Lost in Translation: From English to Pacific Languages in Early Reading Assessment

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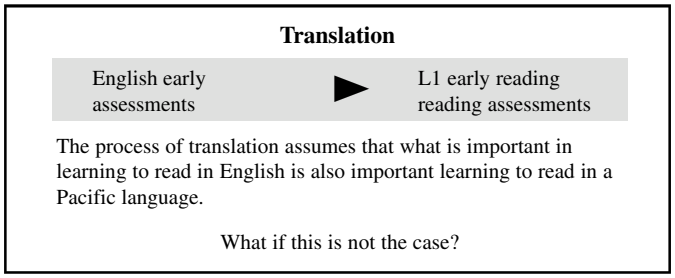
What do Pacific island educators do when they are given the responsibility of teaching children to be literate in the vernacular (L1)? With few L1 texts for children to read and little research and curricular resources for teachers to draw upon, teaching L1 literacy is a daunting task. Teachers want children to build on and benefit from L1 literacy practices, especially as they transition to academic English in school. Often they turn to English textbooks to guide their instruction and assessment in L1. Because of this, we wonder what happens in "translation" from English to L1 practices. As a starting point, we ask about transfer: Is what needs to be learned by early readers of English the same skills and knowledge as that to be learned by early readers of the L1 (see Figure 1)? The task of the translator—bringing together understandings of language and literacy in English and the L1—is difficult work. It is a complex space where we believe much can be "lost in translation."

FIGURE 1
The Task of Translation



The Pacific Regional Educational Laboratory (REL) at Pacific Resources for Education and Learning (PREL) is involved in a research project with six U.S.-affiliated states of the Pacific.[1] Drawing on evidence-based research on methods for successfully teaching children to read, we focused on key areas of reading instruction to create a collection of early reading assessments. With the support of local linguists, we translated the assessments in English to the L1 for children learning to read in an alphabet-based Pacific language. We explore the issues that surface when using English early reading assessments as the frame for developing L1 assessments through examples drawn primarily from Pohnpeian, a Pacific language spoken in Pohnpei, Federated States of Micronesia.

The schools in Micronesia are modeled after the U.S. educational system. As well, most are structured as transitional bilingual programs with transition from L1 to English in grades 3, 4, or 5. In many Micronesian communities, English is a foreign language that is highly valued. In the same contexts, oral traditions in the L1 have a strong presence; the L1 remains the dominant language of home and the community. Bilingual research contends that literacy development in students' first language is a necessary condition for *additive* bilingualism and biliteracy to occur (Hornberger, 2003; Skutnabb-Kangas, 2000; Thomas & Collier, 2001; Barnard &

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[1]We draw on a larger study, Pacific Communities with High-performance In Literacy Development (Pacific CHILD), as part of the Pacific Regional Educational Laboratory (REL) work that is associated with the U.S.-affiliated states of the Pacific: Guam, the Commonwealth of the Northern Mariana Islands, the Federated States of Micronesia (Chuuk, Kosrae, Pohnpei, and Yap), the Republic of Palau, the Republic of the Marshall Islands, and American Samoa. Six of these entities use their local language as the language of instruction for some part of the students' public school education.

Glynn, 2003). Hence, we focus our discussion on questions of language and literacy when translating early reading assessments from English to several Micronesian languages. The assessments are intended to support a pedagogical focus on assessment *for* learning (Black & Wiliam, 1998; Stiggins, 2002). As a result of this work, we engage in complicated conversations on bilingual grounds to deepen our understandings of complex language-culture-literacy connections and improve the quality of early reading assessments prepared for use in Pacific language classrooms.

THE MEDIUM OF LITERACY

Hornberger's (2003) framework of biliteracy development is a useful heuristic for helping us understand what is involved in becoming print literate in two alphabetic languages. From her work, we focus mainly on the concept of language as a medium of print literacy. That is, reading and writing takes place in language. Two aspects of language Hornberger identifies are particularly helpful: structures and scripts (see Figure 2). How systems of structure (grammar and discourse) and script (orthography) work are the codes of a language—codes that are specific to each language. While it is not the only aspect of literacy, the language code is essential for beginning readers and writers to learn.

