *h*, which at least occasionally appears in English and was a standard device in German. No diacritics were used at all. Phonemic consistency was paired with an orthographic aesthetic that is consistent with colonial English and not vastly different from earlier missionary traditions.

It is no surprise that, at the Vernacular Language Symposium on New and Developing Orthographies in Micronesia in 1989, the Pohnpeians, unlike most other groups, did not lodge many complaints about spelling, except for some contention between northern and southern dialect (Spencer et al. 1990). The

Pohnpeian resolutions passed at the symposium focused on language awareness rather than on orthographic standardization issues.

Chuukese

Chuukese, spoken on mountainous islands in a single lagoon area, shows a larger phonemic inventory than Pohnpeian, with 9 vowels, 13 consonants, and 2 glides. Dialect variation may require one to two additional consonants and/or vowels. The Chuukese system, though still with a smaller number of phonemes than English, presents more challenges in designing a Roman-alphabet orthography than does Pohnpeian. An additional social-historical complication is the fact that there is a series of Trukic dialects that show more differentiation than exists on the island of Pohnpei. The bulk of missionary educational and religious materials are based on a different dialect, Mortlockese, which differs phonemically from the dialects of the Chuuk lagoon, the center of the TTPI Truk State government and of the present FSM Chuuk State government.

Perhaps owing to the confusion of dialects and the richer phonemic inventory, spelling systems developed by missionaries reflected Chuukese phonology very inconsistently. This was noted early in the US Naval administration in the islands, and administrator Samuel Elbert and linguist Isidore Dyen worked toward standardizing Chuukese spelling (U.S. Department of the Navy 1948:46). Later, Ward Goodenough and fellow authors of the Chuukese-English dictionary would lament that these 'improvements' by Elbert and Dyen were ignored (Goodenough et al. 1980:xiv).

Chuukese (IPA)

VOWELS

(all may be long or short)

i	u, <i>u</i>
ɛ	o
ʌ	ɔ
æ	
a	

CONSONANTS

p	p ^w	f	t	s	ts	k
m	m ^w	l	r	n		ŋ

GLIDES y w

Chuukese (Spelling)

VOWELS

i	u, <i>ú</i>
e	o
	é ó
á	
a	

vowel length by doubling:

ii, uu, *úú*, ee, oo, *éé*, *óó*, *áá*, aa

CONSONANTS

p	p ^w	f	t	s	ch	k
m	m ^w	l	r	n		ng

GLIDES y w

Chuukese consonant inventory is represented much as in Pohnpeian. Vowel length, however, is represented by doubling the vowel in the orthography rather than adding *h*, and the richer vowel inventory required more distinctions, which were represented with acute accents differentiating phonological neighbors. This seems a reasonably elegant system, however, the frequency of accented

long vowels is fairly high. Thus, words like *wóówóóyééch* and *pwááráátá* are commonplace. The multiplicity of accented vowels in the orthography was later found to be intolerable. Entire publications of educational materials were scrapped; children were reported to have difficulty remembering binary distinctions between accented and unaccented letters. Furthermore, traditional printing presses required more labor and expense in the production of materials with many accented letters — and materials thus printed were chocked full of mistakes. In the 1989 symposium on orthographies, the Chuukese delegation resolved 'to actively identify ways and means of remedying the printing problems involved in developing Chuukese materials for the schools'. (Spencer et al. 1990: 100). A high degree of dissatisfaction remains with respect to the orthography — largely due to printing impracticalities and aesthetics.

A further difficulty is alphabetic order in dictionaries. Micronesian languages follow the missionary practice of reciting the alphabet with the vowel series first, followed by the consonants, otherwise in the order of the English alphabet. Digraphs and diacritically marked letters are considered separate letters (as Spanish *ch*) Geminate consonants are not considered to be digraphs and are alphabetized as if two letters. Long vowels, however are alphabetized as special cases of short vowels; for example, *al* would come before *aam* etc.)

