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A computationally-assisted analysis of early Tahitian oral poetry

David Meyer

A thesis submitted in fulfilment of requirements for the degree of Doctor of Philosophy

to

Linguistics and English Language
School of Philosophy, Psychology and Language Sciences
College of Humanities and Social Science
The University of Edinburgh · An Oilthigh Dhùn Èideann

October 2011
Pāpa‘ihia ma te mana‘o i tō‘u metua vahine,
‘o Sharon Ream Meyer
Declaration

I hereby declare that this thesis is of my own composition, and that it contains no material previously submitted for the award of any other degree or professional qualification. The work reported in this thesis has been executed by myself, except where due acknowledgement is made in the text.

David Meyer
Abstract

A computationally-assisted analysis was undertaken of Tahitian oral poetry transcribed in the early 19th century, with the aim of discovering its poetic organization. An automated pattern detection process attempted to recognize many of the organizational possibilities for poetry that have been documented in the literature, as well as be open to unanticipated varieties. Candidate patterns generated were subjected to several rounds of manual review. Some tasks that would have proved difficult to automate, such as the detection of semantic parallelism, were pursued fully manually.

Two distinct varieties of meter were encountered: A syllabic counting meter based upon a colon line, and a much less common word stress counting meter based upon a colon line or a list item. The use of each meter was ubiquitous in the corpus, but somewhat sporadic. Word stress counting meter was typically applied to lists, and generally co-occurred with patterns of syllabic counting meter; perhaps in order to enhance metrical effect through an addition of rhythm. For both meters, counts were regulated by an external pattern, wherein they were observed to repeat, increment, form inverted structures, or group into alternating sequences. There appeared to be few limitations as to the possibilities for a pattern’s starting count or length. Patterns were found to juxtapose freely, as well as alongside unpatterned counts. According to Nigel Fabb and Morris Halle, syllabic counting meter is only otherwise encountered in a style of Hebrew poetry from the Old Testament (Fabb and Halle 2008:268, 271, 283). Word stress counting meter may be unique to Tahitian poetry.

The colon also functioned as poetic line for purposes of sound parallelism, which manifested itself in patterns of simple assonance, simple consonance, and complex patterns that combined simpler ones of assonance, consonance, and parallel strings of phonemes. Although sound patterns most often spanned lines, they were sometimes constrained to within a line. Occasionally, they were arranged into inverted structures, somewhat analogous to those noted for counting meter. Some sound patterns were
contained within names and epithets, and perhaps served as recurring islands of parallelism.

Syntactic parallelism was common, especially in the organization of lists. Occasionally, its application was suggestive of canonical parallelism. Items of syntactic frame lists were often arranged so as to assist patterns of counting meter. A syntactic frame’s variable elements often belonged to a single semantic category for which there seemed to be no restriction, and which could represent any taxonomic level. There appeared to be complete freedom in regards to the arrangement of syntactic frame patterns, and it was common for several to follow one another in unbroken succession.

There is evidence that some of the corpus poetry was memorized. Other evidence suggests that a capacity existed, and perhaps continues to exist, of poetic composition-in-performance.
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1 Introduction

Oral tradition grew into an academic field of study in the 1920s and 1930s, principally due to research by Milman Perry and Albert Lord on Ancient Greek and Serbo-Croatian epics. Even earlier, linguists were taking an interest in oral poetry, both epic and otherwise. Franz Boas and Edward Sapir compiled Native American oral tradition texts,¹ and Ferdinand de Saussure undertook an analysis of Latin, Greek, and Vedic poetry (Jakobson and Waugh 1987:224). A more formal analysis ensued by linguists such as Roman Jakobson, analyzing both written and oral poetry, and Dell Hymes, who performed in-depth analysis of Boas’s earlier Chinook data.²

Over 200 Tahitian oral tradition texts were transcribed over the course of the 19th century, the large majority of these in its early decades by the English missionary John Muggridge Orsmond. His manuscript was lost, but from his notes his efforts were partially restored and published by his granddaughter, Teuira Henry (see Henry 1928).

At the time of Contact, the Tahitian language was primarily spoken in Tahiti and the other Society Islands. In the present-day, there are roughly 124,000 speakers of Tahitian throughout French Polynesia (Lewis 2009), where it has assumed a role of Polynesian lingua-franca. Although greater awareness of Tahitian oral tradition has been encouraged by several prominent native academics, such as Louise Peltzer,³ no analysis of the organization of Tahitian poetry - either early, modern, oral, or literate - appears yet to have been undertaken. The principal aim of this thesis will be to discover the organization of oral poetry transcribed in the 19th century, and deemed to have been composed in the pre-Contact era. A secondary aim will be to develop a computationally-assisted process for detecting the poetic patterns of this little studied tradition.

This process will attempt to retrieve patterns at many levels of linguistic information, and its search will be as exhaustive as possible within the bounds

¹ See, for example, Boas (1894) and Sapir (1909).
² See, for example, Hymes (1985).
³ See, for example, Peltzer (1985).
of computational tractability. Output of the computational component will undergo several rounds of manual analysis in order to identify candidates that seem to demonstrate poetic organization, as contrasted with random distributions of patterns or organization similar to that of prose. Due to resource restrictions, some analysis tasks, such as the detection of semantic parallelism, will be undertaken as a fully manual process. When analysis has been completed, patterns considered to be poetic will be grouped together by shared characteristics, and their attributes organized into an inventory of early Tahitian oral poetic style.

### 1.1 Tahitian oral tradition

Tahitian oral tradition had an important, primarily religious role in pre-Contact society. Sons of chiefs were trained in it at special schools (Peltzer 1985:2). However, it was generally performed by ritual specialists, whose occupation was abandoned at the time of the society’s conversion to Christianity (see Stillman 1991:352). Orsmond began his work of collection shortly thereafter, but laments that much more material would have been available just a few decades prior (Orsmond 1933:170).

Oral tradition has continued to live on. The term for it in modern Tahitian is *parau tumu fenua* (“words whose foundation is the land”). An oral tradition specialist is currently referred to as *tahu ʻa parau tumu fenua* (“artisan of words whose foundation is the land”), *ʻaito ʻai* (“warrior of nourishment”), or *ʻōrero* (“orator”) (Bordes and Carlson 1980:584).

The French Polynesian Ministry of Culture describes the following oral traditional genres, which seem applicable to both transcribed texts from the 19th century and to present-day oral tradition:

ʻ*a ʻai* (“myth” or “legend”): The term ʻ*a ʻai* means literally “nourish yourself”. Through a generally fictional narrative framework, the legend nourishes the listener with the basic knowledge necessary for construction of identity and integration into society. It dictates the laws that must be followed to the letter in order for one to fit into the world. For those who would overstep established
rules, expounded in fine detail, the legend also describes terrible sanctions. Fiction, here, is employed as a covering for an order established in reality.

*faʻateni* (“praise”): A *faʻateni* is a style of poem used to praise, glorify, or raise to a high level a living person, a civilizing hero, a place, or a deed.

*faʻatara* (“praise with challenge”): A *faʻatara* is often confused with a *faʻateni*. Although superficially similar, these two styles of poem have different endings. They both detail the prestige of a place or qualities of a person. However, whereas a *faʻateni* only provides praise, a *faʻatara* imbues as well a strong feeling of pride and challenge. The poet details the qualities of both flower and thorn, ensuring thereby respect from others.

*paripari* (“description”): A *paripari* is one of the most frequently encountered styles of Tahitian oral tradition. It is used to extol the great attributes and deeds of a district or a people. For example, a *paripari fenua* (“land description”) of a district enumerates all of its founding and prestigious places. (Langues Polynésiennes 2004)

There are also a few genres which appear to be restricted to the early transcriptions:

*anau* (“lamentation”): An *anau* was a tightly crafted lament of fairly short length. Its content generally concerned contemporary people and events.

*rauti* (“battle address”): A *rauti* was generally a poem recited to warriors before and during battle to strengthen their resolve and allay fear.

Religious address: Several 19th century transcribed texts seem to naturally group into a genre of “religious address”, although it is not known whether this was ever a recognized poetic genre or, if so, the Tahitian name for it.

Even though oral tradition has continued in Tahiti, its poetic organization since Contact may very well have changed due to the early loss of its religious role, the possibility of European and other external influences, and the introduction of writing, which typically diminishes the requirement for oral transmission. In order to avoid such considerations, the effects of which might be difficult to establish, the current study will seek to identify and restrict analysis to just those 19th century transcribed poems deemed to have been originally composed in the pre-Contact era; a full list of which will be provided
in table 3.5 below. It is hoped that the study’s findings may serve as a stylistic baseline for an eventual study of Tahitian oral poetry of later periods.

1.2 Motivation for a computationally-assisted process

It appears that most, if not all, analyses of oral poetry to date have been performed by hand. Despite the considerable success achieved by fully manual endeavours, it stands to reason that such may occasionally overlook unanticipated possibilities for poetic organization. It is desirable that a process of analysis be capable of detecting any independent realities of the early Tahitian material. Concerning her documentation of extant Filipino oral traditions, Nicole Revel remarks that “It is necessary to be open to all [organizational] possibilities” (personal communication, January 20, 2006). John Miles Foley recommends that “We must give the idiosyncratic aspects of each tradition their due, for only when we perceive sameness against the background of rigorously examined individualized traits can we claim a true comparison of oral traditions” (Foley 1981:275).

Computational analysis has frequently been applied towards the discovery of unforeseen attributes of text; for example in the fields of author attribution, forensic linguistics, and computational lexicography. Concerning the latter, a high quality dictionary has traditionally been compiled by a gifted lexicographer who, when updating entries, will refer to earlier dictionary editions as well as to his or her own specialist understanding of the language. But it appears that even the minds of veteran lexicographers may be riddled with cognitive gaps.

As a case in point, in the 1990’s, at a major dictionary house in France, a computer-generated analysis of an aligned bilingual corpus of English and French fiction revealed that roughly 40% of the occurrences of the function word after had been translated as au bout de (“at the end of”) instead of the perhaps more anticipated après (“after”). The distribution was very regular: When in English a noun phrase following after represented a period of time (e.g. “after three days”), the matching translation was most often au bout de (e.g. “au bout de trois jours”). However, at that time, no English-French
dictionary in the firm’s line-up, from the pocket-sized to the unabridged, presented *au bout de* as a possible translation.

Lest one be given to disparage the French, this same omission can be noted in a more recent English-French entry from the traditionally Scottish imprint Collins:

**after**

*preposition or adverb* après  
*conjunction* après que; après avoir or être + pp  
*after dinner* après le dîner  
*the day after tomorrow* après demain  
*quarter after two (US)* deux heures et quart  
*what/who are you after?* que/qui cherchez-vous?  
*the police are after him* la police est à ses troupes  
*after you!* après vous  
*after all* après tout  

(Collins French Dictionary Plus Grammar 2000)

It has become generally accepted in lexicography that computational corpus analysis is necessary in order to avoid oversight of many common uses of language. That the omission of such a frequent correspondence as *after / au bout de* befell experienced lexicographers in familiar territory presages the potential pitfalls of pursuing a fully manual analysis of an unknown poetic tradition. The road would surely be lined with wide cognitive gaps, as well as prejudices regarding what might be recognized as poetic.