FIGURE 2
Two Aspects of Language Important to Literacy

Knowledge of the orthography and grammar of a language impacts how we read (decode) and write (encode) text. While alphabetic languages share similar features important to literacy (e.g., they have orthographies and a grammatical system), each language has different ways of using orthography and grammar to make meaning. Recognizing this, government funding from the Trust Territory of the Pacific Islands in the 1970s supported the writing of reference grammar and bilingual dictionaries for many Pacific languages (e.g., Rehg, 1981). Twenty years of correspondence regarding this work between Capelle and Bender (1996) documents their "involvement in efforts to make the Marshallese language a viable written medium for use in all tasks of daily living, including its use in the island's schools" (p. 37). These references to script (dictionaries) and structure (grammar) for Pacific languages remain significant linguistic resources for language arts specialists and teachers.

Hornberger (2003) suggests that the idea of similarities dominates the conversation when English *best practices* are considered for L1 instructional environments. This aligns closely with our experience of translation, as we have found that translating English assessments into another language is a way of privileging the similarities between the two. In specific translations, we may have stretched the common ground to ensure a "fit" without critically questioning whether the fit actually represented the salient features of what it means to read in that particular language. Hornberger argues that for children to reach their potential in bilingualism and biliteracy, both similarities and differences must be taken into account. We now realize that in paying closer attention to translating what works in English into Pacific languages, we lost in translation the differences that may have a significant role in learning to read in the L1.

ENGLISH BEST ASSESSMENT PRACTICES IN EARLY READING

Researchers of English literacy have identified five areas of early reading instruction for the successful teaching of early readers: alphabet (letter knowledge), phonological awareness (phoneme awareness and phonics), fluency, text comprehension, and vocabulary (National Reading Panel [NRP], 2000; Center for the Improvement of Early Reading Achievement, 2001). Print conventions (book handling skills and print awareness) are also recognized as a necessary knowledge and skill base for early readers (Clay, 1993). These areas guided the development of six early reading assessments in English (see Table 1).

TABLE 1
Assessments Representing Key Areas of Reading Instruction

Key Areas in English Early Reading Instruction	Pacific CHILD Assessments in Seven Languages: Chuukese, English, Kosraean, Marshallese, Palauan, Pohnpeian, and Yapese
Alphabetic principle: Letters and sounds	ALPHA—Alphabet letter knowledge
Alphabetic principle: Phonological and phoneme awareness, phonics	PPA—Phonological/phoneme awareness
Book-handling skills, print awareness	CAP—Concepts about print
Fluency: Sight words, rate, expression	SWI—Sight word identification
Text comprehension strategies and vocabulary development	LRV—Listen, retell, & vocabulary: Story structure, language structure, and vocabulary WSC—Written story construction: Story structure, print conventions, language structure, and vocabulary

The assessments were designed to gather evidence of a child's knowledge and ability of early reading in English or a Micronesian language. Our primary concern in developing the assessments, and now in reflecting on them, has been the content of each early reading assessment, a question, ultimately, of validity. Do the items we include on L1 early reading assessments represent the most important skills and knowledge required of a child when learning to read in L1? Little research on aspects of Micronesian languages relevant to literacy has been done (Spencer, 1996), making our question difficult to answer and the task of the translator much more complicated.

Children's responses to the assessments are used to infer their knowledge and abilities related to learning to read in the L1. The validity of those inferences is the focus of this discussion and an essential conversation for anyone considering the development of assessments for early reading in the L1. We use the term validity as a property of the inferences made from the assessment information, not as a property of the assessments themselves (Messick, 1989; Wiliam, 2001). This raises the question of whether or not the domain of the *language of literacy* is adequately addressed in the collection of assessments. For example, do the assessments we developed in Pohnpeian represent what is linguistically important about learning to read in Pohnpeian? In response, we draw on those assessments we believe are strong samples of what happens when best practices in English are assumed to be best practices in alphabetic languages of the Pacific. This process has helped us rethink what it means to learn to read through the medium of a language and to take back what may have been lost in translation.

IN TRANSLATION FROM ENGLISH TO PACIFIC LANGUAGE LITERACY

There was considerable transfer from English to L1 with concepts about print, as book handling skills and print awareness are salient features of literacy in alphabetic languages. The Concepts About Print (CAP) assessment in Micronesian languages benefited from early reading research in English and few issues emerged from that translation, hence it is not discussed further. Within other areas we struggled with questions such as, "Are phonemes as important in Micronesian languages as they are in English?"