This logical system, however, produced word-finding difficulties for those who used the Chuukese-English dictionary for perhaps its most valued purpose to the Micronesians: to look in the Chuukese section for English translations. This is often a source of complaint regarding the PALI dictionaries, that entries are hard to find (Spencer et al. 1992, *passim*; Early 1994). Concessions to this, however, as in the more recently published dictionary of Carolinian (Jackson et al. 1991), the Trukic variety of the Northern Marianas, also cause confusion. The authors of the Carolinian dictionary decided that many users might not know which words contained geminate consonants and long vowels, and so treat them both as long vowels are treated in the Chuukese dictionary. This is exemplified in the Introduction to the Carolinian dictionary (Jackson et al. 1991:xvii) by alphabetic sequences such as: *bwel*, *bwell*, *bweel*, *bwele*, *fas*, *ffas*, *ffat*, *faat*, *ffaaf*, *fiti*, *fíiti*. It is debatable whether such moves, logically and systematically designed to help users, manage to simplify dictionary use.

Overall satisfaction with Chuukese and Trukic orthographies is mediocre. The accented letters are often simply abandoned in favor of a more ambiguous representation that is more in conformance with English orthographic conventions.

Yapese

Yapese, spoken on the old volcanic islands of Yap State, has a richer phonemic inventory than either Pohnpeian or Chuukese, with 8 vowels, 27 consonants, 4 glides:

Yapese (IPA)

VOWELS (all may be long or short)

i	u
ɛ	œ
	ɔ
æ	a

CONSONANTS

p	p'	b	f	f'	m	m'		
t	t'	d	θ	θ'	n	n'	l	l'
c	j	s			r			
k	k'	g		ŋ	ŋ'			
q		h						
GLIDES	w	w'	y	y'				

Yapese (Spelling)

LONG VOWELS

ii	uu
ee	oe
	oo
ea	ae
	aa

SHORT VOWELS

i	u
e	ö
	o
ë	ä
	a

CONSONANTS

p	p'	b	f	f'	m	m'	
t	t'	d	th	th'	n	n'	ll'
ch	j	s			r		
k	k'	g			n	ng	
q		h					
GLIDES	w	w'	y	y'			

Orthography planning for Yapese has shown the least success, partly because the new system agreed upon by Yapese orthography committees, as seen in Jensen et al. 1977, had many more departures from the earlier, somewhat entrenched missionary orthography than was the case with Pohnpeian or Chuukese. The differences between the older missionary spellings and the newer orthography were apparently great enough that there were reports (Spencer et al. 1992) that parents could not understand what children were trying to write and could not help them with their school work.

The choices made for Yapese vowels differed from those made for Pohnpeian and Chuukese. Umlauts were chosen to distinguish vowel qualities beyond the five Latin vowels, introducing *ë*, *ä* and *ö*. Long vowels without diacritics are doubled to show length; however, avoiding the doubled accented letters à la Chuukese, the proposed Yapese orthography adds a second vowel to accented vowels to produce the corresponding long vowel: *ë* lengthens to *ea*; *ä* to *ae*; and *ö* to *oe*. This system was greeted with a great degree of unhappiness: umlauts were resisted and the *ea/ae* distinction (though not unlike the German 'ie'/'ei' difference) was thought confusing.

Yapese, being a non-nuclear Micronesian language, differs in syllable structure and consonant-phoneme inventory from the nuclear Micronesian languages (Pohnpeian, Chuukese, Marshallese, Kosraean, etc.). One such difference is the Yapese series of glottalized consonants, represented by the letter for the corresponding oral consonant followed by an apostrophe. The practice appeared in some missionary writing and was not found especially controversial, though the apostrophe is also often ignored. A controversial innovation regarding consonants is the decision to represent the glottal-stop phoneme with the letter *q*, departing from the earlier practice of representing it with an apostrophe. The repre-