**1.3 Chapter organization**

The organization of the chapters will be as follows:

1. *Introduction*

2. *Review of the literature*

An attempt will be made to organize from the literature aspects that seem most relevant for the analysis of early Tahitian oral poetry. Two specific functions of the review will be:
a. To assist in the development of the computational process by describing many of the organizational possibilities of the world’s written and oral poetries. The computational detection process should be capable of recognizing known types, as well as be open to unforeseen methods of organization.

b. To provide an interpretive context for the Tahitian material, and especially for any analysis results, which will comprise part of the discussion to be presented in chapter 8.

3. **Data preparation:**

   Solutions will be described that attempt to resolve three problematic aspects of the data: its inconsistent orthography, the requirement to constrain analysis to just oral poetry composed pre-Contact, and the need to establish a definition for the Tahitian diphthong, which will be required for analysis of meter.

4. **Description of the pattern detection process:**

   This chapter will describe the automated and manual processes of poetic pattern detection, and provide examples of their implementation.

5. **Meter:**

   From analysis findings, this chapter will discuss poetic organization relevant to meter.

6. **Parallelism:**

   From analysis findings, this chapter will discuss poetic organization relevant to parallelism, which includes sound, syntactic, and semantic parallelism.

7. **Aspects of the poetry relevant to manner of composition:**

   From a manual analysis of corpus data, this chapter will discuss aspects of the early oral poetry that may shed light as to whether the texts were composed prior to performance and memorized by skilled reciters, or whether they were composed in performance by poets who had acquired an oral-formulaic linguistic capacity.
8. Summary and interpretation of analysis results:

This chapter will attempt to summarize, and occasionally interpret, analysis results that were presented in chapters 6, 7, and 8.

9. Conclusion
2 Review of the literature

2.1 Introduction

The principal aim of this review will be to help anticipate requirements of the automated pattern detection process.\(^4\) If successful, it should be capable of recognizing a broad range of poetic patterns, with an emphasis on those already documented for Polynesia and Oceania. It is also hoped that the review will provide an interpretive context for any discoveries that may result.

Discussion will initially cover the overall role of poetics within language. Following this will be a survey of the field of oral studies, with an emphasis on the Oral Formulaic Theory. Built upon analyses of European traditional epic poetry, it comprises the greatest amount of work in the field. Following this will be a survey of non-epic oral poetry, followed by an inventory of many of the types of poetic organization discovered in non-epic traditions of the world. Finally, an attempt will be made to establish a Polynesian and Oceanic context for the early Tahitian material.

It should be noted that although the terms verse and poetry are occasionally applied interchangeably in the literature, it is more common for verse to either refer to a stanza, to poetry comprised of lines, or to the poetic line itself, and for poetry to represent the unmarked sense; capable of describing almost any act of creative language. To avoid confusion, verse, here, will only refer to the poetic line, except for when a different use of the word occurs within, or in reference to, an author’s citation.

2.2 Concerning poetics

2.2.1 Place of poetics within linguistics

Many linguists have forayed into the study of poetics, such as Roman Jakobson, Paul Kiparsky, and Nigel Fabb. For Jakobson, its study is fundamental to that of linguistics. Similar to how a painting deals with visual

\(^4\) This process will be described in detail in chapter 4.
structure, he feels that poetry deals with the problems of verbal structure (Jakobson 1960:350-351).

Jakobson suggests that rather than being regarded as adornment, *poeticalness* should be recognized as a re-evaluation of all of the linguistic components of which discourse is comprised (Jakobson 1960:376-377). For Edward Stankiewicz, poetic form and content are inseparable (Stankiewicz 1960:73). William Wimsatt suggests that the greater the poetic complexity, the greater the artistic unity (Wimsatt 1947:275).

### 2.2.2 Role of poetics

There are many reasons for conveying information using poetry rather than prose. The reasons may be artistic, mnemonic, due to requirements of ritual, or even to prevent a modification of content.

As an example of the latter, when a word is substituted in some Somali poetry, it is necessary that it conform to rules of alliteration - thereby limiting the number of possible changes (Andrzejewski and Lewis 1964:45-46). Old Germanic law was written in verse in order to prevent alteration (Lotz 1960:137). Latin charters in Britain and Ireland were self-sealed through a structure of semantic parallelism and chiasmus, the stylistic roots of which were inherited from the Latin, Greek, and ultimately Hebrew Bible (Howlett 1999: ix).

### 2.2.3 Poetics linked to a language’s linguistic attributes

In order to pursue poetic analysis, it is first important to study much of a language’s prose structure. Thomas Sebeok observes that in order to evaluate the importance of each line of a particular Cheremis folksong ending in a verb, it is first necessary to understand the structure of the Cheremis sentence (see Sebeok 1959 cited in Saporta 1960:91).

Similarly, Jakobson feels that study of a poetic tradition’s sound texture must take into account its language’s phonological structure (Jakobson
1960:374). He cites the following example concerning some songs of the Pima-Papago and Tepecano:

According to Herzog’s observations ... the phonemic distinction between voiced and voiceless plosives and between them and nasals is replaced by a free variation, whereas the distinction between labials, dentals, velars, and palatals is rigorously maintained. Thus in the poetry of these languages’ consonants lose two of the four distinctive features, voiced/voiceless and nasal/oral, and preserve the other two, grave/acute and compact/diffuse. The selection and hierarchic stratification of valid categories is a factor of primary importance for poetics both on the phonological and on the grammatical level (Jakobson 1960:374).

2.2.4 Poetic composition may be non-linguistic

According to Fabb, whereas prose is asymmetric both in terms of word sequence and the hierarchical relation between syntactic elements, poetic forms introduce symmetry into language (Fabb 2009a:54-55). He argues, taking a different stance from Jakobson, that in order to achieve such symmetry poetic language is synthesized by non-linguistic means. It is a copy of ordinary language, not its variant (Fabb 2009a:53-54). Rarely sensitive to syntactic structure, lines of poetry are composed through a non-linguistic process of concatenation (Fabb 2009a:52-53).

Concerning poetry’s light regard for syntax, he remarks:

Metrical rules refer to word boundaries (in caesura and bridge rules) but not to syntactic phrase or sentence boundaries. Rules of rhyme and alliteration seem to ignore syntactic structure completely. Only parallelism⁵ seems to be sensitive to syntactic structure, in the sense that parallelism can hold between phrases or sentence structures, but here too the structures are sometimes reordered or involve ellipses which do not conform to generated syntax, and so parallelism might just be an asyntactic copying of sequences of discrete units. (Fabb 2009a:54-55)

2.2.5 The power of words

For many societies, poetry may also be a natural result of the power associated with words. Alessandro Duranti observes that in Samoa, rather than

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⁵ The use of the word parallelism here refers to repeating syntactic frames, which will be described below in 2.4.2.2.3.
simply being descriptive of the world, words have the power to effect change in people’s lives; such as in the creation of friends or enemies, or in providing for or taking away prestige and material wealth. Samoan orators have therefore developed verbal strategies that deal with words’ potential for danger (Duranti 1984:8).

Duranti also observes that a higher ranking person in Samoa effectively owns the meaning of his or her words, which requires those of lower rank to be mindful to arrive at correct interpretation. He proposes that in such a system, speech has the power to organize experience (Duranti 1984:17-18).

2.3 Survey of the field of oral studies

2.3.1 Origins of the field

Milman Parry is generally credited as the founder of oral studies. His work in the 1920’s focused on the Homeric epic. In the 1930’s, he compiled and began analysis of then still living Serbo-Croatian epic poetry.

Perry proposed that the works of Homer represented an oral tradition, and that in many ways oral and written poetry are fundamentally distinct. He aspired to develop a theory for all oral poetries that would define characteristics of style, and allow for determination, in the absence of external evidence, of whether or not a text is oral (Parry and Lord 1954:4).

One of the attributes that Parry proposed for epic poetry is that it is entirely formulaic. The epic poet does not memorize texts, but rather develops a linguistic capacity that enables every utterance to become poetic. Parry refers to this capacity as a formulaic diction that will give the poet “his verses all made”. On demand they will “link themselves in an unbroken pattern” (Parry 1971:317).

The concept that Homer’s Iliad and Odyssey were not works of writing pre-dates Parry, and probably originated with Rousseau (Havelock 1986:36-37). Later in the 18th century, the English “diplomat, traveler, and amateur archeologist” Robert Wood proposed that Homeric works were “of the memory, not of writing”, and that they were a work of “Nature” (Havelock
1986:37). The issue would then be taken up by German philologist F. A. Wolf (Havelock 1986:37), and after him a string of other European linguists.

Johann Ellendt, Heinrich Düntzer, and Kurt Witte would contribute to the analysis of Homeric meter (Foley 1988:9-10). Düntzer would propose importantly that it was possible that Homer’s fixed epithets were chosen for their metrical suitability for a particular position in a line rather than for aesthetic appeal (Foley 1988:9-10). Parry’s mentor, Antoine Meillet, felt that Homer’s language was entirely formulaic; that it was “traditional and artificial, a Kunstsprache that had evolved for a specific function” (Foley 1988:9-10).

Albert Lord worked alongside Parry in the collection and analysis of the Serbo-Croatian epics, and went on to complete that important work after Parry’s death. He demonstrated that the Serbo-Croatian material had many similarities to the works of Homer, and were a living example of an Indo-European oral formulaic tradition.

The principles of Oral Theory that developed from the analysis of Homeric and Serbo-Croatian epic have since been applied to, and modified by, the study of many other of the world’s oral traditions.6

### 2.3.2 Oral Formulaic Theory

Much of oral studies has been concerned with the Oral Formulaic Theory, which describes a compositional process for oral epics. Below is a list of features typically encountered in oral epics. Some of them may also be found, although perhaps less commonly, in non-epic oral and in written poetry.

#### 2.3.2.1 Oral epic is entirely formulaic

As mentioned above, Meillet proposed that Homeric epics were entirely formulaic. He found it fairly easy to discover verses or parts of verses within

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6 The list of areas includes various African linguistic communities, Albanian, Arabic, Central Asiatic, Celtic, Early Chinese, Old and Middle English, Old French, Ancient, Medieval, and Modern Greek, the Western Indian *pabuji* epic, South Indian, Old Irish, Modern Irish, the Latvian *dainas*, Russian, Sanskrit, Scandinavian, Medieval Spanish, Sumerian, Ugaritic, Xhosa praise poetry, and the Gospels (Lord 1986:472 and Foley 1988:48-49, 55). Many other oral traditions have undergone study as well, both with and without reference to the Oral Formulaic Theory.
them that appeared frequently across passages. He noted that there was a formulaic character to all verses, to the point that if a verse’s constituents were not seen elsewhere, that fact was probably ascribable to a lack of preservation (Meillet 1923:61 cited in Foley 1988:9).

