

Puana ‘Ia me ka ‘Okō‘a: A Comparative Analysis of Hawaiian Language Pronunciation as Spoken and Sung

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In this paper I argue that the differences between spoken Hawaiian and vocal performance of western-influenced “traditional” Hawaiian music are representative of the linguistic diversity found within the Hawaiian language. It contains a comparative analysis of Hawaiian Language Pronunciation as Spoken and Sung, using transcriptions of recorded examples by John Kameaaloha Almeida, a native speaker of the Hawaiian language and a prominent composer, singer, and instrumentalist. It will provide a phonemic analysis of notable and predictable variations heard in Hawaiian language vocal performances that are not heard in spoken Hawaiian. Further, it will show that rhythmic arrangement of morae over strong beats in the musical measure is largely analogous to accent in spoken Hawaiian, with some predictable exceptions. The paper also documents how, during his vocal performance, Almeida added three non-lexical vocables not heard in spoken Hawaiian. I argue that these characteristics and variation are indicative of the linguistic diversity found within the Hawaiian language and, as such, are worthy of the same attention and scholarly scrutiny as spoken Hawaiian. The second goal of this applied research is to present the results in a manner that is accessible to practitioners of Hawaiian language performance.

1. INTRODUCTION.¹ One day during my time as an undergraduate student in the Hawaiian Studies program at the University of Hawai‘i at Hilo, I was listening to a recording of Rev. Dennis Kamakahi’s composition “Kōke‘e.”² As I listened to the opening line of this mele, I found myself unable to understand the first two words of what was being sung. Believing that I had heard ‘upua ‘ē, I consulted the Hawaiian dictionary, and could find no entry for ‘upua. I thought little of this until several years later, after having become acquainted with Kamakahi through email correspondence. Remembering my earlier confu-

¹ This research is based on a thesis that was written in Hawaiian in partial fulfillment of the requirements of the University of Hawai‘i at Hilo’s Master of Arts in Hawaiian Language and Literature program, the first graduate degree program in the U.S. focusing on a Native American language. Aspects of it have been translated, condensed, and updated for this article.

² I do not recall the name of the recording artist who recorded the version of “Kōke‘e” that I had heard, but it was not Kamakahi. I would like to note that this observation is not a criticism of Kamakahi, his outstanding composition “Kōke‘e,” or the performer. It is simply presented to explain the origins of my interest in this aspect of pronunciation and prosody in Hawaiian vocal performance.

sion regarding “Kōke‘e,” I asked him what the first line in the mele was. Kamakahi replied that the first line was ‘upu a‘e he mana‘o ‘a thought has arisen’.³

I was somewhat embarrassed at this revelation as I was familiar with the phrase, and felt that I should have been able to understand those words. I also began to wonder why I had been unable to understand those two words as they had been sung. After subsequent listenings and closer examination, I realized that the rhythmic arrangement of these two words in the recorded performance suggested accent on syllables that would not be accented in spoken Hawaiian. I heard ‘upúá ‘é because of the performance of those syllables (shown with acute accent marks) over strong beats in the musical performance. Normal spoken accent would be heard as ‘úpu á‘e. I wondered if the vocal performances of syllables on strong beats in the musical measure were analogous to spoken accent, and then set out to determine if this was indeed true.

The first goal of this applied research is to identify and analyze differences between spoken and sung Hawaiian by analyzing examples of Hawaiian music as recorded by John Kameaaloha Almeida, a native speaker and an exemplar of Hawaiian language performance. I will do so by providing a phonemic analysis of notable and predictable variations heard in his recorded vocal performances that are not heard in spoken Hawaiian. First, I will identify and examine words and phrases in which the sung accent—which is defined as the vocal performance of morae over strong beats within the musical measure—differs from the accent patterns normally heard in spoken Hawaiian. I will then document Almeida’s use of three non-lexical vocables that are not heard in spoken Hawaiian. While the use of these vocables has been observed in many recordings and live performances by many Hawaiian vocalists, they have not been thoroughly examined or described. I argue that these characteristics and variation are indicative of the linguistic diversity found within the Hawaiian language and, as such, are worthy of the same attention and scholarly scrutiny as spoken Hawaiian. The second goal is to present the results of this research in a manner that is accessible to practitioners of Hawaiian language performance. The knowledge contained in this research will only continue to live in Hawaiian vocal performance if these individuals put it into practice in their recordings and performances.

2. ABOUT THE HAWAIIAN LANGUAGE. *Ka ‘ōlelo Hawai‘i* (the Hawaiian language) is a member of the Austronesian family of languages, and is related to other languages found in Eastern Polynesia, such as those of Rapanui (Easter Island), Aotearoa (New Zealand), and Nukuhiva (The Marquesas Islands) (Elbert 1953). It was the sole language spoken in Hawai‘i until the arrival of the explorer Captain James Cook in 1778. Hawaiian remained the primary language of government, education, and society until the end of the nineteenth century. In 1893 the Hawaiian monarchy was overthrown by a group of missionary descendants and American businessmen, a move supported by the presence of U.S. Marines (Wilson 1998). The Hawaiian language was subsequently outlawed as a me-

³ Schütz related that a similar experience stimulated his interest in Hawaiian prosody. He notes that before he understood its meaning, he had heard the phrase *ha‘ina ‘ia mai (ana) ka puana*—a phrase that is very common in the final verse of songs—and believed that the last two words were *kapu ana* (Schütz 2010).

dium of education by the newly formed Republic of Hawai‘i in 1895 (Wilson & Kamanā 2006).

This legislation, and the subsequent coercion that was inflicted on the Hawaiian community to adopt English as the language of everyday life, led to a precipitous decline in the use of the Hawaiian language (Wilson 1998). By the year 2000, fewer than 500 native speakers of Hawaiian were identified in the Ni‘ihau community, and fewer than 200 Hawaiian-speaking elders attended an annual gathering of such individuals organized by the ‘Ahahui ‘Ōlelo Hawai‘i. The remaining speakers of Hawaiian consist largely of those who have learned Hawaiian as a second language and those individuals who have received their education in the Hawaiian medium schools that were first established in the 1980s (Wilson & Kamanā 2001).

3. JOHN KAMEEALOHA ALMEIDA: AN EXEMPLAR OF HAWAIIAN PRONUNCIATION.

The compositions and recordings of John Kameaaloha Almeida provided a rich source of data for analysis of Hawaiian pronunciation in musical performance for several reasons. First, he is judged to be a highly fluent and accomplished speaker of Hawaiian by linguists and experts in Hawaiian such as Wilson, Kimura, and Silva (pers. comm.). Second, as a native-speaking composer who performed and recorded many of his own compositions, there can be little doubt regarding the accuracy of the lyrics he recorded and his pronunciation. Finally, he recorded a large number of his own compositions, many of which are still accessible.

Almeida was born in Pauoa Valley on the island of O‘ahu in 1896, three years after the overthrow of the Hawaiian monarchy and two years before the annexation of Hawai‘i by the United States. He was born to a Hawaiian mother and a Portuguese immigrant father, who abandoned his family and returned to Portugal a few years after Almeida’s birth. His mother Julia later remarried Paolo Kameaaloha, a Native Hawaiian from Kona on Hawai‘i Island. Kameaaloha became Almeida’s adoptive father and musical mentor, who later relocated the family to Wai‘anae on the island of O‘ahu. Almeida was blind by the age of 10, yet mastered at least eight musical instruments: the guitar, mandolin, *‘ukulele*, double bass, violin, piano, saxophone, and steel guitar. Almeida claimed to have composed over 200 songs.⁴ He was also a staunch advocate of the Hawaiian language who, in his later years, refused on many occasions to speak English.