sentation of this phoneme as a letter in its own right makes good sense, as it appears in all positions (syllable final and initial). However, as Pugram (in Spencer et al. 1992:48) notes, 'Nobody, and I mean nobody, likes that "Q".' Notwithstanding its approval by an orthography committee, the representation was apparently disliked; the use of the apostrophe was well entrenched, and by the 1970s the English language usage of *qu* was quite familiar to the Yapese. Yapese accordingly joked that the indigenous name for their island [*waʔab*] had become 'waQUab' [*wakwab*] after 30 years of exposure to English. The *q* was widely ignored and is almost never used in personal names, place names, or even on tourist T-shirts, which still say *Wa'ab*.

Planning the Yapese orthography was largely a non-success, and consistency has not yet been achieved. Mother-tongue school materials continue to be a problem. Educational materials printed with the new orthography, on an even greater scale than in Chuuk, were discarded, and there remains much confusion over orthography. A standard system has not yet been settled upon.

In each case, American linguists, under the advisement of Micronesian committees, made sound, scientific decisions. They succeeded when their efforts happened, serendipitously, to coincide with pre-existing (though only marginally entrenched) literacy practices and to correspond to a prevailing aesthetic among Micronesians consistent with developing attitudes toward the language used for literacy and wider communication internally and internationally: English. Where these practices and attitudes conflicted, little progress has been made.

The overall tone of the 1989 symposium on orthography (Spencer et al. 1990) is optimistic; however, many educators complained that there was not enough legal backbone to enforce language commission decisions; others complained of inaccuracies and omissions in materials developed in the 1970s; others complained of lack of funding and of relative lack of follow-through on projects when the initiating program funding ran out.

Interestingly, and perhaps ironically, Topping, a linguist who directed the program under which most of the Micronesian dictionaries and grammars were produced, encourages Micronesian language planners not to hold up writing in Micronesia over an ideology of correct spelling (Topping 1992:148). Correctness is, however, perhaps the primary legacy of American linguistic efforts in Micronesia: concern for scientific accuracy above all, in the belief that accurate spelling systems would pave the way for literacy in vernacular languages, in the belief that the 'correct' acquisition of English would pave the way for literacy in English, and finally in the belief these would in turn would provide a way to the good balanced life of traditional values and modern market-economy. These factors reflect the focus of American linguistic inquiry: understanding from the bottom-up.

Americans demonstrated a complex over-arching ideology and sensitivity toward their role in Micronesia. They recognized from the beginning that a balance would be needed between a free hand and guiding hand, if Micronesians wanted to see economic transformation. Micronesian interest in education and in English reflected their desire to participate in some way in the world economy.

Both groups relied on language-teaching methods and linguists for major and minor social transformation. It seemed clear what language and linguistics was supposed to do for the Micronesian, but not what the Micronesian was supposed to do with the language, Micronesian or English.