Lord states the following concerning the ubiquity of formulae in a typical Serbo-Croatian epic:

Had we gone beyond 12,000 lines [of the text under discussion], the number of formulas would have continued to mount, and had we included material from other singers it would have increased still further, until it became clear that almost all, if not all, the lines in the sample passage were formulas and that they consisted of half lines which were also formulas. In other words, the manner of learning described earlier leads the singer to make and remake phrases, the same phrases, over and over again whenever he needs them. The formulas in oral narrative style are not limited to a comparatively few epic “tags,” but are in reality all pervasive. There is nothing in the poem that is not formulaic. (Lord 1960:47)

2.3.2.2 Process of oral epic composition

The oral epic is not memorized. Rather the capacity for epic composition is fundamentally linguistic. According to Lord, it has nothing to do with memory, but “the natural process of language itself – dynamic, creative, ever in movement – is the basis of traditional composition and recomposition” (Lord 1979-1980:583).

Lord describes this capacity as a special versification grammar that is superimposed on the grammar of a language. Once mastered, the poet “does not move any more mechanically within it than we do in ordinary speech”. The epic poet learns it by hearing its formulae in epic songs and poetry recited by others, through a process that is akin to language learning (Lord 1960:35-36).

According to Walter Ong, thought in oral cultures takes the form of patterns of memory that are “shaped for ready oral occurrence” (Ong 1982:34). Lord suggests that the epic poet’s recall of traditional material is specifically unconscious. He compares the process to that of a person speaking, who does
not make conscious reference to phrases or structural elements; but merely employs them. Lord notes:

In everyday speech an idea seems to produce the word or words to express it. The same process occurs in composing verses in oral traditional epic style, except that the idea must be expressed under given metrical conditions. (Lord 1981a:451)

According to Lord, if passages from two different recitations appear similar or identical, it is not an indication of memorization. The passages simply manifest a similar oral-formulaic response to the same input stimulus (Lord 1981a:451).

Robert Creed compares a Yugoslavian guslari epic poet to a “well-trained athlete in mid-contest” locked into a “rapid retrieval system”, to mix metaphors. At the fast speed of recitation, it is unlikely that a guslari exerts much conscious control over the process (Creed 1981:204-205).

However, just as phrases and texts may appear similar, there is also a degree of variation. Lord attributes this to “dialectal” differences, as well as to the process of organic change that will occur in any language (Lord 1960:36). Because memorization is not taking place, an oral text in some instances can be learned in one hearing. Lord makes note of such a feat regarding a Serbo-Croatian epic (Lord 1960:78).

Although memorization may not be relevant to epic poetry, it may have a role in shorter works. James Holoka notes that, in contrast to an Old English epic, the “short, elegiac poems could conceivably attain a fixity indistinguishable from that of a written text” (Holoka 1976:572). Lord notes that it is only obvious to expect greater fixity the smaller the work, irrespective of its genre (Lord 1981a:459-460).

2.3.2.3 Nature of the oral epic

Unlike the built up structure of drama, an oral epic is linear. Ong states that “oral poetry tends to be additive rather than being organized by subordination” (Ong 1982:37). According to James Notopoulos, the formulaic
digressions in Homer are actually the substance of the narrative. They are “strung paratactically like beads on a string” (Notopoulos 1949:6).

From an analysis of 15,000 lines of Hispanic, South-Slavic, and Russian narrative poems, John Miletich proposes that oral texts exhibit “elaborate”, as opposed to “essential”, repetition (Miletich 1981:189). John Miles Foley describes elaborate repetition text as being “anaphoric, parallel, nonessential, and retarding”, and the repetition of other text types as “rapid and necessary to the narrative” (Foley 1988:78-79).

According to Lord, many formulas in oral epics begin with a conjunction. The following is the English translation of a few lines of a Serbo-Croatian epic:

And the emperor was angered at me,
And he inflicted outlawry upon me,
And today he has exiled me,
And sent me to you in Bagdad,
(Lord 1960:42)

Ong describes the narrative style typical of oral epic as “more focused, slower-moving, frequently redundant”. Its plots are not climactic. Its characters are memorable; heavy, monumental, and not typically three dimensional (Ong 1982:37-40, 70, 143). Axel Olrik observes that epic narratives are not quick to begin or end, and that a maximum of two characters appear in any given scene (Olrik 1965:131-141).

According to Eric Havelock, a narrative style is employed because it is more interesting than ideology, a series of facts, or reflection. Tradition in an oral culture is “taught by action, not by idea or principle” (Havelock 1986:75-77).

2.3.2.3.1 Use of meter in the oral epic

A half a century before Parry, Düntzer proposed that the poetic choices of the oral epic, such as “multiplicity of quantity, elimination and introduction of vowels, ... multiplicity of coexistent forms side by side, ... alternation in number, case, tense, and mood” were all driven by metrical convenience (Düntzer 1872:513). It was efficient to re-use poetic strategies already proven
to be metrically successful. The rendering of an idea onto a metrical framework thus became formulaic.

Lord states that meter provides “the molds, or matrices, into which thought is poured” (Lord 1981b:416). Foley might replace the word thought with tradition. For him, the traditional aspect of oral tradition is extra-textual, and larger than a performance or group of performances. Foley sees meter as “a superficial feature of the idiom”. He compares its role to that of surface structure in syntactic analysis (Foley 1992:281).

Meter is one of the principal features of oral formulaic poetry that distinguishes it from non-formulaic varieties. Dell Hymes remarks that for the oral-formulaic epic, the constraint is the metrical line; which is commonly sung. For non-epic oral narratives, “the constraint is commonly a relation among lines”, where lines are commonly found to form sequences of two-four or three-five, although narrators are not limited by these alternatives (Hymes 1994:330-331).7

Foley gives warning of the pitfall inherent to not studying each tradition’s meter independently:

Trying to construe the Old English multiform phrase in terms of the Greek line is a Pyrrhic task; all we can prove is that Old English is, is not, or is to a certain degree, Greek. But unless we are willing to take the particular, tradition-dependent characteristics of each prosody into account, carefully noting the features most important to formula generation, we are doomed to such tautologies,

(Foley 1981:263-264)

2.3.2.3.1.1 Interaction of formula and meter

Gregory Nagy suggests that diachronically there may be a process by which meter emerges. It may be that a selection is made among the various rhythms found in prose phraseology. As time passes, the selected rhythm regulates new incoming material. Once a functioning meter, it is able to pursue an evolution independent of its origins (Nagy 1974:145). Perhaps as an example of part of this process, Kevin O’Nolan suggests that Irish epic meter

7 The subject of counting sequences will be discussed further in 2.4.1.5 below.

It seems likely that the origins of meter lie in formula, and formula is subsequently restricted by meter. Foley advises that in this chicken-and-egg relationship, both structures be considered together (Foley 1981:263-264).

Parry notes that in the Ancient Greek epics, older and foreign words were retained, and new forms included, due to their suitability for the hexameter (Parry 1971:328). Foley refers to Greek hexameter as a “complex and precise metrical filter which tended to hypostatize or fossilize its verbal component to an appreciable degree” (Foley 1981:265). Outmoded and foreign terms could stay in use as long as they served a compositional function. There might also arise new elements, unnatural to spoken language, but able to fulfill the requirements of the oral traditional style (Foley 1988:30-31).

2.3.2.3.2 Tests for determining if a text is oral

A somewhat strong claim of the Oral Formulaic Theory is that it is possible to determine whether or not a poem was the result of an oral formulaic process. The tests of such an analysis are perhaps best described by Berkley Peabody in his book *The Winged Word* (Peabody 1975). He observes five levels of structure and function for Hesiod’s *The Works and Days* (Hesiod 1959), which can also be generalized to the Homeric epics. Peabody asserts that there is “a necessary connection between the complexity of ancient Greek epos and its orality” (Foley 1988:100; Foley’s emphasis).

The five tests are for consistency of phoneme, formula, enjambment, theme, and song. Consistency of phoneme refers to the “rhyme, alliteration, assonance”, and other types of “redundancy in the use of sounds” that Peabody notes are typical of oral styles (Peabody 1975:3).

Consistency of formula refers to repetition of phrases and morphemic clusters (Peabody 1975:3). It may be that formulaic consistency grows out of Parry’s notion of *thrift*, which Parry defines as “the degree in which [a formula type or system] is free of phrases which, having the same metrical value and expressing the same idea, could replace one another” (Parry 1971:276). Foley
remarks, “Within the same formula type one finds a wide selection of phrases for different gods and heroes, but very few instances of more than a single formula of the same metrical definition for a single character”. The practicality that underlies thrift, then, is that a single metrical solution for any given point in the performance saves the oral poet from needing to make a choice (Foley 1988:24-25).

Lord remarks that thrift is often not noticeable unless analysis is restricted to a single poet. An oral poet can have a distinct repertoire of formulae, and in grouping repertoires of many poets of a tradition together, evidence for thrift may be lost. The thriftiness of Homeric poems, therefore, is an argument for their having been sung by a single poet (Lord 1960:53).

Richard Janko argues that the formulaic consistency test should be viewed as a negative test. When the test fails it proves that a poem is not of the oral epic genre, although the opposite is not necessarily true (Janko 2007:31).

Peabody’s test for consistency of enjambment claims that in an oral text, enjambment will be infrequent. If it occurs, it will often be syntactically unessential (Peabody 1975:4). Lord notes that of the 2,400 lines of a Yugoslav epic analyzed, “44.5 per cent showed no enjambment, 40.6 per cent showed unperiodic enjambment (this is, the sense was complete at the end of the line, but the sentence continues) and only 14.9 per cent involved necessary enjambement”. Parry, Lord notes, refers to the sparseness of enjambment as “an adding style” (Lord 1960:54). Janko proposes that enjambment consistency should also be considered as a negative test (Janko 2007:31).

Thematic consistency refers to “lexical clumps” that appear in different passages within and across the oral texts of a tradition (Peabody 1975:4). Concerning the manner in which these recurring situations are sought out, Lord remarks, “the method is the same used for formula analysis; but the units are larger and exact word-for-word correspondence is not necessary” (Lord 1960:145).

Lastly, consistency of song refers to the consistency of an oral text in its re-telling. According to Peabody, there should be close repetition of the entire composition (Peabody 1975:4). Creed observes that of the five consistency
tests, this last one most clearly demonstrates the diachronic depth of an oral tradition (Creed 1981:205).

### 2.3.2.4 Distinction between oral-formulaic and written composition

Lord makes the fairly strong claim that it is possible to diagnose a text as either oral or literary. He states:

Formula analysis … is ... able to indicate whether any given text is oral or “literary”. An oral text will yield a predominance of clearly demonstrable formulas, with the bulk of the remainder “formulaic,” and a small number of nonformulaic expressions. A literary text will show a predominance of nonformulaic expressions, with some formulaic expressions, and very few clear formulas. The fact that nonformulaic expressions will be found in an oral text proves that the seeds of the “literary” style are already present in oral style; and likewise the presence of “formulas” in “literary” style indicates its origin in oral style. These “formulas” are vestigial (Lord 1960:130; Lord’s emphasis).

Francis Magoun states even more strongly, “Oral poetry, it may be safely said, is composed entirely of formulas, large and small, while lettered poetry is never formulaic” (Magoun 1953:447).

For Havelock, the oral/literary juncture that a society passes through upon becoming literate results in nothing less than a fundamental change of cognition. The new process of thought is unfettered by rhythm. He claims that, “the participles and the verbs and the adjectives that behave like gerunds have yielded to conceptual entities, abstractions, objects”. In prose, fact, theory, and history become possible, whereas the pre-literate era could only be concerned with “the living panorama of experience and its ceaseless flow” (Havelock 1986:96-97, 110).