Almeida’s performing and recording career parallels the first half century of commercially recorded Hawaiian music. His earliest recordings were made in the 1920s, and he continued to record into the 1970s. Many of Almeida’s compositions are now considered standards of traditional Hawaiian music, and several generations of Hawai‘i’s musicians have performed and recorded them. His compositions are widely considered to be among the finest of the twentieth century in terms of their poetic use of Hawaiian language, and his recordings among the finest in terms of the pronunciation. Among some of his better-known and most-recorded compositions are “‘Ā ‘O Ia,” “*Lei Hinahina*,” “*Pānini*

⁴ The exact number of Almeida’s compositions is unknown. Two published songbooks containing his compositions were published (in 1946 and 1977), however, they also contain songs known not to have been composed by Almeida, and the authorship of others has been disputed.

Puakea,” and “*Ku‘u Ipo Pua Rose.*”

The situation has improved somewhat in the intervening three decades. While university classes, Kamehameha Schools, Nā Kula *Kaiapuni Hawai‘i* (Hawaiian immersion schools), and other programs have produced a significant number of new Hawaiian speakers, Hawaiian language recordings by second language learners and those with no fluency in the Hawaiian language continue to be released with inaccurate song texts as well as poor pronunciation and phrasing.

4. RECOGNIZING LINGUISTIC DIVERSITY WITHIN THE HAWAIIAN LANGUAGE.

The loss of many of the world’s languages has been compared to the accelerating extinction of plant and animal species, and there is in fact a growing recognition that both “are intrinsically related and interconnected, and that they share a common fate” (Maffi 2000:17). The Hawaiian Islands are some of the most isolated islands on earth, and as a result they are home to a large number of species of plants and animals that are found nowhere else (Falk, Millar & Olwell 1996). While Hawai‘i experienced the loss of many endemic species after the arrival of Polynesian settlers, the biodiversity of the islands was most severely impacted after the arrival of Capt. James Cook and subsequent westerners who brought many more invasive species (Scheuer & Clark 2001). Introduced diseases also devastated the Native Hawaiian population (Stannard 1989).

While Hawai‘i possessed great biological diversity prior to the arrival of westerners, it was a monolingual society. In addition to speaking only Hawaiian, its inhabitants “may not have known of the existence of other languages” (Elbert & Māhoe 1970). Post-contact Hawai‘i began to experience language shift—a result of “the relationship between change or stability in habitual language use ... and ongoing psychological, social or cultural processes ... when populations differing in language are in contact with each other” (Fishman 1964:32). The legislation enacted by the Republic of Hawai‘i mandated that all schools use English as the medium of education and accelerated the shift from a predominantly Hawaiian-speaking society to an English-speaking one. While the desire to privilege some languages over others has a pragmatic function—making a government’s job easier—it may also be motivated by a desire “to exclude minority groups from power and privilege” (Hinton 2001:39). Wilson notes that the inability to speak Hawaiian is not only a major cultural loss, but that without it “there is no creativity in traditional forms of poetry, oratory, and aspects of other arts” (Wilson & Kamanā 2006:157). While the presence and frequent use of many immigrant languages is a testament to the linguistic diversity found in Hawai‘i today, Wilson’s statement affirms the existence of linguistic diversity within the Hawaiian language itself. In his discussion of Hawaiian language composition, Kimura also acknowledges this diversity and the preeminence of the poetic form:

‘O ka hana haku mele kekahi hana ma ka pae ki‘ekie‘ loa o ka ‘ōlelo. Ho‘ohana ‘ia ka ‘ōlelo ma nā ‘anu‘u like ‘ole, ‘o ke mele na‘e ka ‘anu‘u koik‘o‘i a ki‘eki‘e loa (Kimura 2002).

Hawaiian poetry writing is an act done at the highest levels of the language. The language is used at many different levels, but Hawaiian poetry is the most important and

highest level.⁵

While the practice of haku mele (composition of Hawaiian language poetry) is a valuable topic for research and analysis, it is beyond the scope of this paper. Instead, I will focus on Hawaiian language vocal performance. Such performances include the recitation of a mele—a poetic text. In older chant forms, mele did not have fixed melodies, but were performed using specific vocal techniques (Stillman 2005). It is the use of these techniques that differentiates musical performance from spoken forms of Hawaiian. Mele can be vocalized in two styles: with techniques that pre-date contact by westerners and with those that have been influenced by introduced musical forms to varying degrees. The older, so-called ancient forms are referred to as oli (chant performance) and sometimes include performance of hula (ancient dance). Later western-influenced forms include sacred and secular hīmeni (western-style choral singing) and “traditional” Hawaiian music that includes western-influenced melodies, harmony, rhythm, structure, and western instrumentation.⁶ It is the performance of these later forms that will be examined in this paper.

On the very first *Ka Leo Hawai‘i* radio program,⁷ broadcast on February 22, 1972, host Larry Kimura asked John Kameaaloha Almeida for his opinion on the Hawaiian pronunciation of young singers of that era. Almeida replied, “*Minamina nō*” (so sad) (Kimura 1973). It was sad indeed, as there were many *mānaleo* (native speakers) still alive at the time who could have assisted those young performers with the correct pronunciation. Some of these native speakers were also famous composers, such as Almeida, Mary Kawena Pukui (1895–1986), Lena Machado (1903–1974), Bill Ali‘ihoa Lincoln (1913–1989), and Alice Nāmakelua (1892–1987). Most of these native speakers have since died; however, students, researchers, and performers of today are fortunate that many of those individuals have left behind recordings of their speaking and singing in the Hawaiian language. Some of them, including Almeida, Machado, and Nāmakelua, also recorded many of their own compositions.

Using Almeida’s recorded vocal performances, I will identify and examine two aspects of variation in Hawaiian vocal performance—characteristics that differ from the spoken norms for Hawaiian. First, I will identify words and phrases in which the sung accent—as represented by rhythmic placement of morae within the musical measure—differs from spoken Hawaiian. I will review the literature that discusses stress and accent as it pertains to spoken Hawaiian in order to provide a base with which to compare Almeida’s sung pronunciation. I will then document Almeida’s use of three non-lexical vocables that

⁵ All translations are by the author unless otherwise noted.

⁶ The characterization of Hawaiian musical forms as “ancient” and “modern” is problematic. Stillman (2005:85) notes that “over time the terms have come to gloss a dimension of performance style.” The musical forms that comprise what is commonly referred to as “traditional Hawaiian music” today date to the mid-to-late 1800s. Older texts have been performed and recorded using introduced “modern” melody, harmonic and rhythmic characteristics, and recent compositions have also been written to be performed in “ancient” performance styles.

⁷ *Ka Leo Hawai‘i* is a Hawaiian-language radio program that was hosted by Kimura and others on KCCN radio from 1972 through 1989. The program continues to be broadcast live on KCCN at the time of this writing. Most of the programs broadcast between 1972 and 1989 were recorded on reel-to-reel tape, and were available for this research.

are not heard in spoken Hawaiian. While the use of these vocables has been observed in many recordings and live performances by many Hawaiian vocalists, they have not been thoroughly examined or described.