Alphabetic Principle—ALPHA Assessment (Script)

Written symbols and their associated sounds form the alphabetic script (or code) of a language. In languages similar to English, a symbol can have more than one sound. Such alphabets name each of their symbols. In phonetically regular languages where there is a close sound-symbol correspondence, the sound often becomes the name of the symbol (e.g., in Marshallese, a language with a newly aligned orthography, the letter *b* is [bw]—its sound and name). Hence, knowing the names of the letters in some Pacific languages is not as important as it is for English. This is of pedagogical importance as children learning the alphabet often begin by identifying each symbol by its name, sound, or a word beginning with that letter (a "best practice" in English). Teachers need to know whether letter names are important for the language in which early reading instruction takes place. As well, symbols may take different forms (e.g., uppercase or lowercase, single or double letters). Children need this letter knowledge to access the code of the language—the letter-sound associations for decoding (reading) and encoding (writing) words.

For example, the writing system in Pohnpeian is based on the English writing system (see Table 2). English symbols in close proximity to the Pohnpeian sounds were used to form the Pohnpeian alphabet. Out of 26 English symbols, 16 were replicated and 4 were adapted to create the 20-symbol Pohnpeian writing system.

TABLE 2
Similarities and Differences Between Pohnpeian and English Alphabet Symbols

Pohnpeian Alphabet	
Lowercase	a, e, i, o, **oa**, u, h, k, l, m, **mw**, n, **ng**, p, **pw**, r, s, d, t, w
Pohnpeian letters not in the English alphabet	oa, mw, ng, pw
English Alphabet	
Lowercase	a, **b**, c, d, e, **f**, **g**, h, i, j, k, l, m, n, o, p, **q**, r, s, t, u, v, w, **x**, **y**, **z**
English letters not in the Pohnpeian alphabet	b, c, f, g, j, q, v, x, y, z

Although elements of the English alphabet appear in the Pohnpeian writing system, the sounds that those same symbols represent are quite different. For example, Pohnpeian consonants have both short and long forms, except for *w*. English does not follow this pattern. Stop consonants can vary. For example, the *p* in the English word *pig* is an aspirated stop. The same letter *p* in Pohnpeian is a voiceless stop, as in the word *pihk*. Similar differences occur with the letters *d*, *t*, and *k*; in English they are voiced, and in Pohnpeian they are voiceless. Children need to have flexibility in how they know

letters and realize that the same symbol may have different sounds and serve different functions in different languages.

Pohnpeian has digraphs: symbols with more than one letter. The Pohnpeian alphabet uses four combinations of letters or digraphs. The four digraphs include one vowel /oa/ and three consonants /mw/, /ng/, and /pw/. No single English alphabetic symbol can represent each of these sounds. The digraphs can be separated and independently represent two phonemes, except the *g* in /ng/. The *g* can never stand alone, it only appears in partnership with the letter *n*, as in the phoneme /ng/. Children learning the Pohnpeian script need to identify the combinations of letters used as a unit of sound. While English alphabet assessments do not include digraphs as an alphabet symbol, these are strongly established symbols in the Pohnpeian alphabet that should be assessed. We wonder, what impact do digraphs as letters of the alphabet have on becoming literate in Pohnpeian? It seems that as long as children become familiar with how they work as letters or as digraphs, it does not matter.

Over time, the Pohnpeian alphabet letters have developed names that are separate from their associated sounds. For example, the name of the letter *s* is [sih], similar to the sound of English letter name *c*. However, the sound of *s* is similar to the English [s]. Naming *s* [sih] is consistent with other Pohnpeian consonants such as [kih], [lih], [mih], [mwih], and [ngih]. The name of each vowel is the vowel plus the letter *h*, making each vowel sound lengthened, such as [ah], [eh], [ih], and [oah]. For children, learning to read in Pohnpeian, a language that has borrowed the letter naming practice from English, means knowing the names and the sounds of the letters.

The sequence of letters differs between English and other Pacific languages. For example, the Pohnpeian alphabet begins with the vowel sounds, and is followed by the letter *h*. Finally the consonants are listed—the sounds that require air obstructions formed by the lips, tongue, or teeth. This may cause confusion for some L1 learners if they are learning the L1 and English alphabet at the same time. The alphabet assessment should reflect the established sequence of letters for each language and teachers need to help children learn the differences.