### 2.3.2.5 A challenge to the Oral Formulaic Theory

With an increase in the study of non-European oral traditions, many considered the Oral Formulaic Theory, especially in its stronger assertions, to be inadequate. Ruth Finnegan seems to be the most outspoken critic.
Foley notes that following the 1970 publication of her massive work *Oral Literature in Africa*, Finnegan commenced her long criticism of the Oral Formulaic Theory in a series of publications that followed. Accusing it of over-reliance on the South Slavic tradition, she specifically rejects claims that there is a single phenomenon that can be labelled “oral literature”, that a distinction can always be made between oral and written forms of poetry, and that there exists a single universal process of oral composition (Foley 1988:88-89).

Finnegan gives examples that argue that oral composition does not always take place at the time of performance, but rather in many cases beforehand. She points out that there are oral Somali poets who compose, memorize, and teach word for word oral poems to others (Lord 1987:316) which, according to oral theory, should be a hallmark of written poetry. She cites Knud Rasmussen concerning a type of Eskimo oral poetry that is artistically composed prior to performance (Rasmussen 1931:321), and Arthur Grimble concerning a similar manner of composition for a Gilbertese (Kiribati) love poem (Grimble 1957:200 cited in Finnegan 1976:156-157).

She asserts that to accept Lord’s view that composition during performance is the principal element of oral poetry, or that oral narrative is not memorized (see Lord 1965:592) “is liable to blind one to the many interesting ways in which the elements of composition, memorisation and performance may be in play in or before the delivery of a specific oral poem” (Finnegan 1976:152).

Lord retorts that only in the most literal sense is short, memorized poetry oral. As its method of composition is the same as for written poetry, it should be considered as such. Furthermore, short genres normally tend to fixity, and should not be compared with epic compositions (Lord 1981a:459-460).

Finnegan notes that in Africa, the epic style of Parry and Lord’s Homeric and Serbo-Croatian data is not a typical form. It is also often difficult, in African oral tradition, to distinguish between prose and poetry, as there are many long narratives which are mainly in prose, but with verse insets (Stolz 1976:168-169).
She claims as outdated Parry’s goal of discovering the universal set of characteristics of oral poetry. She argues that the division of poetry is artificial, and advocates removing the separate category of oral poetry in order to obviate the need to identify formulae (Finnegan 1976:159).

Parry’s goal was to obtain “evidence on the basis of which could be drawn a series of generalities applicable to all oral poetries” (Parry and Lord 1954:4). Declaring victory, Finnegan states, “If the assumption is that one should search for universal laws or uniform style across all oral poetries, this is surely by now an outdated program – but still, what a vision!” (Finnegan 1991:120-121)

2.3.2.5.1 Proponents of the theory strike back

David Bynum, in assailing one of Finnegan’s controversial papers (see Finnegan 1976), accuses it of doing nothing, except perhaps to “offer a compilation of unsupported assertions”. He asks,

[What do] we have in the statement, for example, “unaided by writing they learn long poems by heart”. This is an assertion of fact without details to support it. This is the kind of understanding that we have had for literally hundreds of years … (Stolz 1976:173)

Being an anthropologist, part of the criticism directed towards Finnegan concerns a perceived weakness in her linguistic training. Foley notes that she almost always comments on texts in translation, and pays little attention to linguistic aspects (Foley 1981:276).

Finnegan was also criticized for lumping too many varieties of oral material together. Foley remarks that in her book *Oral Poetry: Its Nature, Significance, and Social Context* (Finnegan 1977), she combines “all types of orally performed song into a single category (at one point juxtaposing Homer and the Beatles!) and then, tautologically, [demonstrates] the variety of her sample” (Foley 1981:276).

Lord makes a significant point when criticizing Finnegan for conflating traditional and non-traditional oral poetry; the former representative of content
passed down through generations. The poetry of the oral formulaic theory is oral traditional poetry. Parry had, in fact, noted the traditional aspect of Homeric poems before considering that they were oral.

Lord states that “any poetry or prose that is presented orally in the most literal sense of the word is to [Finnegan] ‘oral literature’”. He laments that by allowing distinctions to vanish, “the greatest variety of creations are included in ‘oral literature’”, as is apparent in her African examples (Lord 1987:327).

*Composition-in-performance* refers to an oral formulaic rendering of traditional material. This contrasts with the many possibilities for oral improvisation of newly minted non-traditional material. Lord states that some of Jeff Opland’s *imbongi* poets, whose recitations were used to support Finnegan’s arguments, were actually improvisers (Lord 1987:328).

Lord notes that there is a role for tradition in “composition-by-theme” that is lacking in improvisation. Composition-by-theme can be characterized as having “traditional diction and patterns shared by others over a period of time”, whereas improvisation is “individual, spur of the moment, non-traditional” (Lord 1987:335-337).

However Finnegan had proposed the possibility of a mixture of tradition and originality. She noted that Limba story-tellers combine tradition with a creative contribution. One such narrator explained that he was “‘taught by the dead [ancestors] and my own heart’” (Finnegan 1976:131).

### 2.3.2.5.2 Oral studies in the aftermath of Finnegan’s criticism

Despite any flaws claimed in regards to Finnegan’s arguments, she does demonstrate the need to be open to the independent realities of the world’s many oral traditions. Foley remarks, “Although the literary specialist may find fault with the lack of philological underpinning, everyone engaged in research that touches on the Oral Theory should be grateful for Finnegan’s insistence on a pluralistic model of oral literature”. He notes that a “complex mass of materials” had up until that point been forced into “the simplistic oral-versus-written dichotomy” (Foley 1988:102-103). He advises, “We must give the idiosyncratic aspects of each tradition their due, for only when we perceive
sameness against the background of rigorously examined individualized traits can we claim a true comparison of oral traditions” (Foley 1981:275).

Finnegan’s criticisms also point out that for the Oral Formulaic Theory to be descriptively successful, it must be restricted to oral epic poetry; epic poetry being scarce to non-existent among the mostly panegyric African traditions that she references. In rephrasing Parry’s theory, Lord does just that, and re-asserts the legitimacy of the two fundamental attributes of oral epic poetry: formula and theme. These both “arose from necessity and came into being with that style” (Lord 1987:337).

The full name for the poetry described by the Oral Formulaic Theory should therefore be *oral traditional epic poetry*. Non-epic oral traditional poetry, to be discussed below, does not necessarily have formulaic or thematic density, and, as noted by Finnegan and others, is sometimes difficult to distinguish from written poetry. Its study should not be conflated with that of epic poetry, of non-traditional poetry, or of written poetry. Perhaps one of Finnegan’s contributions has been to help the field of oral studies become more restrained in its assertions and definitions.

### 2.3.2.6 Examples of oral epic in the Pacific

While rare to non-existent in Oceania, as will be discussed below, oral traditional epic poetry seems to be widespread in non-Oceanic Austronesia. Nicole Revel and others have documented more than sixty epics from a still extant tradition of the Philippines (see Revel 2005). Nigel Phillips has studied *sijobang* narrative poetry of West Sumatra which, from the genre’s extensive use of epithet, other types of formula, and theme, seems to match several predictions of the Oral Formulaic Theory. He remarks, “many elements - from phrases, lines, couplets and clusters of lines to whole scenes - recur in different places, sometimes in unaltered form, often in different forms adapted to different contexts” (Phillips 1981:108).
2.3.3 Non-epic oral traditional poetry

Worldwide, it is likely that the majority of oral traditional poetry is non-epic. However, for historical reasons, greater academic study has been applied to European epics. Such, perhaps, is the natural consequence of an increased attention paid to Indo-European linguistics as compared to the study of other language families. Despite this, quite a lot of information has been accumulated for many non-European oral traditions.

Finnegan notes that panegyric praise poetry is the most highly specialized poetic genre of Sub-Saharan Africa. In contrast to the oral epic, its style is laudatory rather than narrative. It also differs in tone, intention, and size; measuring in the hundreds of lines rather than thousands (Finnegan 1976:133).

Hymes notes importantly that non-epic oral tradition does not have the performance constraints of a metrical line. As mentioned above, he observes that in oral narratives “the constraint is commonly a relation among lines” (Hymes 1994:330).

Hymes additionally mentions the following two roles for the use of formulae among some Native Americans of the Pacific Northwest:

Prayers and exhortations at ceremonies may be full of [formulae], not to meet formal constraint, but to invoke tradition. Narratives employ them at major junctures, such as openings and closings, and there are classes of words to be expected as markers. (Hymes 1994:330)

Therefore, there may be a function for formulae in oral tradition that is both non-epic and non-metrical. But such formulae are not necessarily of the same type, nor their role that described by the Oral Formulaic Theory.

2.3.3.1 Non-epic composition-in-performance

It appears that composition-in-performance, one of the fundamental concepts of the Oral Formulaic Theory, can be found in non-epic oral poetry as well. Finnegan provides several examples from Oceania, including Mono-Alu
stories from the Bougainville Straits, and stories about the Polynesian trickster-hero Maui.

In Gerald Camden Wheeler’s description of Mono-Alu stories (see Wheeler 1926), the compositions are a combination of themes and plots. Different story-tellers can put a given tale together in different ways, with no single correct version (Finnegan 1988:91).

Concerning Maui narratives, Katherine Luomala notes that “Each biographer interprets Maui in the light of the culture not only of his era and island, but of his particular social and intellectual set” (Luomala 1949:23). She offers the following praise for a particular Maori performance:

Its unity, coherence, and depth of feeling point to the work of a literary genius reinterpreting the mythology of his people” (Luomala 1949:38).

and

Its author-raconteur saw the possibility of using an error in the father’s rites over Maui as a point of departure in building up suspense to a climax. The narrator has integrated various stages of Maui’s career from birth to death into a composition which resembles a novelette in its closely woven plot. The Arawa cycle is a masterpiece of primitive literature. (Luomala 1949:63)

As noted above, Ong observes that the structure of oral formulaic poetry is “additive rather than being organized by subordination” (Ong 1982:37). And Notopoulos describes digressions in a Homeric epic as being “strung paratactically like beads on a string” (Notopoulos 1949:6). Agathe Thornton observes two types of paratactic structure in non-epic Maori oral tradition. Of both types, she notes that “statement follows on statement, in ‘stringing-along’ utterances”.

The first type of structure is linear and chronological. In the second, the storyteller responds to his audience. Thornton remarks that from this psychological and spiritual relationship, an appositional style arises (Thornton 1985:173).

In this style, the storyteller first relates the beginning and ending of a tale in order to initially satisfy the audience. He then appositionally expands on
details of the content. At the completion of each expansion, he returns to the narration. Thornton notes that the opposite of an appositional style would be that of a detective story, “where ignorance of the outcome is crucial, and each clue must be given at the appropriate time in the unravelling of the puzzle” (Thornton 1985:157).