5. METHODOLOGY, SONG SAMPLE, AND TRANSCRIPTION FORMATS. In the early stages of my MA research, I located copies of four cassette tapes that had accompanied the songbook *Johnny's Na Mele Aloha*, published by Almeida and his wife Janet in 1977. There are two methods by which Almeida and his wife recorded the songs that were included on these tapes:

- 1) Some of the songs were Almeida's commercial 78- and 45-RPM recordings, played on a record player and recorded to tape.
- 2) Almeida and/or his wife performed and recorded some of the songs specifically for inclusion with the book.

The four tapes contained a total of approximately 150 individual song recordings. Some songs were included twice on the tapes, with both a copy of Almeida's commercial recording and a live performance of the song. Janet Almeida also played and sang some songs for the recording. Both of them also provided spoken information and commentary regarding some, but not all, of the songs and recordings. All of the songs that were selected for the song sample were commercially available at some point during Almeida's life, with the exception of "Ka 'Ō'ū O Ka Nahele," which was never commercially recorded and released. The songs that I chose for this sample include a mix of those that were commercially recorded and those that Almeida performed live for inclusion on these tapes.

From these tapes, I selected 12 recordings using the following criteria:

- 1) I chose songs for which Almeida is known or believed to be the composer. It is impossible to verify his authorship of some songs, and indeed it has been disputed for some. However, if he claimed authorship of a song and I could find no evidence to the contrary, then the song was considered for inclusion in the sample.
- 2) I listened to each song recording for examples of pronunciation and phrasing that differed from spoken norms, and for performative variations that could possibly be explained through notation and analysis of the performance itself.⁸

For each song in the sample, I created a descriptive music transcription in which Almeida's vocal performances were transcribed and notated an octave above actual pitch and in treble clef.⁹ As this paper examines Almeida's pronunciation, the text was transcribed as follows below the descriptive music notation:

- 1) All letters appear in lower case, as the presence or absence of capital letters

⁸ See Appendix for a list of the songs that were selected for the sample and, when available, background information regarding the recordings.

⁹ All music and lyric transcriptions are available at <http://www.ulukau.org/elib/cgi-bin/library?c=ks7&l=haw> in PDF format.

does not affect pronunciation.

- 2) The *kahakō* (macron) is not included, as the note duration and not the *kahakō* indicates the duration of the vowel.
- 3) The ‘okina (glottal stop) is written when heard in the performance.
- 4) Allophones are written as pronounced. For example, when Almeida sang a t where k would normally be written or spoken, t is written.
- 5) Inserted vocables appear in curly brackets, such as {a’}o and ka-{h}a-u-a
- 6) Grammatical phrases¹⁰ are underlined.

A lyric transcription was also created for each mele, which contained the text using currently accepted spelling and orthography. I felt it vital to provide this in addition to the descriptive lyric transcription to highlight the point that the transcribed vocal performance should not be considered definitive or prescriptive, but subject to performer variation based on the text. The following guidelines were used for the lyric transcription:

- 1) The first letter of each line is capitalized, as are the names of people and places.
- 2) Kahakō are written as they would be using contemporary orthography.
- 3) The ‘okina is written.
- 4) Allophones are spelled according to contemporary orthographic conventions. For example, when Almeida sang a t where k would normally be written or spoken, k is written.
- 5) Inserted vocables are not written.

With all 12 songs of the sample transcribed, it was possible to begin an analysis of Almeida’s sung pronunciation, and to examine the correlation between spoken accent and the arrangement of words and phrases within the musical measure. While there are significant differences in the way accent is manifested in spoken and sung Hawaiian, an understanding of accent in spoken Hawaiian is necessary for comparison with musical performance.

6. ACCENT IN SPOKEN HAWAIIAN. The terms stress and accent have been used interchangeably in describing the same prosodic element of spoken Hawaiian. While Newbrand (1951) and Elbert & Pukui (1979)¹¹ use the term stress in their descriptions, I

¹⁰ The definition of a Hawaiian grammatical phrase will be explained in the section “The Grammatical Phrase in Hawaiian.”

¹¹ Elbert notes that Pukui’s family name was originally Kapūku‘i. The family ceased using the *ka* determiner in the name before her birth. Pukui herself eschewed the use of the ‘okina (glottal stop) and *kahakō* (macron) when writing her own name because of their infrequent use in her youth (Elbert 1989). In this paper I defer to Pukui and spell her name as she did in her lifetime, without these orthographic devices: Pukui.

will follow Schütz and his use of “accent” (1977:141-149; 2005). He explains his preference for this term, citing Crystal: “the emphasis which makes a particular word or syllable stand out in a stream of speech ... Technically, accent is not solely a matter of loudness, but also of pitch and duration, especially pitch” (2009:3). Schütz adds that “Hawaiian accent is a combination of these features” (2010:405). While the change in pitch and duration may be characteristic of accent in spoken Hawaiian, examination of pitch and duration as elements of accent in musical performance is problematic. Nonetheless, in this paper I will use the term accent in my examination of both spoken Hawaiian and how it corresponds with rhythmic placement of morae in sung Hawaiian performance.

The syllable is the organizational unit most commonly referred to in discourse regarding accent in Hawaiian. A syllable in Hawaiian may be comprised of a single short vowel (a, e, i, o, u), a single long vowel (indicated by the use of a kahakō, or macron, over the vowel: ā, ē, ī, ō, ū), a diphthong (such as ai, au, ae, ao, ei, eu, oi, ou, and iu), or a long diphthong (āi, āu, āe, ēi, ōu, āo and ōi).¹² The syllable may or may not be preceded by a single consonant, including the ‘okina (a phonemic glottal stop).

Newbrand’s (1951) attempt to predict stress in Hawaiian by counting the even-numbered syllables from the end of the word and deducting syllables with long vowels has proven accurate for words containing four or fewer syllables, but not for words with five or more syllables. Schütz later applied his previous research regarding stress in Fijian to Hawaiian and presented it to Elbert. In *Hawaiian Grammar*, Elbert & Pukui (1979:16) include his analysis, stating, “Stress groups in Hawaiian consist most commonly of two syllables, often of one or three syllables.” Elbert & Pukui also included several paragraphs written by Schütz in their *Hawaiian Dictionary* that explain spoken accent in Hawaiian this way:

“Contrary to many statements about Polynesian language, there are no rules to predict which syllable will be stressed in words of more than four syllables... For shorter words, however, stress is predictable” (1986).

Schütz has also applied King’s hypothesis regarding accent in Fijian—“Counting backwards within the word, assign stress to penultimate and alternate preceding vowels, i.e., to every even-numbered mora” (King 1969:532)—and found it inadequate to explain or predict accent in both Hawaiian and Fijian. Schütz argues that stress in Hawaiian is not predictable and proposes a phonological unit, the measure, “which fits into the phonological hierarchy between the syllable and the phrase.” To avoid possible confusion between Schütz’ use of the term measure for spoken stress and the musical measure that will be discussed in this paper, I will refer to the spoken measure as an accent unit, except when measure is included in a quotation. Otherwise, the term measure will be used only to describe the musical measure as encountered during my analysis of Almeida’s recorded vocal performances.