In a different example, the initial translation of an English alphabet assessment into Yapese on two items—names and sounds—seemed straightforward. After the pilot assessment, we found that children were scoring high on letter sounds but not letter names. It became apparent that while letter names are important in English, this is not so in Yapese. We removed the letter name item from the assessment, instead asking children to tell us how they know letters (by sound, name, or word). This change in the assessment seemed to accommodate letter identification differences between English and Pacific languages, providing teachers with important information about a child's letter knowledge in the language of literacy.

We also draw on examples from the Marshallese language to show how newer orthographies in the Pacific have stronger letter-sound correspondences. Capelle and Bender (1996) note the following:

> The original translators introduced several special letters for sounds not covered by the Roman alphabet: *s*, *c*, and *y* for distinctive vowels and *g* as a single letter for the *ng* combination. They did not provide, however, for three other special sounds that bear an especially heavy load in distinguishing words: *v*, *h*, *f*. That is, there are two distinctive *l*, *m*, and *n* sounds . . . . (In the standard alphabet recommended by the Committee on Spelling Marshallese, the dark members of these pairs are distinguished by a mark, a cedilla beneath; the light members are unmarked.) (p. 75)

New orthographies helped make spelling easier because of the closer association of symbol to sound. However, the old orthographies, grounded in translations of the bible, remain strong. It is not unusual to see multiple spellings for the same word (e.g., yokwe, ixkwe, and iakwe—a Marshallese greeting). English has, at this point in its history, a relatively stable orthography and clear spelling rules (phonics), even though there may be more exceptions than rules. Pacific languages have shifting orthographies. They are in transition from old to new. Arguments over how words should be spelled in the L1 have stood in the way of printing stories for children to read. When a generation of parents and community members use the old orthography and children in school learn the new, what are the expectations for literacy? There is evidence that spelling flexibility can be productive and that children are very capable of making sense of words that can be spelled in different ways. This debate should not prevent stories from being printed and put in the hands of children. Insisting on the new and rejecting the old separates generations. By teaching children both orthographies, the children will be able to participate in their elder's world of print and elders can participate in the children's, bringing meaningful literacy to everyone.

Alphabetic Principle—PPA Assessment (Script)

Phonological and phoneme awareness (PPA) addresses the ability to differentiate sounds of the language and eventually link those sounds to letters and groups of letters (phonics). Hearing differences between words, syllables, and phonemes (the smallest unit of sound) and being able to manipulate sounds (e.g., initial and final sounds, rhyming, blending, segmenting) are important aspects of learning to read in English. But, how important are they when learning to read in a Pacific language?

When we translated a basic English PPA assessment to a Pacific language, we looked for similarities between the languages. For example, a large portion of our PPA assessment

comprises initial and final sounds (phonemes) of words. It was not difficult to find words in the six Micronesian languages with beginning and ending sounds that could be isolated. Other tasks on the assessment asked the child to blend and segment phonemes, thus giving much attention in the L1 to phonemes, an important aspect of learning to read in English. However, what we didn't ask was if phonemes are important in learning to read. We just assumed they were.

We began to question the *heavy loading* of phonemic awareness, when, in L1 classrooms we observed children reading by decoding "chunks" of words. Very little phonemic emphasis was given to L1 literacy development in classrooms where English textbooks were unavailable to teachers. As we learned more about Pacific languages, we began to pay attention to the role of syllables. For example, in Kosraean we would hear the word *tuhlihk* (child) decoded in chunks /tuh/ /lihk/ rather than by phonemes /t/ /uh/ /l/ /ih/ /k/. Similarly, in Pohnpeian, the word *tepitep* (begin) was decoded in syllabic or reduplicated chunks as /tep/ /i/ /tep/, rather than by phonemes /t/ /e/ /p/ /i/ /t/ /e/ /p/. Chunking seemed to have more usefulness in the reading process, yet we were not emphasizing it on the L1 PPA. Instead, we focused at the phoneme level, mimicking the tendencies of phonetic practices in English.

A special feature of sound was assigned arbitrarily to the letter *h* in the Pohnpeian language. While the sound /h/ does not exist in the Pohnpeian language, the symbol was adopted to be part of the alphabet to signal long vowels. Hence, the letter *h* has kept its English name but is referred to in Pohnpeian as *reireila* meaning *lengthened*. In contrast, there are some Pohnpeian sounds without corresponding symbols. Hence, these sounds are written in alternative forms. For example, the sound of the letter *y* is spoken in Pohnpeian words such as *yahya* spelled *iahia* (rainbow), or *piyaya* spelled *piahia* (extracting coconut milk from its origins). Since *y* is not listed among the symbols representing a Pohnpeian sound, /y/ is spelled alternatively using /i/, as seen in these examples.