Finnegan suggests that some Oceanic examples of composition-in-performance may be more prosaic than poetic. She observes that the Maui stories mentioned by Luomala, for example, are told in a manner that is “much more plastic than poetry” (Finnegan 1988:95). Proponents of the Oral Formulaic Theory, however, might counter that great time depth and unattributed authorship are both aspects of traditional material. This may indicate that composition-in-performance, in the mentioned Oceanic examples, is a trademark of tradition - whether or not the form of a particular oral text be judged poetic.

A stylistic distinction between the Maui tales and other oral tradition is found elsewhere in Polynesia as well. In Tonga, Adrienne Kaeppler mentions that whereas chants and genealogies were part of a tradition that was attended to by a priestly class, tradition relating to demi-gods such as Maui were in the public domain, and often served to explain features of the landscape (e.g. the topographical outcome of Maui shaking the roots of a tree, or throwing a spear) (Kaeppler 1976:197).

An exception to this generalization, however, is in the Society Islands, where Luomala notes that some Maui tales were co-opted by the Taʻaroa cult. Maui was needed as a hero to complete work in the sky, which was a pre-requisite for the development of culture on the ground. The trickster side of Maui’s character was left out in these texts, except for his boastfulness.

Luomala explains that “whereas in New Zealand, the Maui tales were usually regarded as non-sacred and only of slightly higher rank than popular tales, the Society Islands priests saw in them material for the religious cosmogony and history of colonization” (Luomala 1949:276).

There seems, therefore, to be a distinction in some areas of Polynesia between the priestly vs. public domain nature of a text, which may in some way
correspond to composition-prior-to-performance vs. composition-in-performance. However, for reasons discussed above, such a distinction may be found to be less evident in Society Island oral tradition.

2.3.3.1.1 Adapting traditional material to new occasions

Also among the Maori, there is a style of composition-in-performance oratory where existing formulae and frames are built upon to fit an occasion. Anne Salmond remarks that some of these function for “the recitation of genealogy, proverbs, and a more flexible set of oratorical clichés ... [which] can be varied by minor word changes and the selection of new images to fit almost any situation” (Salmond 1975:53).

Finnegan notes how Maori laments could be adapted to the circumstances of the newly deceased, and how Maori haka (“war songs”) could be likewise modified for new purposes (Finnegan 1988:94). Similarly, older Hawaiian praise songs could be revised for living persons (Pukui 1949:255). Luomala observes that Marquesan hoki praise songs were “flexibly composed ... quickly adaptable to any customer who could pay to have his name publicly celebrated” (Luomala 1955:51).

2.3.3.2 Non-epic composition-prior-to-performance

It appears that much of the world’s non-epic oral poetry is composed prior to performance. It is then performed either by individuals, alone or assisted by others, or by groups of people. Sometimes, oral poetry is composed to be recited by others.

Lord states concerning the Somali gabay genre of oral poetry:

[It] is occasional poetry composed on a recent or contemporary incident or event ... without writing, but not by extempore improvisation. They are worked out by the poet carefully in his head, but never written down by him, or presumably by anyone else. The finished poem is learned from the poet by a memorizer, who can, and does, in his turn pass it on to other memorizers, and in this way the poem is preserved and disseminated, “published,” as it were. (Lord 1987:316)
Lord describes the court memorizers of Somali poetry as “‘copyists,’ ‘editors,’ ‘printers,’ and ‘publishers’ of fixed texts in an oral culture” (Lord 1987:318). It is not clear that the gabay’s material is traditional.

Somewhat similar to the Somali tradition, Francis Meding Deng describes a process of composition for Dinka oral poetry, which also might not be traditional:

While an expert composes for others, people must be near him to memorize the song as it develops. The composer mumbles to himself, constructs a few lines, tells the people to “hold this” and sings the lines. As he proceeds, they follow him. When a song is completed, the expert is likely to have forgotten it, while they remember it in full. (Deng 1973:85)

For composer and memorizer to be different people is found in European oral tradition as well. Eleanor Knott and Gerard Murphy note that Medieval Gaelic court oral poets composed in a dark room. When completed, a poem was recited to the chief not by the poet, but by a bard (Knott and Murphy 1967:63-64).

Finnegan remarks on the division of labour between the medieval European troubadour, who was a composer, and the joglar, who recited his compositions. She notes that the distinction between poet and reciter, common to so many traditions, is very different from the Yugoslav model where, according to Lord, “singing, performing, composition are facets of the same act” (Lord 1960:13).

Oral composition-prior-to-performance may share inspirational qualities normally associated with written poetry or song. Mayuark, an Eskimo oral poet from Little Diomede Island, describes how after waiting in a stillness of artistic concentration called qarrtsiluni, sacred songs would “take shape in the minds of men and rise up like bubbles from the depths of the sea, bubbles that seek the air to burst in the light” (Freuchen 1962:280-281).

Finnegan asserts that the majority of oral poetry in Oceania is composed prior to performance. She remarks that such a widely accepted model serves as a “fascinating counter-example” to the oral-formulaic; especially as it appears
throughout such a large culture area in which oral literature is revered (Finnegan 1988:90).

An example of composition-prior-to-performance from the Marquesas Islands is noted by Edward Handy and Jane Winne. They mention that after going into seclusion to “evolve from his mind the verses and melody”, the poet/composer then teaches the work to the chorus that will perform it (Handy and Winne 1925:11).

As mentioned above, however, Lord points out that the Oral Formulaic Theory was developed to describe *epic* oral traditional poetry (Lord 1987:325-326; my emphasis) which, if it exists, appears to be rare in Oceania. Non-epic poetry can therefore not serve as a strict counter-example to the Parry-Lord theory. It would probably be better to analyze non-epic poetries without prejudice, in the effort to determine which, if any, insights from Oral Formulaic Theory find a place in their description.


Martha Beckwith observed that for longer and more important Hawaiian songs of praise, a group assembled, a theme was proposed, and then either a single composer was selected or each member of the group in turn contributed a line. Each line would subsequently be vetted by the entire group lest an unforeseen allusion bring disaster upon the endeavour. All members of the group memorized the song, which had the added benefit of ensuring exact transmission (Beckwith 1918:28).

Grimble gives the following description of group-assisted composition of a Gilbertese (Kiribati) love song:

When a Gilbertese poet “feels the divine spark of inspiration once more stirring within him,” he leaves the village and goes off to some lonely place where he
can do the initial work on his composition completely alone: “This is his ‘house of song,’ wherein he will sit in travail with the poem that is yet unborn. All the next night he squats there, bolt upright, facing east, while the song quickens within him. The next morning he returns to the village to collect a group of friends to help him”. It is their job to criticise and assess the poem – “to interrupt, criticise, interject suggestions, applaud, or howl down according to taste. Very often they do howl him down, too, for they are themselves poets. On the other hand, if the poem, in their opinion, shows beauty they are indefatigable in abetting its perfection”. They spend the whole day with the poet, working with him on his “rough draft” – “searching for the right word, the balance, the music that will convert it into a finished work of art”. After a day spent in this joint process, the friends leave and the poet is left on his own once more:

He remains alone again - probably for several days - to reflect upon their advice, accept, reject, accommodate, improve, as his genius dictates. The responsibility for the completed poem will be entirely his. (Grimble 1957:204-205 cited in Finnegan 1976:156-157)

2.3.3.2.1 Relationship of poetry to dance

Finnegan suggests that in Oceania, composition-prior-to-performance applies principally to oral poetry associated with dance, where the material is taught to the performers in a series of rehearsals (Finnegan 1988:95).

Kaeppler proposes that dance in Polynesia and Micronesia is “a visual extension of poetry”. Movement is primarily of the hands and arms which, he suggests, denotes interpretation by a storyteller rather than an actor. The lack of masks in Polynesian dance may also reflect this lesser degree of dramatization (Kaeppler 1976:199).

By way of contrast, in Melanesia the role of dance is that of “spectacular display during times of life crises and secret society rituals”. Kaeppler theorizes the difference may relate to differing political systems: Polynesian chiefdoms vs. Melanesian big-man societies (Kaeppler 1976:199).

It should be noted, though, that in many poetic genres of Oceania, composition-prior-to-performance is not sung. For example, Jacob Love observes concerning the recitation of a Samoan solo, “[the oral poet’s] pitches wandered for a phrase or two, and eventually settled on a pitch-area a little below the midpoint of her speaking-voice” (Love 1991:56).
2.3.3.2.2 Supernatural source of inspiration

Supernatural inspiration has been a principal source of oral poetry composed prior to performance in Oceania. Paul Laxton describes a Gilbertese process employed by a performer of kario magic. Swimming past the reef before dawn, the poet lies flat, bobbing up and down just beyond the crashing breakers. He chants an invocation, following which he will be inspired with music and words. He sings out the composition line by line, which are in turn memorized by an assistant standing within earshot in a shallow area of the reef (Laxton 1953:343-4).

Edwin Burrows tells of supernatural inspiration among the Ifaluk people of the Carolines, where, “a god can take possession of either a man or a woman and so dictate a song which issues from between tranced lips” (Burrows 1963:7). In Hawaii, it was said that the gods of the hula taught at least one chanter in dreams (Pukui 1949:257). In the Trobriand Islands, Bernard Baldwin describes how a woman was mourning her son when “the spirit came and spoke to her, felled her in a trance, and took her soul to the sunset isles”. Once there, her husband’s departed relatives composed with her the music and words for the song Kaduguwai, which she asserted was “a spirit song” (Baldwin 1950:264 cited in Finnegan 1988:100).

Kubuabola and Seniloli et al describe the compositional process for a Fijian meke. After commissioning a composer, rituals are performed that will make him receptive to inspiration. In one such instance, a composer was brought flowers which, either while he was sleeping or in a trance, inspired him with the words, music, and gestures of a meke dance piece. Upon awaking, he related his vision to assistants. At this point, he was able to forget the particulars, allowing the meke’s production to be taken over by others (Kubuabola et al 1978 cited in Finnegan 1988:95-96).

Fijian poets can also receive inspiration from the dead. Buell Quain notes that the poet Velema in the 1930s claimed that songs were taught to him by the dead; even some containing contemporary material. In one instance, composition of a song in commemoration of a death was attributed to the soul of the recently departed (Quain 1942:9-14).
2.3.3.2.3 Fixity of text

It appears that a common requirement for poetry composed prior to performance is that it remain unchanged. It was noted above that sound parallelism, semantic parallelism and meter are devices sometimes employed by a poet to discourage alteration of content; legal documents in the case of the European examples. Kiparsky remarks that oral poetry that has an important ritual function often tends towards fixity, whereas it can be relatively unstable if for entertainment (Kiparsky 1976:98-104).

Joel Sherzer observes that the magical chants of the Kuna of Panama performed for female puberty rites are completely fixed. Nine years after initially recording and transcribing a particular text, he asked the specialist who had chanted it to translate it into colloquial Kuna. As Sherzer began each line, the specialist completed it, never missing even a phoneme from the earlier transcription (Sherzer 1990:240).

Greg Urban gives an example from Brazil of a Shokleng wāñēklèn that must be recited verbatim, syllable by syllable. He notes that “each instance should be a perfect replica, insofar as morphemic composition is concerned, of some ideal type” (Urban 1986:21-22).

In Oceanic tradition, Finnegans notes that “the idea and practice of exact memorization ... [seems] to be a feature of at least a number of Pacific cultures (perhaps most notably in Polynesia)” (Finnegan 1988:103-104). She asserts that the majority of prior-to-performance compositions are supernaturally inspired, and so “must be preserved and repeated faithfully by the performers” (Finnegan 1988:99).