Schütz posits that accent is not a feature of words, and that words do not have fixed accent (Schütz 1977). We must then also examine groups of words and phrases to explain phrase accent. Newbrand did not discuss phrase stress in her thesis. Elbert & Pukui in-

¹² Elbert & Pukui, Newbrand, Schütz, and Wilson do not agree on all of the vowel groupings considered diphthongs and long diphthongs. In this paper I will follow Schütz (2010).

cluded a brief passage entitled “Stress in Phrases and Sentences” in Hawaiian Grammar. They write:

The stress patterns of words usually extend to the phrases in which they are used (a phrase is a base and its modifiers). Phrases are usually (but now always) separated by junctures of some kind ...

In sentences, as in phrases, there is usually a single primary stress, with secondary stresses, if any, preceding the primary stress. The placing of the primary stress is unpredictable (Elbert & Pukui 1979).

Schütz describes phrase stress in this way: “All phrases are made up of one or a succession of measures” (1977:142). I will apply this assertion in my analysis of phrases from Almeida’s recorded vocal performances, but must first define what constitutes a grammatical phrase in Hawaiian.

7. THE GRAMMATICAL PHRASE IN HAWAIIAN. In this paper, the grammatical phrase is defined as in Hawaiian Grammar (Elbert & Pukui 1979). In some instances, a complete grammatical phrase is composed of a single word, though it most frequently contains several words. Listed below are the three types of grammatical phrases heard in the compositions of John Kameaaloha Almeida. These phrases are underlined in the music transcriptions:

1) The verb phrase (poke painu¹³) can contain aspect markers, tense markers, qualifiers, passive-imperative particles, directional markers, the Ø-demonstrative and particles that follow it. Examples that can be found in the song sample are *hā’ina ‘ia mai ana, uluhua wale, puana, ‘ike pono ‘ia*, and *kau a’ela*. There are other particles that may occur in the verb phrase; however, those listed above are the only ones heard in the sample.

2) The noun phrase (poke ki’a) can contain prepositions, determiners, qualifiers, nominalizing particles, directional markers, and plural markers. Examples that can be found in the song sample are *ku’u ipo, ‘o Leialoha, ‘oe, he lā hau’oli, o ku’u ipo, me a’u, ‘o ka lā ‘ekahi, i kou ‘āwihi maka ‘ana mai*. There are other particles that may occur in the noun phrase; however, those listed above are the only ones heard in the sample.

3) The verb-like idiom phrase (poke waila) may contain particles or directional markers. Examples of these kinds of phrases that can be found in the song sample are *aia lā, eia mai*. There are other particles that may occur in the verb-like idiom phrase; however, those listed above are the only ones heard in the sample. My hypothesis upon undertaking this analysis was that the placement of syllables over

¹³ The Hawaiian terms for various parts of speech were coined by Wilson, and many can be found in the *Nā kai ‘ewalu* Hawaiian language textbook authored by Wilson and Kauanoē Kamanā (Kamanā & Wilson 1990). Others I learned from Wilson directly.

the strong beats of the musical measure would be largely analogous to accent in spoken Hawaiian. Silva (1982) noted such a correlation between accent in spoken Hawaiian and the chanted performances of James Ka'upena Wong. As Temperly notes, "in most pre-twentieth century vocal art music or folk song, it will be found that stressed syllables generally coincide with relatively strong beats" (1999:20–21). The data that is presented here will demonstrate that this observation is true of western-influenced, "traditional" Hawaiian music, such as that performed by Almeida, with some predictable exceptions.

After identifying the grammatical phrases of the texts, I compared Almeida's sung accent with spoken accent by examining his placement of syllables over strong beats of the measure. Almeida's sung accent, as represented by rhythmic placement over strong beats in the measure, was identical to spoken accent in the majority of the sample. An example of a grammatical phrase in which the sung accent is identical to spoken accent appears below. The following line shows the division of this phrase, with the accented syllables marked with a grave accent:¹⁴

ká wahíne léo hóne

Each of these accented syllables is situated on the strong beats of the measure in Almeida's performance of 'Ā 'Ō Ia, and on even-numbered syllables when counted from the end of phrase.



FIGURE 1. The placement of accented syllables over strong beats of the measure.

However, in some phrases his sung accent as represented by rhythmic arrangement differed from normal spoken accent, and these differences always occurred in a single word within these phrases. Close examination of these phrases revealed that, in each instance, the penultimate syllable contained a diphthong. In spoken Hawaiian, the first vowel of this diphthong would be accented. Silva also noted this diphthongization of vowels in the penultimate position in his analysis of the performances of James Ka'upena Wong (1982). However, Almeida's sung performances of these diphthongs place the second vowel of the diphthong over the strong beat, resulting in what is perceived by the listener as a disyllable. In order to explain the disyllabification of these diphthongs in sung performance and other characteristics of Almeida's vocal performances, it is necessary to examine the mora.

Ray Harlow (2001) discussed the mora in the Māori language, and this explanation is applicable to the Hawaiian language as well. "A mora in Māori consists of either a single

¹⁴ In this paper I do not differentiate between primary and secondary stress, as it is more applicable to spoken than sung Hawaiian. However, further examination of secondary stress in sung Hawaiian as it relates to rhythmic placement is a worthwhile topic for future research.

consonant plus a single short vowel (CV) or just a single short vowel (V)". The examples below show a diphthong, a long diphthong, a vowel grouping, and a long vowel. The syllables and morae are separated by a period, and if necessary, are followed by an explanation of the subdivision of the syllable.

A diphthong is composed of a single syllable, but two morae:

ae — one syllable

a.e — two morae

A long diphthong is composed of one syllable, but three morae:

āi — one syllable

a.a.i — three morae

A vowel grouping is composed of two syllables and two morae:

e.a — two syllables

e.a — two morae

A long vowel is composed of a single syllable, but two morae:

ā - one syllable

a.a – two morae

In each grammatical phrase in the music sample, morae were counted from the end of the grammatical phrase, and each even-numbered mora was numbered, ending with the beginning of the grammatical phrase. Figure 2 displays an example of the separation of the grammatical phrases and the numbering of the even-numbered morae beneath them as they appear beneath the lyrics in the transcriptions.

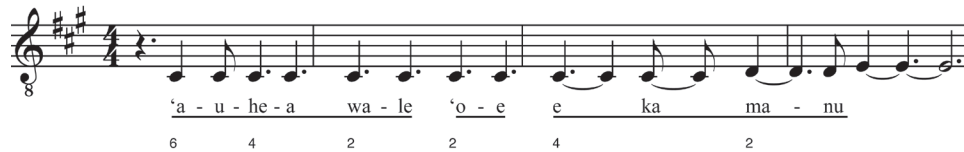


FIGURE 2. Counting of morae from the end of the grammatical phrase.

In the music transcriptions of the sample, the morae are separated by a hyphen (-), except for the vowels that contain a macron. These vowels are written only once, as the duration of Almeida's singing of that vowel (as indicated by the note value) is the true indicator of vowel duration. After subdividing the individual words whose accent differed from that of spoken Hawaiian by morae rather than syllables, I noted that in each case the accent, represented by rhythmic arrangement, occurred on an even-numbered mora when counted from the end of the word and was situated on strong beats. Before examining the arrangement of these morae in Almeida's musical performance, an explanation of my definition of strong beats is warranted.