The English alphabetic principles established starting points for translation, but they are not enough. Micronesian languages are rich in alphabetic differences that, if attended to, have the potential to improve children's comprehension, and as a result, their love of reading in the L1.

Fluency—SWI Assessment (Script)

For English, sight words are those words that frequently occur in print that children read. Most sight words are structure or function words that often have no referent (e.g., *the* or *was*); these words are usually more difficult for children to learn than vocabulary (words that have concrete referents such as *dog* or *cat*). In English, structure or function words sometimes have an irregular sound-symbol correspondence and therefore are best learned as a total unit rather than by individual letters or word parts. There are a number of research-based lists available in English (e.g., Fry or Dolche lists) but similar lists are not yet available for Pacific languages. The English sight word identification (SWI) assessment presents a list of frequently occurring words that a child should be able to quickly and accurately identify.

The task of the translator was particularly challenging for this assessment. If no lists of most frequently occurring words for the L1 were available, what would we use as a source of words? For our pilot, we asked the REL Reading Specialists and local linguists in the entities to review a list of L1 words we saw in a limited number of children's L1 texts. They added words to the list they believed children frequently hear and use in speech, and deleted others. It was an unsystematic approach to sight words that raised questions for us for at least three reasons: (1) the words that tended to be included seemed to be more vocabulary oriented than function words (it seems that in languages such as Pohnpeian, suffixes may be doing the work of function words), (2) the words seemed to be easily decodable because of the phonetically regular orthography, and (3) the words had multiple spellings because of changing orthographies that are not yet established. We quickly determined that we were not assessing sight words as we had defined them in the English assessment. Instead, we had translated lists of common L1 words (content and structure/function words), and it seems that if children learned to identify the flexible spellings of them correctly and quickly, their fluency would increase.

We continue to use the assessment even though we know the words are not sight words. We believe this assessment provides useful information for teachers about word identification. More importantly though, we realize the need for systematically developed sources of word lists in different Pacific languages that will help teachers know which words to draw children's attention to in the stories they read—words that children should learn to identify automatically and accurately as they read.

Text Comprehension—LRV and WSC Assessments (Structure)

We turn now to stories—spoken and written—to explore translation questions of structure and the ways language makes meaning (e.g., in grammar and vocabulary). All narratives have a story structure (though it may differ from story to story depending on the purpose); that is, stories are organized in particular ways that have evolved from a heritage of the everyday practices of storytellers and storywriters. In the Pacific, oral traditions guide the storyteller, "recount[ing] that tale in turn when one has earned the right to do so (now inflected by the patterns of one's own experience and the rhythms of one's own voice)" (Abrams, 1996, p. 181). While variations in retelling oral stories are the norm, the Listen,

Retell, and Vocabulary (LRV) assessment goal of printed texts is repetition. Written Story Construction (WSC) tasked children to write a narrative in L1. We acknowledged our alignment in both LRV and WSC with the narrative structure of school-based stories and consciously chose to promote that alignment. We now wonder what was lost. Had children been encouraged to retell in their rich oral traditions, would it have made a difference in their language and literacy abilities? We suspect it would.

The narrative assessments elicited evidence of students' knowledge of Western story structure (orientation, complication, resolution) and their ability to construct meaning (stories) in language. Primarily, the purpose of both the LRV and WSC assessments was to acknowledge story structure as a comprehension strategy. What we neglected to pay attention to in English and other Micronesian languages were the language features of narrative a child must know and use in order to make meaning (tell/write a story).