In addition to a supernatural motivation, fixity of text may arise from “the emphasis in many aspects of Oceanic culture on the concept of memorization and correctness” (Finnegan 1988:102), and to performance requirements of synchronizing the dance and movement of a “well-drilled troupe” (Finnegan 1988:102).

Mervyn McLean remarks that among the Maori, “memory lapses are still regarded as a sign of death or disaster and some young people say they would
sooner not try to learn songs than run the risk of not performing them correctly” (McLean 1964:34-35).

Apirana Ngata observes, relating to his own education as a Maori:

A fundamental feature of recitation or singing in Maori is that there must be no hitch of any kind. So a leader must not only know his matter, but must also remember it in all its phases. A fault was an aitua, a presage of ill-fate, even of death. (Ngata 2004:xxxv)

Salmond provides two cases in point. The first is that of the waerea protective incantation, performed when a visiting group is about to enter a strange marae. She notes that its words are archaic, and for the most part no longer understood. If a mistake is made in recitation, evil will follow. The speaker is free to select the incantation to be used, but there is no freedom within the text (Salmond 1974:201).

The second example is that of the tauparapara chant, which includes chants for tree-felling, carving, adzing, sentry watch, and paddling canoes. She notes that “many of the words are so archaic as to be incomprehensible, and the chant does not convey specific semantic information so much as establish the orator’s claim to esoteric knowledge” (Salmond 1974:206).

Degree of fixity may also be indicative of a poet’s level of oral-formulaic competency. In West Sumatra, Phillips observes that the compositional processes pursued by a master sijobang poet, Munin, and his apprentice, As, differ. The master poet “seems to have acquired, over the years, an ability to vary expression by substituting alternative words within the same grammatical framework and recombining the same vocabulary in various patterns, and he relies more on these resources than on straightforward repetition” (Phillips 1981:168). Phillips notes that the apprentice, however, “instead depends more on memory and repetition” (Phillips 1981:168).
2.3.3.2.3.1 Task of memorization

Fixity of text may lead to significant requirements for memorization. Lord remarks concerning Zulu praise poets:

An excellent memory is an essential qualification, for [the poet] has to memorize not only the praises of the chief but the praises of all his ancestors as well, and he has to memorize them so perfectly that on occasions of tribal importance they pour forth in a continuous stream or torrent. Although he may vary the order of the sections or stanzas of the praise-poem, he may not vary the praises themselves. He commits them to memory as he hears them, even if they are meaningless to him, as they sometimes are when they have been handed down for generations.
(Lord 1987:314-315)

B. W. Andrzejewski and I. M. Lewis note that there are Somali poets who can memorize a poem after hearing it just once, albeit chanted slowly and with some repetition of important lines (Andrzejewski and Lewis 1964:45). Concerning Polynesia, Ernest Collocott records an instance in Tonga where a poet chanted a 101 line poem to a poet friend. The latter thanked him, and then immediately recited it back in its entirety (Collocott 1928:81 cited in Finnegans 1988:103-104). Luomala remarks that the feat of memory Collocott describes occurs throughout Polynesia, where poems are often given and received as gifts (Luomala 1955:43).

Concerning the capacity for memorization in Maori oral tradition, Ngata remarks:

I learnt one outstanding feature in the education of a Maori, that he must know a thing in one lesson: in two lessons, if his teacher is indulgent. To learn a song in one lesson, words, air and all its graces seemed an impossible feat. But it was demonstrated in many cases within one's knowledge. There were illiterate elders among my relatives in the sense that they read with great difficulty and could barely sign their names to paper. But they could memorize genealogies, land boundaries and strange songs with ease.
(Ngata 2004:xxxv)

If ritual texts are acquired as an indivisible whole, it is sometimes difficult to deliver them in fragments or at a different pace. Bronislaw Malinowski observes that Kiriwina magicians “cannot repeat their spells slowly or piecemeal or in an ordinary voice” (Malinowski 1935:224). George Devereux
notes that the Mojave “have a traditional staccato, strongly accented and rather rapid manner of delivering traditional memorized texts”, and that, “This characteristic method of delivery is so completely a part of the recited text, that it is very difficult, even for the most willing informant, to slow down to the point where the text can be conveniently recorded” (Devereux 1964:268).

Structural devices may serve to simplify the memorization task. In Kuna oral discourse, Sherzer notes that the use of frame-parallelism aided in the memorization and performance of lists (Sherzer 1990:249).

2.3.4 The traditional aspect of oral traditional poetry

Lord suggests that traditional content in oral traditional poetry is much more important than its oral poetic manner of delivery. Tradition seeks to maintain stability and to preserve itself. Preservation of a society’s tradition is vital, thus assigning to the oral poet a role more of seer than that of artist. His duty is not to art, but to religion. That art takes over the form of the narrative is a by-product (Lord 1960:220).

Havelock interprets oral poetry’s primary function as encyclopaedic. He notes that until the latter half of the fifth century in Europe, the disciplines of law, business management, agriculture, etc. were required to conform to the conditions of an oral culture (Havelock 1952:100). He suggests that the Homeric epic served two purposes: the first being to entertain, and the second as “a method for preserving an ‘encyclopedia’ of social habit and custom-law and convention which constituted the Greek cultural tradition” (Havelock 1986:58).

2.3.4.1 Tradition builds up over generations

In their retelling of oral tradition, succeeding generations will create myth out of history. Lord suggests that actual historical events do not possess the intensity and force required to survive the “constant reinterpretation of succeeding generations and societies.” To survive, the patterns must be “suprahistorical”. Lord notes that, “Their matrix is myth and not history; for
when history does have an influence on the stories it is, at first at least, history that is changed, not the stories” (Lord 1970:27-28 cited in Foley 1988:47). Lord’s concept of oral epic tradition is that it is “fundamentally diachronic, as an evolutionary process that continues to develop while still preserving that which is important to the people who transmit it” (Foley 1988:40).

Urban describes how this process occurs in the Shokleng origin myth, which he considers to have developed by “historical accretion”. Ordering forces shaped older material into a poetic form. New material is then simultaneously assimilated into the older structures (Urban 1986:33).

Alice Schlichter describes the retention of archaic grammar in Quiché ritual speech, such as the mi recent past tense marker which is no longer used in modern colloquial Quiché. Integration of archaic elements is aided by both a “stylized intonation contour” and by the fact that the speech belongs to a specific ritual context (Schlichter 1981:109 cited in DuBois 1986:316-317). She similarly notes that in the Wintu oral tradition in Northern California “obsolescent expressions survive longer in shamanistic speech” (Schlichter 1981:109 cited in DuBois 1986:316-317).

Stanley Tambiah observes that for oral societies, greater authority is suggested by archaic language, which often renders material barely comprehensible to modern speakers. The archaic component may represent older elements of the language, or may even hail from a different language (Tambiah 1968:181-182).

Phillips recounts that the sijobang narratives of West Sumatra are considered “not modern” by their audience. In addition to a small number of words that are generally not understood, they incorporate a specialized vocabulary whose terms are either not found in colloquial language, or employed grammatically in a different way (Phillips 1981:106).

Foley notes that in the South Slavic epic, there are “extremely old words and outdated inflections alongside recent and even new elements, and with numerous inflections from dialects other than the poet’s own” (Foley 1988:31). Foley refers to Parry in explaining why archaic and contemporary language are often found side by side. In Greek epic poetry, there had been before Parry a
nagging problem of whether the poet of a given text was Ionic, Aeolic, or Arcado-Cyprian. The solution Parry proposed was that the Ionians learned formulaic diction from the Aeolians, and would make it Ionic whenever possible without harming the technique. However when that was not possible, they mostly kept it unchanged (Foley 1988:31).

Schlichter observes that in addition to the archaic, the ritual register is also built up from “borrowed, tabooed, and formulaic elements” (Schlichter 1981:109 cited in DuBois 1986:316-317). Concerning borrowed elements, John DuBois remarks that “the source of ritual register elements is often a neighboring language (or dialect), even where no superstrate relation exists and the borrowing language does not lack the borrowed term” (DuBois 1986:317-318).

James Fox remarks that in Rotinese oral tradition, “the second member of a lexical pair is often borrowed from a neighboring dialect” (Fox 1974:80ff). Victoria Bricker observes that “Tzotzil pairs are often made up of a native and a ‘Spanish term’” (Bricker 1974:372). Leslie White notes that in a song from a Hopi powamu ceremony, obscure terms are likely Keresan loanwords (White 1944:162).

Vestigial formulae over time may lose their original meaning. Lord remarks that a formula might survive even after the potency of its words or ideas were lost because “the fragrance of its past importance still clung vaguely to it and … it was now useful in composition.” The meaning of such vestigial formulae becomes “connotative rather than denotative” (Lord 1960:65).

The time depth of oral tradition may be great. For example, it is possible that the Slavic epic decasyllable is traceable all the way back to a parent Indo-European tradition. Jakobson suggests this from analysis of the “quantitative close” (Foley 1981:277). Lord provides further support from an analysis of the Return Song. It involves the five elements of Absence, Devastation, Return, Retribution, and Wedding, found both in Homer’s Odyssey and in Muslim and Christian South Slavic sung epics (Lord 1969 cited in Foley 1988:46).
2.3.4.2 Strategies for increasing a tradition's authority

Repetition is one of the strategies by which tradition can signal its authority. Maurice Bloch remarks that in logical analysis, repetition of an argument is mere redundancy. However ritual tradition is a total bonded experience, where repetition becomes the sole means of emphasis (Bloch 1974:76).

Another strategy for increasing a tradition’s authority is to establish distance from the performer. Regna Darnell mentions that at the beginning of Cree traditional narratives, there is an etiquette which requires denial of competence. The speaker is a performer, not an individual (Darnell 1974:325). Somewhat similarly, a Native American oral poet stated to Hymes, “I'm only giving you the revelations which I’ve learned from somebody else” (Hymes 1981:90).

DuBois notes that “Distance in the past is associated both with the fading of distinctive personality and with increase in authority” (DuBois 1986:329). He proposes a “Hierarchy of Personal Presence”, where at each subsequent level authority increases as personal presence decreases:

a. Proximate speaker (= prime speaker)
b. Addressee
c. Recent interested witness
d. Recent disinterested witness
e. Ancient witness
f. Myth characters & lesser deities
g. Anonymous ancestor group
(DuBois 1986:330)

DuBois further proposes that greatest authority is obtained through obliteration of source altogether, citing Claude Lévi-Strauss’ observation that the repeated myth is “a message that, properly speaking, is coming from nowhere” (Lévi-Strauss 1969:18 cited in DuBois 1986:330). The audience, from its perspective, will want to believe in an archaic nature for ritual speech, whether or not, DuBois adds, “actual archaism can be demonstrated to the historical linguist’s satisfaction” (DuBois 1986:316-317).
2.3.4.3 Full clarification not provided

Hymes proposes that oral traditional performances assume a contextual awareness on the part of the listener. Full clarification is evidence that a narration is not intended for the native audience. For example, in Wasco, a narrator will only include explanations in the English version of a story. Hymes cautions that “in assessing a given narration, one must distinguish between what is missing and what is implicit” (Hymes 1981:111).