8. IDENTIFYING THE STRONG BEATS OF THE MEASURE. Seven songs in the sample are notated in 12/8 time and the remaining five songs in 4/4. The first and third beats of each measure are designated as the strong beats of the measure, as the

second and fourth beats are not as strongly emphasized in most songs in this sample. Although all of the songs in the sample are in 4/4, Almeida performed seven of them with a swing feel that would have required using a large number of eighth-note triplets had they been notated in 4/4. Such notation would be much more difficult to read and interpret; therefore, the notation was done in 12/8.

When the even-numbered morae were examined for rhythmic placement, they were not always situated directly over the strong beats. Almeida frequently moved these morae to just before or after the strong beat of the measure, and when he did this, the perceived emphasis of the mora was strengthened. Therefore, morae that were placed on the eighth note preceding the strong beat were counted as being situated on the strong beat, as well as those placed on a quarter-note duplet immediately preceding the strong beat when the recording was notated in 12/8. Figure 3 shows examples of the placement of an even-numbered mora, one in which the mora is sung an eighth note before the strong beat, and the second in which the mora is sung a quarter-note duplet before the strong beat. The carat (^) figure below the lyric designates the location of the strong beat.



FIGURE 3. Placement of even-numbered morae over strong beats of the measure

In the first example in figure 3, the mora 'a is sung an eighth note before the strong beat of the measure—that is, the third beat. In the second example, the mora ni is sung a quarter-note duplet before the strong beat of the measure, which is also the third beat. Both the 'a and ni morae are counted, along with those that are sung directly on the strong beats of the measure. Even-numbered morae are not counted when sung further in front of the strong beat than the eighth note or quarter-note duplet immediately preceding the strong beat in 12/8 meter.

In songs performed in 4/4 meter, morae that were placed on the eighth note preceding the strong beat were counted as being situated on the strong beat. Figure 4 shows an example of the placement of an even-numbered mora, one in which the mora is sung an eighth note before the strong beat.



FIGURE 4. Placement of even-numbered morae in front of strong beats of the measure in 4/4.

In the first example in figure 4, the mora 'i is sung an eighth note before the strong beat of the measure, that is, the third beat. The mora 'i is counted along with those that are sung directly on the strong beats of the measure. Even-numbered morae are not counted when sung further in front of the strong beat than the eighth note immediately preceding the strong beat in 4/4 meter.

In some songs, morae are predominantly situated on eighth notes; this results in even-numbered morae being situated over each of the four beats of the measure rather than on the first and third beats alone. Figures 5 and 6 show examples of measures in 12/8 and 4/4 meter that have even-numbered morae sung on each of the four beats.

FIGURE 5. Placement of even-numbered morae in front of strong beats of the measure in 12/8.

FIGURE 6. Placement of even-numbered morae on each beat of the measure in 4/4.

In these songs, each of the four beats is considered a strong beat, and morae situated on the eighth notes in between the beats were not counted as being situated on the strong beat.

9. ARRANGEMENT OF EVEN-NUMBERED MORA. 983 morae were sung in the sample, and the songs contained 48–166 morae each. 908 morae were sung on the strong beats of the measure. 75 even-numbered morae were not sung on the strong beats of the measure. Three songs contained no instances of even-numbered morae that were not sung on the strong beats of the measure. The highest number of even-numbered morae that were not sung on the strong beats of the measure heard in any song was 25. 92.37% of all morae heard in the sample were sung on the strong beats of the measure. Table 1 shows the number and percentage of even-numbered morae sung on and off the strong beats in each song of the sample.

Sample #	Total	On-Beat	Off-Beat	% On-Beat	% Off-Beat
1	124	119	5	95.96%	4.04%
2	77	52	25	67.54%	32.46%
3	63	60	3	95.24%	4.76%
4	166	153	13	92.17%	7.83%
5	66	66	0	100%	0%
6	133	122	11	91.73%	8.27%
7	62	60	2	96.77%	3.23%
8	48	39	9	81.25%	18.75%
9	67	67	0	100%	0%
10	52	48	4	92.31%	7.69%
11	53	50	3	94.34%	5.66%
12	72	72	0	100%	0%
Totals	983	908	75	92.37%	7.63%

TABLE 1. Even-numbered morae sung on and off the strong beats.

In the sample, I identified eight words whose sung accent—as represented by placement of morae over strong beats within the musical measure—differed from spoken Hawaiian. For each song in the sample, table 2 shows the following:

- the measure number of each occurrence
- the beat number within the measure where each word is found
- the word itself, with the accented vowel as heard in spoken Hawaiian underlined
- the accented vowel as heard in Almeida's sung performance underlined
- the number of times the sung accent is heard within the song

In the sample, the sung accent of these eight words was heard a total of 20 times, and the spoken accent was not heard once.

Sample #	Measure #	Beat # In Measure	Spoken Accent	Sung Accent	Song Total
1	51, 61	3, 3	na <u>u</u> e	na <u>u</u> e	2
1	129, 139	3, 3	ma <u>i</u> le	ma <u>i</u> le	2
3	6	3	ona <u>o</u> na	ona <u>o</u> na	1
4	8	3	ona <u>o</u> na	ona <u>o</u> na	1
7	18	1	ona <u>o</u> na	ona <u>o</u> na	1

8	32, 38	1, 1	onaona	onaona	2
8	54	3	Hawai'i	Hawai'i	1
9	7	2	eia	eia	1
10	19	1	onaona	onaona	1
11	17	3	onaona	onaona	1
11	11, 34	1, 1	Maui	Maui	2
11	19	1	'āina	'āina	1
12	42, 106	1, 1	onaona	onaona	2
12	56, 120	1, 1	laila	laila	2
Total					20

TABLE 2. Words with different spoken and sung accents.

All of the vowel groupings displayed in the table above are diphthongs, and spoken accent is heard on the first vowel. However, Almeida sings the second vowel on a strong beat in the measure. In each instance, these vowels are even-numbered morae when counted from the end of the word. Eleven of these morae were sung on the first beat of the measure, eight were sung on the third beat, and one was sung on the second beat in a song, with even-numbered morae sung on all four beats of the measure due to the song's rapid tempo.

I also identified four phrases whose sung accent differed from spoken Hawaiian. For each song in the sample, table 3 shows the following:

- the measure number of each occurrence
- the beat number within the measure where each phrase is found
- the phrase itself, with the accented vowel as heard in spoken Hawaiian underlined
- the accented vowel as heard in Almeida's sung performance underlined
- the number of times the sung accent is heard within the song

Sample #	Measure #	Beat # In Measure	Spoken Accent	Sung Accent	Song Total
6	47, 57	3, 3	o <u>kou</u> mana'o	o <u>kou</u> mana'o	2
6	71, 81	3, 3	he <u>la</u> mania	he <u>la</u> mania	2
8	55	3	i <u>kou</u> inoa	i <u>kou</u> inoa	1
9	4	2	'o <u>Lei</u> aloha	'o <u>Lei</u> aloha	1
Total					6

TABLE 3. Phrases with different spoken and sung accents¹⁵.