REFERENCES

- BENDER, Byron W. 1984. 'Preface'. *Studies in Micronesian Linguistics*, ed. by Byron W. Bender, vii-x. Canberra: Department of Linguistics, Research School of Pacific Studies, The Australian National University.
- COBARRUBIAS, Juan. 1983. Ethical issues in status planning. *Progress in Language Planning*. In Cobarrubias & Fishman, 41-83. Berlin: Mouton.
- COBARRUBIAS, Juan, & Joshua FISHMAN (eds.). 1983. *Progress in Language Planning*. Berlin: Mouton.
- Early, ROBERT. 1994. Review of Jackson et al. 1991, in *Isla: A Journal of Micronesian Studies* 2:2.333-8.
- GIBSON, Robert E. 1980. Putting the mother tongue back into the classroom: ESL and bilingual education in Micronesia. *NABE Journal* 4:2.49-58.
- GOODENOUGH, Ward H., et al. 1980. *Trukese-English Dictionary*. Philadelphia: American Philosophical Society.
- GROSSMAN, Gary M., Harry N. Drier, & Harold Starr. 1990. *Achieving Academic Excellence: The Challenge of the 90s in the Federated States of Micronesia*. Palikir: Office of Education, Department of Human Resources, The Government of the Federated States of Micronesia.
- HANLON, David. 1998. *Remaking Micronesia: Discourses over Development in a Pacific Territory, 1944-1982*. Honolulu: University of Hawaii Press.
- JACKSON, Frederick H. et al. 1991. *Carolinian-English Dictionary*. Honolulu: University of Hawaii Press.
- JENSEN, John Thayer, et al. 1977. *Yapese-English Dictionary*. Honolulu: University of Hawaii Press.
- QUACKENBUSH, Hiroko C. 1970. Studies in the phonology of some Trukic dialects. University of Michigan, Ph.D. dissertation.
- REHG, Kenneth L. 1981. *Ponapean Reference Grammar*. Honolulu: University of Hawaii Press.
- , & Damien G. SOHL. 1979. *Ponapean-English Dictionary*. Honolulu: University of Hawaii Press.
- RICHARD, Dorothy. 1957. *United States Naval Administration of the Trust Territory of the Pacific Islands*. Washington, D.C: USGPO.
- SACHUO, Sweeter. 1992. Impact of communication technology on traditional discourse in the cultures of Micronesia. *Pacific History: Papers from the 8th Pacific History Association Conference*, ed. by Donald Rubinstein, 405-18. Mangilao: UOG Press.
- SPENCER, Mary L. 1992. Literacy in Micronesia. *ISLA: A Journal of Micronesian Studies* 1:2.289-327.

- . 1985. Entry-exit criteria issues as they pertain to the bilingual education programs of the Micronesian region. Mangilao, Guam: University of Guam. ERIC, ED297586.
- , & Patrick Langmoir. 1987. Time to question the SPC standard: The ubiquitous English reading curriculum of the Pacific. Paper presented to the National Association for Asian and Pacific American Education National Conference, Honolulu, Hawaii, April 1987. ERIC document FL071493.
- , et al. 1990 *Vernacular Language Symposium on New and Developing Orthographies in Micronesia*. Mangilao: University of Guam Press.
- TATE, Gloria M. 1971. *Oral English, Handbook for Teachers, Teacher-Trainers, Inspectors, Your Essential Guide to the Oral English Course*. Wellington : Reed Education.
- . 1979. *Oral English, Handbook for Teachers, Teacher-Trainers, Inspectors, Your Essential Guide to the Oral English Course*. Sydney, Australia : South Pacific Commission in association with the New Zealand Dept. of Education..
- TOPPING, Donald M. 1975. A bilingual education program for Micronesia. *The Linguistic Reporter* 15: 6. 4.
- . 1992. Review of Vernacular Language Symposium on New and Developing Orthographies in Micronesia. *Isla: A Journal of Micronesian Studies* 1:1.
- U.S. Department of State. 1958. *Eleventh Annual Report to the United Nation on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- . 1962. *Fifteenth Annual Report to the United Nation on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- . 1964. *Seventeenth Annual Report to the United Nation on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- . 1967. *Twentieth Annual Report to the United Nation on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- . 1969. *Twenty-second Annual Report to the United Nation on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- U.S. Department of the Interior. 1952. *Report on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.
- . 1972. *Annual Report of the High Commissioner of the Trust Territory of the Pacific Islands to the Secretary of the Interior*. Washington, D.C.: US GPO.
- . Office of Insular Affairs. 1999. *A Report on the State of the Islands, 1999*. Washington, D.C.: US GPO.
- U.S. Department of the Navy. 1951. *Report on the Administration of the Trust Territory of the Pacific Islands*. Washington, D.C.: US GPO.

- , Office of the Chief of Naval Operations. 1948. *Handbook on the Trust Territory of the Pacific Islands: A Handbook for Use in Training and Administration*. Washington, D.C.: US GPO.