One major way meaning is constructed is in the structure of the language. English, for example, has a subject + verb + object (SVO) structure, and that structure provides a frame for meaning. Likewise, punctuation also influences how meaning gets made. For example, question and exclamation marks indicate different meanings than do periods. Do structures and punctuation in Pacific languages act in the same manner as in English? While there are obvious similarities, there are also some differences that may impact learning to read in the L1. For example, while English uses one basic structure of SVO, the Pohnpeian language has at least two basic sentence types or structures. The first structure is an *equational* sentence composed of two noun phrases, one of which typically has the function of identifying the other (Rehg, 1981). Consider the following examples:

- *Liho sounpadahk emen.* [woman-that teacher one-numeric-choice-person] translates to *That woman* is a teacher.
- *Sohn mehn Pohnpei.* [Sohn one-of Pohnpei] translates to *Sohn is a Pohnpeian*.
- *Ien noumw dahlo.* [there-by-you your plate-that] translates to *There is your plate*.
- *Mahi ieu mwo.* [Breadfruit one there-away from you and me] translates to *That is a breadfruit.*

This Pohnpeian language structure serves a similar function to the work of relational verbs in English (*to be* and *to have*) but operates very differently. Using language to identify or describe (e.g., characters or settings) is an important feature of narratives that children use to tell and write stories in ways that are valued in school. Our assessments expected children to use this language ability in asking them to retell and write stories, but it was not explicitly assessed. We should have better addressed in the assessment what children need to do in language to describe the characters and setting.

The second structure used in Pohnpeian is a *verbal sentence* composed of a noun phrase and a verb phrase, similar to the English structure SVO. We provide the following Pohnpeian examples:

- *Ohlo noahrok*. [men-that greedy] translates to *That man is greedy*.
- *Siro pahn duhdu*. [Siro will bath] translates to *Siro will take a bath.*
- *Pahpa memeir*. [father sleeping] translates to *My father is sleeping*.
- *Liho kohkohla*. [women-that going there away from you and me] translates to *That woman left*.

As native speakers of the language, children are internalizing the structures as they experience language. Teachers need to know, through assessment, what children know and can do with these varying sentence structures.

Another major difference between English and the Pohnpeian language is with regard to tense. While English uses tenses, such as present and past (see—saw or go—went), to make meaning, Pohnpeian is a "tense-less" language (Lynch, 1998, p. 134). The expression of time is contoured in four different aspect markers identified by Lynch and outlined in Table 3.

TABLE 3
Tenseless Pohnpeian

Aspect Marker	Time Contour/Curve
1. *kin*—Habitual aspect marker; preverbal particle "kin"	Implying that the action is a habit and is done regularly. *Pahpa kin suk kehp—My father usually pounds yam.*
2. *reduplicating verb*—Continuous aspect marker	Signals that the action of the verb is or was being carried out over some length of time. *Pahpa sukusuk kehp—My father is pounding yam.*
3. *ehr*—Complete aspect marker	Indicating that the action has reached some kind of conclusion or completion. *Pahpa sukehr kehp—My father has pounded his yam.*
4. *pahn*—Irrealis aspect marker; preverbal particle "pahn"	Implying that the action is not realized as complete, oftentimes corresponding to the future. *Pahpa pahn suk kehp—My father will pound his yam.*

The idea that Pohnpeian is a tenseless language becomes particularly interesting when we assess children on their narrative writing ability—as a main language feature of English,

narrative is the dominant use of past tense (Derewianka, 1990). Do children understand the function of *ehr* and its positioning in the sentence? If this were taught explicitly, would children become better readers of Pohnpeian? Again, we assumed the assessment requiring children to write narratives in the L1 to be unproblematic. We did not take into account the tenseless nature of Pohnpeian and the complexities involved in using aspect to reflect tense. Do children intuitively know how to express notions of time in their L1? If narrative reading and writing are the dominant types of texts used in learning to be literate, should we not be paying attention to how a language expresses time?

Knowing the vocabulary of a language is basic to receiving/interpreting (listening and reading) and producing (speaking and writing) meaning. Just as phonemes are the smallest unit of sound, morphemes are the smallest units of word meaning. A word can consist of a prefix, a base or root, and a suffix. Prefixes and suffixes are morphemes added to a base or root word whose function is to alter meaning or indicate the role of the word in the sentence (e.g., note the subtle differences in meaning between *reader* [noun], *reading* [verb], and *pre-reading* [adjective]). Words can also be combined to form compound words (e.g., *textbook*, *classroom*). Good readers have a large vocabulary that they draw on quickly. As early readers, students learn root or base words and how to build and extend their vocabulary from this base.