All of the vowel groupings heard in the first word of each of the phrases displayed

¹⁵ Almeida does sing "Leialoha" with the spoken stress pattern in the song "Ku'u Ipo Pua Rose" (song 2, measure 67) and in "Ku'u Lei Pua Nani" (song 10, measure 9)

in the table above are diphthongs. Spoken accent is heard on the first vowel, which is an odd-numbered mora when counted from the end of the phrase. However, Almeida sang the second vowel of these diphthongs, which is an even-numbered mora, on a strong beat in the measure. In each instance, these vowels are even-numbered morae when counted from the end of the word. Five of these morae were sung on the third beat of the measure, and one was sung on the second beat in a song with even-numbered morae sung on all four beats of the measure due to the song's rapid tempo.

In a different recorded performance of the song "*Lei Lokelani O Ka Punahou*" (one that was not analyzed for this paper), Almeida sang an additional verse that was not heard in the recording used for this research. In that recorded performance, he sang *ku'ú alóha* twice, with accent heard on the second *u*, not on the first as is heard in spoken Hawaiian.

Almeida's singing of *ku'ú alóha* is identical to Lena Machado's singing of this same phrase in her composition "*Ho'onanea*." Machado recorded "*Ho'onanea*" twice with this phrasing—the first in 1935 on a 78 RPM record, and again in 1962 on her 33 1/3 RPM LP, *Hawai'i's Songbird*.

10. SUNG ACCENT REVISITED USING THE ACCENT UNIT. While analyzing the song sample for my MA research, I compared Almeida's sung accent—as represented by placement of morae over strong beats within the musical measure—with spoken accent by counting morae from the end of words and phrases. This was consistent with the previous practice of counting syllables from the end of a phrase back to its beginning. I did not apply the accent unit to the sample, and will do so at this time. While I will not provide new quantitative data for this reexamination, analyzing the sample through this new lens has provided some additional insights into the relationship of spoken and sung stress.

The primary difference between Schütz's use of the term measure and my own is that, in spoken Hawaiian, the measure is purely descriptive. Schütz posits that accent functions to guide the hearer to meaning, "just as intonation guides us (but not infallibly) to grammatical units—phrases and sentences—accent helps the hearer sort out strings of otherwise similar syllables into units that correspond (again, not infallibly) to morphemes" (2010:408). In spoken Hawaiian, the speaker is not restricted by metric structure: the measure boundaries that demarcate the accent units are products of the speech act.

In musical performance, the measure and its boundaries create a metric structure as indicated by time signature, and the rhythms within the measure at the very least suggest possible arrangements of words over the rhythmic structures within the measure. This is not to suggest that arrangement of morae in this manner is prescriptive. The composer and performer do have considerable flexibility in arranging the morae rhythmically, or to eschew the metric and rhythmic structures that are inherent to the musical measure. However, it is the composer's or performer's adherence to the arrangements suggested by the meter and measure rhythms that help or hinder the hearer's ability to "sort out" these strings of syllables and comprehend the vocalized text. The arrangement of morae over strong beats—analogue to spoken accent—provides the auditory clues to interpret the strings of speech into recognizable units (Schütz 2010). In the case of the song "*Kōke'e*," the performer's arrangement of morae over strong beats of the measure—morae that are usually

not accented in spoken Hawaiian—hindered my ability to sort these strings and comprehend the words that were being sung. However, Almeida’s vocal performances did indeed contain some morae that would not normally be accented in spoken Hawaiian of several words and phrases, yet were arranged on strong beats. A closer examination of these words revealed a predictable pattern. I will discuss several of these exceptional examples.

The word *onaona* “softly fragrant; soft fragrance or perfume, aroma” (Pukui & Elbert 1986:288) is frequently mentioned in discourse regarding mispronunciation in the performance of *mele* and therefore warrants special discussion. Almeida sang *onaona* seven times in the song sample. In each performance, his rhythmic arrangement of *onaona* suggested a pronunciation different from that of spoken Hawaiian—one that contained four syllables and not three. When spoken, *onaona* is composed of a single accent unit containing three syllables:

[o.náo.na]

Figure 7 displays a transcription of Almeida’s sung pronunciation of *onaona*:



FIGURE 7. Placement of the morae in the word *onaona* in the measure.

This rhythmic arrangement implies two accent units containing two syllables:

[ó.na][ó.na]

Almeida’s performance does not, however, include the insertion of the ‘okina before the letter *o* in each syllable. The insertion of the ‘okina here, resulting with a pronunciation of ‘ona’ona “drunk or dizzy” is a common mispronunciation in Hawaiian vocal performances. The sung performance of the normal spoken pronunciation [o.náo.na] may also represent a hypercorrection due to some performers’ being criticized for singing ‘ona’ona (Makuakāne, Pers. Comm.). Schütz discusses words such as *onaona* and *ikaika*, and notes the resyllabification of the vowel combinations in spoken Hawaiian that are caused by the reduplication of words and the resultant vowel combinations (2010). This resyllabification of vowels does not occur in Almeida’s recorded musical performances. However, there are instances of disyllabification of these vowel combinations in words and phrases that are not reduplications, such as *maile*, *nauē*, *Hawai‘i*, and *Maui*.

Word	Spoken Accent	Sung Accent
<i>nauē</i>	[náu.e]	[na.ú.e]
<i>maile</i>	[mái.le]	[ma.í.le]
<i>onaona</i>	[o.náo.na]	[ó.na][ó.na]

Hawai‘i	[Ha.wái.‘i]	[Há.wa][í‘i]
eia	[éi.a]	[e.í.a]
Maui	[Máu.i]	[Ma.ú.i]
‘āina	[‘āai.na]	[‘á.a][í.na]
laila	[láí.la]	[la.í.la]

TABLE 4. Words with different spoken and sung accents

As in the previous example of onaona, sometimes a word that comprises a single accent unit in spoken Hawaiian may become two accent units when sung. In the sung measure, morae of two different words may be combined into a single accent unit. For example, the phrase o kou mana‘o is heard differently when spoken and when sung by Almeida:

[o kó.u] [ma.ná.‘o] (spoken)
 [ó ko] [ú.ma][ná.‘o] (sung)

An accent unit may be composed of either two or three syllables in spoken Hawaiian; however, in the sung measure a three-mora accent unit occurs only in the sample at the beginning of the grammatical phrase when a single mora or syllable is arranged on a weak or off-beat, as a pick-up note. All subsequent accent units in that grammatical phrase contain only two morae. In figure 8 below, he is arranged over the last eighth note of the measure, and while this mora would be counted as part of the accent unit that follows when spoken, it would not when sung.



FIGURE 8. The placement of grammatical phrase in measure with accent units indicated in brackets.

Some morae that are arranged over such pick-up notes in this way at the beginning of a grammatical phrase do provide the opportunity for the performer to insert a vocable that is usually not heard in spoken Hawaiian. I will discuss this feature of Hawaiian language vocal performance along with two other vocables that also may be inserted by the performer while singing.

11. INSERTED NON-LEXICAL VOCABLES. Singers of Hawaiian language songs may, at their discretion, insert non-lexical vocables into their vocal performances—meaningless vowels and/or consonants that do not affect the meaning of the text. Almeida inserted three different vocables—two individual sounds and one combination of sounds—

that are not heard in spoken Hawaiian during his sung performances.¹⁶ In this paper, these vocables are enclosed in curly brackets { }. Two vocables composed of individual sounds, {h} and {e}, were heard in the sample and a vocable composed of a sound combination, {a'}, was also heard. {h} was heard in various locations within the grammatical phrases; {a'} was only heard at the beginning of the grammatical phrase.