Rolf Kuschel and Torben Monberg observe that Bellonese *kananga* in the Solomon Islands contain “several strata of understanding”. They note that a story may seem intelligible to anyone, but there may be references known only to certain listeners (Kuschel and Monberg 1977:92).

Having discussed the role of poetics within language as well as potentially relevant contributions from the field of oral studies, an effort will next be undertaken to survey the use of meter and parallelism in oral poetry.

2.4 Survey of poetic methodology

Hymes proposes that the principal elements of all poetic structure are *meter* and *repetition* (Hymes 1960:116); repetition being commonly referred to as parallelism. Parallelism may be of sound, morphology, syntax, or meaning; singly or in combination.

2.4.1 Meter

Meter is regarded as a principal characteristic of both oral formulaic and written poetry. Jakobson restricts its use to the poetic function, stating that it otherwise finds no linguistic application (Jakobson 1960:358-359). John Lotz goes so far as to suggest that non-metrical text is prose:

In some languages there are texts in which the phonetic material within certain syntactic frames, such as sentence, phrase, word, is numerically regulated. Such a text is called verse, and its distinctive characteristic *meter* ... A nonmetric text is called *prose*.

(Lotz 1960:135)
Fabb, however, argues that non-metrical poetry should also be considered verse, as it too is comprised of lines. Examples of such verse, with no fixed line length, can be found in Mongolia, ancient Semitic traditions, many non-Islamic African traditions, and traditions of the Pacific, Australia, and the Americas. (Fabb 2009b:143)

Evidence supporting the use of line in non-metrical poetry is that line-specific rules are found to apply. For example, there are “types of non-metrical verse in Mongolian with both alliteration on the first syllable of a line and rhyme on the last syllable” (Fabb 1997:118). Fabb suggests that the concept of line, whether metrical or non-metrical, of an oral or literate genre, may very well be a poetic universal (Fabb 2009a:54-55.).

When the lines of a tradition are metrical, Fabb and Morris Halle propose that the ability of poets and their audiences to judge metrical well-formedness is part of the human capacity for language. Similar to phonology and morphology, the rules of meter “generate abstract elements that are not directly present in the acoustic speech signal”. Words and syllables are thus “constructed by speakers and hearers alike by virtue of their knowledge of the language” (Fabb and Halle 2008:11-12).

Lotz proposes the following framework to assist in the scansion of a given meter:

1. The study of the linguistic constituents
   a. The study of the phonological constituents
   b. The study of the syntactic constituents
2. The study of the metric superstructure
   (Lotz 1960:140-143)

Concerning the study of a meter’s phonological constituents, Jakobson states that the “peak” of a syllable is constituted by a “more prominent, nuclear, syllable part”. This syllabic phoneme is surrounded by marginal, non-syllabic phonemes. He remarks that “In the so-called syllabic versification the number of syllabics in a metrically delimited chain (time series) is a constant” (Jakobson 1960:359-360). Lotz similarly observes that “all strictly regulated metric systems are founded on syllabification”, where only a “syllabic pulse, characterized by a dominant syllabic
rather than the syllable as such … is metrically relevant” (Lotz 1960:140-143; Lotz’s emphasis).

Jakobson states importantly that it is possible for the definition of a syllable in poetry to be different than it is for prose. In the case of Italian syllabic verse, for example, he notes there is “a tendency to treat a sequence of vowels unseparated by consonantal phonemes as one single metrical syllable” (Jakobson 1960:359-360).

2.4.1.1 Definition of the line

The study of syntactic constituents mentioned by Lotz refers to determining the syntactic composition of a metrical line. Lotz notes that sentence and word will always be metrically relevant. The colon, or syntactic phrase, also plays a role in some languages; especially for folk poetry. Lotz remarks that “syntactic constituents provide the frame for which the numerical regulation of the phonological material can be stated” (Lotz 1960:140-143).

There are a variety of frames which might be used, and which may or may not be separated by an audible pause. Whereas Dennis Tedlock observes that in Arizona, the Zuni poetic line is based on pauses in speech, Hymes notes that in the Pacific Northwest, Chinookan narratives have “lines on the basis of certain features of syntax … Each predication in a text is likely to be a line, whether or wherever the speaker may have paused” (Hymes 1980:7). According to Sherzer, in a performance of a Kuna work called The way of the snake, “lines are determined by melodic shape, including falling pitch, lengthened final vowels, and pauses” (Sherzer 1990:253).

As to the metric superstructure, lines can be organized into higher order constructions, such as strophes. And they are sometimes split into line segments, which are often characterized by caesurae (Lotz 1960:138-140).

Hymes suggests that for metrical poetry what is most important is “a relation within the line, a relation among syllables, stresses, alliterations, tones, conventional feet”. Measured verse, on the other hand, is a term Hymes proposes for poetry concerned foremost with the relationship among lines (Hymes 1994:331-333).
2.4.1.2 Typology for meter

Based on observations from Jakobson (Jakobson and Waugh 1987:219-220), Lotz (Lotz 1960:140-143), and Fabb and Halle (Fabb and Halle 2008:9, 93, 268, 271, 283), the following is a list of documented varieties of meter:

1. Pure moraic meter
2. Pure syllabic meter
3. Syllabic meter based upon:
   a. Vowel quantity
   b. Word stress
   c. Word boundary placement
   d. Alliteration
   e. Tone
4. Syllabic counting meter

In pure moraic meter, all morae are counted (e.g. Japanese haiku, East Carolina, and some Polynesian poetry). In pure syllabic meter, all syllables are counted (e.g. some Mordvinian poetry).

More commonly in syllabic meter, however, syllables are divided into two metrical classes, one of which is counted. Classes may be based upon vowel quantity (e.g. some Arabic, Ancient Greek, and Latin poetry), word stress (e.g. some Old English, German, and Latvian poetry), word boundary placement (e.g. relating to caesura rules), alliteration (e.g. the Anglo-Saxon epic Beowulf, which is also restricted by word stress), and tone (e.g. some Chinese and Vietnamese poetry). Some meters, as noted with Beowulf, are based on more than one set of classes (Fabb and Halle 2008:93).

Jakobson remarks concerning word stress meter (which he calls accentual verse), “the number of syllables in the upbeat may vary, but the downbeat (ictus) constantly contains one single syllable”. He also notes that whereas the division is usually between stressed and stressless syllables, some word stress meter deals with syntactic, phrasal stresses, such as the major stresses of major words (Jakobson 1960:359-360).

Syllabic counting meter, like pure syllabic meter, counts all the syllables in a line. However, it differs in that the syllable count can vary from line to line, according to an external pattern. Fabb and Halle note that the only clear example
of this type of meter is found in “a small minority of Old Testament poetry” (Fabb and Halle 2008:268, 271, 283).

Lotz observes that there are never more than two levels of metrical contrast, even though finer linguistic gradations are possible. He notes that in Classical Greek, there could be a large number of classes of syllable length combined with following consonant cluster, but only two base types, short and long, are employed for metrical purposes. In Classical Chinese, there are six phonemic tones, but only one opposition in meter: even vs. non-even (Lotz 1960:140-143). Fabb and Halle similarly state that “language may differentiate a syllable in more than two ways but the meter recognizes only the two types of syllable” (Fabb and Halle 2008:254-255).

2.4.1.3 Upper limit to metrical complexity

Fabb notes that for poetries with meter, two sets of rules will refer to the metrical grid, where a rule set “regulates the presence or location of (i) a prosodic subclass of syllables (defined by stress, weight, tone or some combination of these), or (ii) rhyme, or (iii) alliteration”. An exception to this statement can occur where no relationship exists between syllable subset and the metrical grid (Fabb 2009b:147-148).

Fabb theorizes that “the generation of a grid is an expenditure of effort”, and “if the effort is to be rewarded, the grid needs to be used for some other purpose”. This is the motivation for incorporating a second rule set. However, it does not appear that a third or higher set of rules is ever attached to the grid, perhaps due to Relevance-Theoretic optimality having been achieved at just two (Fabb 2009b:150-151). Although it may be desirable for a second set of rules to take its “free ride” on the already established grid, it would seem desirable as well that the poetic compositional process not become too cognitively complex.

2.4.1.4 Traditional vs. generative approach to scansion

In traditional methods of scansion, heads of metrical feet are aligned with stressed syllables, resulting in a match between rhythm and meter. In a generative
The approach proposed by Fabb and Halle, rhythm and meter are not necessarily “two sides of the same coin”. Their metrical grid, rather, is generated from the line by iterative rules. The method employs a hierarchy of gridlines, each with its own rule set, and requiring an ordering similar to that of rules of generative phonology (Fabb and Halle 2008:24-25, 34, 75).

### 2.4.1.5 Sequences of counting

In some oral traditional poetry, verses are counted in sequences. Hymes notes that it is most common for such sequences to be of two and four, or of three and five. For example, Hopi, Karok, Kwakiutl, Navajo, Takelma, Tonkawa, and Zuni linguistic communities make use of a two-four sequence, whereas Chinookan, Sahaptin, and Kalapuyan communities join verses by series of three-five (Hymes 1980:8-9 and Hymes 1994:331).

Urban notes that in the Shokleng origin myth, threefold repetition tends to dominate, despite occasional two- and four-fold repetition. He adds that the Shokleng scheme does not seem to correspond to sacred numbers (Urban 1986:36).

According to Hymes, sequences of two establish a “this, then that” rhythm, as do pairs of pairs. Sequence of three imply “onset, ongoing, outcome”. Hymes further describes how simple sequences of three can be built upon:

A development ... found as far apart as the Columbia River, Philadelphia, and Finland, integrates two sequences of three within a sequence of five. It is possible (not necessary) to have the third unit a pivot, completing one succession of three and beginning another. I call this ‘interlocking’ ...

(Hymes 1994:331-333)

Hymes remarks that content presented in this manner represents “not a straight line, but a series of arcs” relating to a “recurrent arousal and satisfying of expectation” (Hymes 1994:331-333).

### 2.4.1.5.1 Counting systems of French Polynesia

If sequences of counting play a role in the Tahitian material, they may be based upon earlier non-decimal systems. Yves LeMaître provides a detailed
description of the modern counting systems of French Polynesia. However, he makes no mention as to whether any finds application in oral tradition, except to suggest that counting by round numbers may relate to the memorization requirements of non-writing systems (LeMaître 1985:3).

In Tahitian, counting can occur by single units or pairs. Counting in pairs is helpful for objects that are often tied together, such as coconuts, breadfruit, or bonito. The forms of numbers remain the same for both systems, except that with single units the tenth count is ʻahuru ("ten") and the hundredth hānere ("hundred", an English loanword), whereas when counting in pairs the tenth count is ta ʻau ("twenty") and the hundredth rau ("two hundred") (LeMaître 1985:5). Therefore, depending on the system intended, the numeric form toru would either designate three or six items.

Mangareva makes use of a more complex system, whereby counting can either be in single units, pairs, fours, or eights. It is possible that in the past the Society Islands had a more complex system as well.