In Pohnpeian, morphemes are units of meaning such as prefixes and suffixes. Regardless of the sounds or spellings they have, as evident in the different dialects and written representations, they maintain consistency in meaning across their various allomorphic signs. For example, when the prefix /sa/ (*negation*) is added to a root word, it can be spelled in four different ways: /sa/, /se/, or /soa/ as in the words *samin*, s*emine*, and *soaminoa*. Equally important for meaning are those suffixes that appear in different sounds and spellings, such as /-ehr/ for *completive actions*. The /-ehr/ appears in two different variations as /-ehr/, and /-ier/. Likewise, the suffix /-ki/ appears as /-ki/ and /-kin/. These are examples of syllabic chunks of meaning that appear differently in sounds and in spelling, yet maintain the same meaning. Children need to recognize these variations, as they carry meanings children need to know as they learn to read.

Learning in an oral culture means learning by chunking large words and phrases. For example, in Pohnpeian, the morphology system is complex and morphemes function as affixes in unique ways. Following a verb (root or base word) there are seven positions of suffixes, as well as one position, labeled as intermediate, that morphemes can take. Suffixes of the same position cannot occur together in the same position, nor can suffixes of the intermediate co-occur with suffixes of the 3rd and 4th position (see Table 4). For example, the word *papkinieieiweisangirailehr* is made up of a series of suffixes in which sequence determines meaning. The word *pap* means swim. Adding specially ordered suffixes, such as

pap + ki + ie + iei + wei + sang + irail + ehr

literally translates to "instrumentally causing to swim, as to take me, outward, there by you, from, more than two of them, completive aspect." More loosely translated, it means "causing you to take me and swim, carrying me outward away from them."

Other examples include,

- Root verb *wa (carry)* and suffixes: *wahkiniraildihwei*
  Cause to carry them downward away.
- Root verb *tang (run)* and suffixes: *tangahkinkumwailsangehr*
  Cause to make the boat run, taking many of you as a completed action.
- Root verb *sei (rowing a canoe)* and suffixes: seikinirailpeseng
  Cause to row them in all different directions apart.

TABLE 4
Verb Suffix Positioning in Pohnpeian

1st	2nd	3rd	4th	5th	6th	7th
-ki	-ie -uhk -ø -kit -kita -ira -kitail -kumwail -irail	-da -di -iei -long	-la -do -wei	-ehng -sang	-ie -uhk -ø -kit -kita -kumwa -kumwa -ira -kitail -kumwail -irail	-ehr
		Intermediate				
		-pene -peseng -seli				

Note. From *Ponapean Reference Grammar* (p. 223), by K. Rehg, 1981, Honolulu, HI: University of Hawaii Press. Copyright 1981 by Kenneth Rehg. Reprinted with permission.

Comparatively speaking, one word in Pohnpeian can be the equivalent of a sentence or paragraph of meaning in English. Children learning to read in Pohnpeian need to understand the various suffixes, their order, and their meanings. This important aspect of the language was lost in the translation of an English vocabulary assessment to Pohnpeian.

As we became more aware of the differences between languages, we began to see differences everywhere—reduplication rules in the Pohnpeian language, the role of language chunks in decoding—and realized we needed to pause and take stock. It seems too complex to write them all, but it would be a disservice to students if we didn't pay attention to the differences—distinctive items of the vernacular used daily by children and adults. They are not part of how the English language works. Yet, they seem to account for important lan-

guage features largely neglected in teaching children to read in their Pacific language.

CONCLUSION

We have raised questions about translating best practices from English early reading to Pacific language literacy through our work in assessment. The examples used demonstrate that teaching Pacific language literacy is similar to, and benefits from, the research on early reading in English. However, the examples also show important language features of the L1 that have been lost in translation—differences that we believe may be integral to the pedagogical process of learning to read in the L1. As a question of validity, assessments that address both similarities and differences will better inform teaching and learning processes in Pacific literacy classrooms. Using Hornberger's (2003) continua of biliteracy to guide this work is an important place to begin.

Knowing how language works to make meaning (comprehension) is a critical factor too often overlooked by reading teachers. In English, the *No Child Left Behind Act of 2001* has made educators more aware of best practices, practices that are based on decades of research efforts that address the links between language and literacy. However, a similar body of research literature does not yet exist for languages in the U.S.-affiliated Pacific. We cannot assume that English best practices are a best fit for teaching L1 literacy. Hence, we ask Pacific educators to think not only of which best practices in English to bring into their L1 classrooms, but also to consider what might be lost in translation—differences that may be harder to identify yet may provide critical support to Pacific island children in becoming the best readers they can be.

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