11.1 THE INSERTED NON-LEXICAL VOCABLE {a'}. The {a'} vocable is heard in the sample only before the *o* possessive preposition, the *'o* preposition marking equational sentences, and the *e* verb marker in the sample. It may also be inserted in other circumstances such as before the preposition *i*: {a'}*i*; however, no example of this use was encountered in the sample. This insertion could also be analyzed as an added {a} plus glottal stop before a phrase-initial vowel, a normal variation occurring in spoken Hawaiian and other Polynesian languages (Clark 1976). There were instances in the sample in which the glottal stop can be heard before a phrase-initial vowel. However, as this is a normal spoken variation, it is not examined in this paper, and the insertion of {a'} is treated as a single unit. Table 5 shows each occurrence of the inserted {a'} vocable, the song in which it is heard, the measure number where it occurs, the beat number where it occurs, and the preposition that it proceeds.

Sample #	Measure #	Beat Number	{a'} and preposition or verb marker
1	10	3	[a']o
1	20	3	[a']o
1	131	1	[a']o
1	150	3	[a']o
1	160	3	[a']o
9	6	1	[a']o
9	22	1	[a']o
12	38	4	[a']e
12	102	4	[a']e
Total			9

TABLE 5. The Inserted {a'} Vocable.

The {a'} vocable was heard a total of nine times in the sample. Each inserted vocable represented an even-numbered mora, and occurred on a strong beat. {a'}*o* Hi'ilawe, {a'}*o* ka nahele, {a'}*o* nā pua and {a'}*e* lilo ana are some examples of phrases in which {a'} was inserted. In seven of the nine insertions of this vocable, it is sung on the same pitch as the *o* that it precedes. In the two insertions in "Pānini Puakea," the {a'} vocable is sung on

¹⁶ Though Almeida sang "ka 'ō'ū a'o ka nahele" in his recorded performance of the song by the same name, the sound combination {a'} was not written in the book *Johnny's Na Mele Aloha*, nor was it pronounced by his wife Janet when she spoke the name of the song to introduce it on the tape that accompanied the book.

a higher note, and the o that follows it on a lower pitch.

While the addition of the {a'} vocable may be used to fill in a space between two phrases to support the melody, Almeida demonstrated that it is not necessary to do so. In his recorded performance of “Ka ‘Ō‘ū O Ka Nahele,” Almeida sang a verse containing the phrase o Hi‘ilawe twice—once without {a'} and once with {a'} inserted. In the first example, o is situated on a weak beat, and a quarter note rest precedes the phrase-initial o. Consistent with my previous observations, the even-numbered morae (when counted from the end of the phrase) are situated on strong beats. Figure 9 displays a transcription of Almeida’s performance of o “Hi‘ilawe” without {a'} insertion.

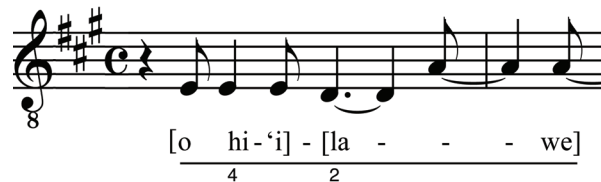


FIGURE 9. o Hi‘ilawe without a’ vocable.

In his second performance of “o Hi‘ilawe,” Almeida inserted {a'} phrase-initially. As the phrase had begun with an accent unit of three morae prior to the insertion of {a'}, the initial o mora of that accent unit joins with the {a'} to form a new phrase-initial accent unit. a in this accent unit, an even-numbered mora when counted from the end of the phrase, is situated on a strong beat. Figure 10 displays a transcription of this performance.



FIGURE 10. o Hi‘ilawe with a’ vocable

It is possible to insert this vocable in the performance of older and new compositions in a manner that does not hinder phrasing, and may in fact help it. If a phrase contains an odd number of morae and includes a phrase-initial a, i, or o, the performer may append the {a'} vocable. While the phrase-initial a possessive was not encountered in this sample, it is possible for performers to replace it with a'o, provided that the phrase that begins with the a possessive also contains an odd number of mora. This phenomenon would be a worthwhile topic for further research. The insertion of the {a'} vocable in front of a phrase that contains an even number of mora will place the {a'} on a weak beat, possibly resulting in awkward phrasing. I have observed this result in one modern composition and recording.

11.2 THE INSERTED OR APPENDED NON-LEXICAL VOCABLE {h}. The inserted or appended {h} vocable is heard most frequently in the sample, and it occurs in two forms. The first is an epenthetic insertion between the two morae of a long vowel. In the second form, the {h} is appended after a short vowel and is followed by an echo vowel. In most occurrences, the short vowel to which this {h} is appended is the final vowel of the word; however, there is a single occurrence of {h} appended to a vowel which is not the final vowel, and which is followed by an echo vowel. There is not a single instance in which Almeida sings a different vowel after the appended {h}. In the sample, Almeida inserts {h} between the morae of the long vowels ā and ō in his recorded performances. He appends {h} after the short vowels a, e, i and o, and then sings an echo vowel. There are no instances of Almeida’s inserting {h} between the morae of a long ū, or appending it after the short u. There appears to be no relation between the melodic contour and Almeida’s inserting this vocable: some of the vowels that follow the inserted {h} are sung on the same pitch as the vowel that precedes it, some are sung on a higher pitch, and some on a lower pitch.

Ka{h}āua (kāua), a{h}ākea (ākea), la{h}ā (lā) and ‘a{h}āina (‘āina) are some examples of words in which {h} was inserted between the two morae of long vowels within a word. ‘Ite{h}e (‘ike), ala{h}ā (ala), ‘oe{h}e (‘oe), ma{h}āi (mai) and wai{h}i (wai) are some examples of words in which the {h} was appended to a short vowel, and was followed by an echo vowel.

The {h} vocable was inserted or appended a total of 37 times in the sample. There were 12 instances of {h} insertion within long vowels. There were 25 instances of {h} appended after short vowels. 32.43% of the {h} vocable instances were inserted within long vowels. 67.56% were appended after short vowels. Table 6 displays the following:

- totals and percentages of inserted and appended {h}
- each occurrence of inserted {h}
- the song in which it is heard
- the measure number where it occurs within long vowels and after short vowels
- the number of occurrences in the measure
- the beat number in which it occurs in the song

Sample #	Measure #	Occurrences of the Inserted {h} Vocable	Occurrences After Long Vowels	Occurrences After Short Vowels	% of Inserted {h} Vocables After Long Vowels	% of Inserted {h} Vocables After Short Vowels
1	27, 37, 67	4	0	4	0%	100%
2	19, 45, 65	3	0	3	0%	100%
3	2	2	0	2	0%	100%
5	77	1	0	1	0%	100%
6	30, 40, 46, 56, 60, 61, 66, 75, 76, 87, 96	13	6	7	46.15%	53.85%

9	11, 16, 19	5	1	4	20%	80%
10	13, 35	2	0	2	0%	100%
11	18	1	1	0	100%	0%
12	55, 63, 65, 119, 117, 129	6	4	2	66.67%	33.33%
Totals		37	12	25	32.43%	67.56%

TABLE 6. Inserted and appended {h} vocable.

Inserted and appended {h} is most frequently heard between the strong beats of the measure; however, it also occurs on the second and fourth beats of the measure. There is not a single occurrence of an inserted or appended {h} on either the first or third beats of a measure in the sample. The inserted or appended {h} occurred twice within the same measure in some songs in the sample.

Almeida's recording of "Holoholo Ka'a," written by Clarence Kenney, is arguably the best-known song that includes the inserted {h} vocable (Almeida 2003). It begins,

Ka{h}aui i ka holoholo ka'a (Kāua i ka holoholo ka'a)

In this line, {h} is an epenthetic insertion within a long vowel. Every subsequent recording of this song that I have heard sung by other artists includes this insertion. As such, performers have adopted this variation, and its use has become de facto performative practice. The insertion of the {h} vocable in "Holoholo Ka'a" does, in my own opinion, enhance the vocal performance by allowing Almeida to sing the phrase-initial ka mora on the first beat. However, my examination of Almeida's other recorded performances clearly demonstrates that the {h} vocable may be added or omitted at the performer's discretion. As I have documented above, most insertions of this vocable occurred between the strong beats of the measure.

11.3 THE INSERTED NON-LEXICAL VOCABLE {e}. The inserted {e} vocable is also heard in the sample. {e} is inserted before a common noun *piko*—that is, a noun in the nominative case.¹⁷ Table 7 shows each occurrence of inserted {e}, the song in which it is heard, the measure number where it occurs, the beat number where it occurs, and the number of times it is heard in the song.

There were four insertions of {e} in the sample, and one to two insertions in each individual song in which they occur. One inserted {e} occurred on a strong beat, and each insertion occurred within an even-numbered mora.

¹⁷ The *piko* is a noun phrase which is generally the subject of the sentence. The term was coined by Wilson & Kamanā and was first used in their Hawaiian language textbook *Nā Kai 'Ewalu* (1990).

Sample #	Measure #	Beat Number	Number of Occurrences
2	44	2	1
5	76	1	1
5	78	2	1
9	20	3	1
Total			4

TABLE 7. The Inserted {e} Vocable

Aloha {e} ka leo, 'ike {e} ka mea waiwai lā, pi'i {e} ke kai, and ha'ina 'ia mai ana {e} ka puana are some examples of phrases in which the {e} vocable was inserted. The addition of {e} does not affect the meaning, and appears to be inserted to ease the pronunciation of some phrases that would otherwise require a lengthening of other morae or create a rest within the musical measure. It is notable that a word beginning with a consonant follows each inserted {e} vocable; however, as only four insertions of this vocable are heard in the sample, I do not rule out the possibility that it could precede a word that begins with a vowel. The use of this inserted vocable by other performers would also be valuable for future research.

12. CONCLUSIONS. In this paper I have presented a comparative analysis of Hawaiian Language Pronunciation as Spoken and Sung, using transcriptions of recorded examples by John Kameaaloha Almeida. I have shown that rhythmic arrangement of morae over strong beats in the musical measure is largely analogous to accent in spoken Hawaiian. However, I have documented a disyllabification of diphthongs that results in shifting of morae between accent units. This shift results in a perception that morae that are normally not accented in spoken Hawaiian are accented in sung Hawaiian, due to their placement over strong beats in the measure. I have also documented Almeida's addition of three non-lexical vocables—two composed of individual sounds and one composed of a sound combination—in ways that allowed him to personalize and vary his vocal performance. However, these vocables did not affect the meaning of the sung text. These features, in addition to the textual difference between spoken Hawaiian and mele, support the notion of diversity that can be found within the Hawaiian language, and as such is as worth a research topic as spoken and written forms of Hawaiian.

Almeida did not think in terms of syllables, morae, accent units, diphthongs, vowel clusters, and vocable insertions as he was composing and singing. He sang his songs in a way that reflected the style of singing he heard in his youth, as well as in other ways that pleased him. He was fortunate to have heard monolingual Hawaiian-speaking elders performing in his youth. Unlike many contemporary performers, he did not learn to speak Hawaiian or sing Hawaiian songs in school. Likewise, the language use of Almeida's contemporaries, such as Machado, Nāmakelua, and Lincoln, will be reflective of their language exposure and experiences. While some of the performative variations that I have noted in Almeida's recordings may be heard in the performance of other native speakers, some

may indeed be idiosyncratic, and other variations may exist in the performances of other artists. The similarities and differences heard in the accessible recordings of other native speakers is a valuable topic for future research. And because the Hawaiian language is so infrequently used in modern daily life, it is very important for contemporary songwriters and singers to seek out the few native speakers that remain with us, to attend Hawaiian language classes, and to listen to these recordings—both spoken and sung—left behind by native speakers who have passed away.

Though conversational fluency in the Hawaiian language is the foundation for any singer of Hawaiian-language songs, it is just that—a foundation. This paper shows that there are words and phrases whose accents, as reflected by rhythmic placement, differ from spoken Hawaiian. This difference is evident in the recorded performances of native speakers, and it reflects the variations possible in Hawaiian-language vocal performance. In addition to calling for more rigorous research into the differences between spoken and sung Hawaiian, it is my hope that practitioners of Hawaiian vocal performance may find the information contained in this paper valuable, use it to strengthen and personalize their performances in ways that are aesthetically pleasing to knowledgeable listeners, and perpetuate these practices into the future.

APPENDIX - SONG CORPUS

#	Song Title	Source and Other Information
1.	“Ka ‘Ō‘ū O Ka Nahele”	Composed and recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on guitar. Only known recording of this song; never released commercially on record.
2.	“Ku‘u Ipo Pua Rose”	Recording date unknown. Almeida is accompanied by “John K. Almeida’s Hawaiians.”
3.	“Ku‘u Liko Pua I Ke Kakahiaka”	Recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on ‘ukulele.
4.	“Ku‘u Onaona”	Recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on ‘ukulele.
5.	“Lei Hinahina”	Recorded in 1935 and released by Brunswick Records.
6.	“Lei Loke O Kapunahou”	Recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on ‘ukulele. At least one commercially released recording of this song also exists.
7.	“Lei Pua Mēlia”	Recorded between 1945 and 1955 and released by 49 th State Hawaii Records.
8.	“Nā Pua Like ‘Ole O Ka ‘Āina”	Recorded @1948 and released by 49 th State Hawaii Records.
9.	“Pānini Puakea”	Recorded between 1948 and 1950 for 49 th State Hawaii Records. Almeida performs the song in <i>hula ‘ōlapa</i> style, followed by Genoa Keawe performing in <i>hula ku‘i</i> style.
10.	“Ku‘u Lei Pua Nani”	Recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on ‘ukulele.
11.	“Mahalo Haleakalā”	Recorded in 1977 for inclusion with <i>Johnny’s Na Mele Aloha Songbook</i> . Almeida sings and accompanies himself on guitar.
12.	“ ‘Ā ‘O Ia”	Recorded in 1945, initially released by the Oliver record label and later by 49 th State Hawaii Records. Almeida is accompanied by “Pua Almeida & His Polynesians.”

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