Some members of the class of Mangarevan objects counted in single units are people, reptiles, mammals, birds, insects, shells, lands, boats, pearls, and stars. Some objects counted in pairs are breadfruit (unmarked form), woven pandanus leaves, farming tools, and sugar cane. Some objects counted by fours are ripe breadfruit, and octopi. The class of objects counted by eights includes first breadfruit or first fished octopi of the season that are offered to a landowner (LeMaître 1985:10).

2.4.1.6 Examples of meter in oral poetry

Jakobson provides the following description of Serbian decasyllable meter:

Any line of Serbian epics contains precisely ten syllables and is followed by a syntactic pause. There is furthermore a compulsory word boundary before the fifth syllable and a compulsory absence of word boundary before the fourth and tenth syllable. The verse has, moreover, significant quantitative and accentual characteristics. (Jakobson 1960:364)
In regards to the word boundary requirement, Jakobson remarks that the break before the fifth syllable is not intended to be heard. This would imply that it must be occurring at a lower level of analysis. Jakobson warns, “thus verse design goes far beyond the questions of sheer sound shape; it is a much wider linguistic phenomenon, and it yields to no isolating phonetic treatment” (Jakobson 1960:364-365). This is in line with Fabb and Halle’s assertion mentioned above that words and syllables are “constructed by speakers and hearers alike by virtue of their knowledge of the language” (Fabb and Halle 2008:11-12).

Sebeok describes an elaborate metrical system for Cheremis song texts based on the syllabic pulse. Its constraints are as follows:

A word boundary comes after no more than four pulses, a member boundary after no more than seven, a line boundary after no more than eleven, and the text ends after 81. Only one word, the pivotal /ške/ “ego,” is monosyllabic, and all the rest range from two to four syllables. The number of pulses per member ranges from four to seven, such that, in the sestet, the number in the first is always smaller than in the second, whereas, in line 7, the two are identical and, in line 8, the proportions are reversed. (Sebeok 1960:230)

In the Pacific, Phillips describes a meter of eight or nine syllables in the sung sijobang narratives of West Sumatra (Phillips 1981:105-106). From the East Carolines, Fischer tells of a “pre-foreign” meter that he argues contains eight morae per line when pause length is taken into account (Fischer 1959:47-48). Fischer notes that “most apparently unreconcilable violations of meter are with one word lines or in a series of lines each containing a different proper name in parallel contexts” (Fischer 1959:51).

Generally in Oceania, Fischer states that “clear descriptions of indigenous poetic meter ... are rare” (Fischer 1959:52). Love laments, “With the passage of decades, the trail, once redolent of clues, has grown colder; but the search hasn’t intensified” (Love 1991:54). However, there does seem to be the possibility of meter in Fiji and in Western Polynesia.

Quain notes that in Fiji, verses tend to be the same length, although “no deliberate patterning of rhythm appears” (Quain 1942:14-15). According to
Burrows, most recitative songs in Futuna have no regular meter. He states, “They fall into longer rhythmic figures whose length, governed by the lines of the text, approaches symmetry but is not exactly uniform” (Burrows 1936:205).

Augustin Krämer suggests a possibly metrical nature for Samoan verse. He generalizes that despite their lack of uniformity, verses seem to keep sufficiently within boundaries to convey a perception of metrical speech (Krämer 1903:342-343 cited in Love 1991:55).

Love proposes a structuring of Samoan solo poetry into stanzas, verses, and cola. Stanzas are indicated by a stop for breath, and often coincide with a change of rhyme and intonation. Verses are indicated by short pauses. These commonly coincide with colon boundaries, and often end in rhyme. Most verses split in half into two cola. Prolongation of a vowel to three or four times its normal length can be an indicator of this verse-internal division. The mora is a verse’s standard mensural unit, and is counted between rhyming points (Love 1991:57).

Concerning the colon, Love notes that Samoan poets have no term for it, nor are they consciously aware of it; despite awareness of the vowel prolongation that appears to serve as its indicator. Love’s consultant Fa’animo states simply “that was the way she had learned to recite, and the way her elders had recited” (Love 1991:64).

Love proposes that approaching Samoan verbal rhythm is probably best undertaken at the level of the mora. In Eastern Polynesia, Bruce Biggs discovered a consistent count of eight morae per half-line (or “rule of eight”) in Maori song texts (see Biggs 1980), which has since been observed by Kevin Salisbury in mako songs of Pukapuka, and by Steven Roger Fischer in chants from Tokelau, Mangareva, Hawaii, Mangaia, and the Tuamotus (McLean 1996:258-259).

Love additionally remarks on the mora’s importance in Carolinian poetry in Micronesia, and in Japanese genres, such as haiku (Love 1991:72). Although Ancient Greek and Latin texts used vowel quantity meter, the range and traditional nature of much of the Polynesian mora-timed material suggests that it is not a result of post-Conquest influence.

Concerning the potential relationship between the Samoan solo colon and meter, Love observes that the variability of mora count is 20% and 19% for the
lengths of the first and second cola, respectively (Love 1991:74). Cola seem to
have no regular pattern of quantity, none of stress, and no fixed number of words.
Vowels that receive primary stress are the same as those in non-poetic speech
(Love 1991:70).

Similar variability is found at the level of the verse. A verse’s mean mora
count for a sample of solo was 13.27. Its durational variability was 20%; the same
as for the colon (Love 1991:75).

The greatest degree of solo mora count variability occurs in the first and last
verses of a stanza. Love notes that the variability of a stanza’s first verse
“corroborates observations about the tolerability of deviance in the first stanza of
melodies” (Love 1991:76) and that “the possibility must be granted that stanza-
terminal verses were ideally longer than other ones, and that the extra length of
these verses didn’t happen by accident” (Love 1991:78).

Love proposes that the Samoan solo poet was more concerned with
measuring time than counting morae. He remarks:

When Sāmoan poets practiced the art of composition, they must have had a
standard verse-length in mind. They based their idea of that length on the
unfettered flow of time ... to the ancient Sāmoan poets, larger metrical units
demanded creative attention: the verse, not the mora, was the thing.
(Love 1991:81)

2.4.2 Parallelism

Repetition is Hymes’ second principal element of poetic structure. As
mentioned above, repetition - or parallelism in the general sense - can be of sound,
morphology, syntax, or meaning; singly or in combination.

Lévi-Strauss remarks that the value of parallelism is to make a song’s
structure apparent. The structure “seeps to the surface ... through the repetition
process” (Lévi-Strauss 1970:105). For some languages, parallelism is the
predominant poetic device. Dubois notes this for Cuna, Kiriwina, Rotinese, and
perhaps all of the Mayan languages (DuBois 1986:318).

Jakobson observes that one of the roles of parallelism is to project
inevitability: a form is first foreshadowed, and then occurs (DuBois 1986:326-327).
Jakobson in fact views parallelism, broadly defined, as the essential poetic process. He states:

Poetic language consists of an elementary process: the bringing together of two elements.

The semantic variants of this process are: parallelism, comparison (a particular case of parallelism), metamorphosis (parallelism projected in time), metaphor (parallelism reduced to a point).

The euphonic variants of this process of juxtaposition are: rhyme, assonance and alliteration (or repetition of a series of sounds) (Jakobson 1977:25).

Parallelism can be simple or embedded, on a small or large scale. Urban employs the terms micro-parallelism and macro-parallelism. An example of micro-parallelism would be the similarity of two lines based on rhyme or meter (Urban 1986:16), and of macro-parallelism would be repetition of episodes of a story, however with key semantic changes (Urban 1986:26). According to Urban, the semantic function of macro-parallelism is to equate the events and situations of two different points in time. He remarks, “It is as if history regularly repeated itself” (Urban 1986:28-29).

2.4.2.1 Parallelism of sound

Hymes asserts that repetition of sound can operate at a variety of linguistic levels, both above and below that of the phoneme. No dimension should be excluded along which a poet might group sound for a given poem or more general stylistic trait (Hymes 1960:130-131).

Beneath the level of the phoneme, parallelism might be of a distinctive feature. For example, there may be parallelism of manner of articulation (eg +/- continuant, +/-nasal) or of place of articulation: (eg +/-labial, +/-coronal).

Seymour Chatman provides the following list of common schemes for sound repetition, juxtaposition, and syllable control that a poet may make use of to achieve sound parallelism. It should be noted that the syllable controlling schemes in his list primarily apply to the needs of meter.
A. Sound repetition schemes

Word initial:

1. **Consonant alliteration**: Repetition of the same initial consonant in several adjacent syllables, usually coinciding with word stress: “furrow follows free”.

2. **Vowel alliteration**: Repetition of the same initial vowel or diphthong in several adjacent syllables, usually coinciding with word stress: “empty effort”.

Word-final:

1. **Rhyme**. Repetition of final stressed vowels and final consonants and consonant clusters, if any, but *not* of initial consonants in the syllable: “be:agree”.

2. **Feminine rhyme**. The above, plus any additional unstressed identical syllables: “taker:maker”.

3. **Assonance**. Like vowels, different consonants: “fame:late”.

4. **Consonance**. Like consonants, different vowels: “pressed:past”.

5. **Homeoteleuton**. Repetition of whole final unstressed syllables where the stressed syllables preceding are consonant: “fission:motion”.

6. **Eye rhyme**. A kind of assonance in which the letters are identical, although they represent different vowels: “blood:mood”.

B. Sound juxtaposition schemes

1. **Chiasmus**. Reversal of phoneme sequence: /u/:/i/:/i/:/u/ - “dupes of a deep delusion”.

2. **Augmentation**. CC -> CVC: “That slid into my soul”.

3. **Diminution**. CVC -> CC: “But silently, by slow degrees”.

C. Syllable controlling schemes

1. **Apocope**. The loss of a word-final vowel such that the consonant which *precedes* it clusters with the initial vowel or consonant of the following word (for example, “the army” becomes “th’army” and “to write” becomes “t’write”).

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8 Eye rhyme would not be relevant to the poetry of a pre-literate society.
9 The term *chiasmus* is often restricted in the literature to inverted semantic parallelism, common to many Greek, Latin, and Hebrew texts. Henceforth, patterns of non-semantic chiasmus will simply be described as *inverted*. 
2. Aphaeresis. The loss of an initial vowel such that the consonant which follows it clusters with a following vowel or consonant (for example, “it is” becomes “’tis” and “it were” becomes “’twere”).

3. Vowel syncope. The loss of a vowel such that a syllable is lost without the syllables on either side being affected (for example, “medicine” becomes “med’cine” and “fluctuate” becomes “fluct’ate”).

4. Consonant syncope. The loss of a consonant such that the syllables on either side are fused, often by the loss of the second vowel (for example, “seven” becomes “se’en”, “devil” becomes “de’l”, and “by his” becomes “by’s”).

5. Synaeresis. The consonantizing of a vowel (usually into /j-/ or /w-/), or the loss of syllabicity of a syllabic consonant, such that it clusters with the following vowel rather than standing alone as a syllable (for example, “many a” becomes /menjə/, “jollier” becomes /ʤaljər/, “title of” becomes /tajtləv/).

6. Monosyllabification (or synizesis or synechphonesis). The reduction of contiguous syllabics to a single nucleus (for example, “idea” becomes /ajdij/, “being” becomes /biŋ/).

7. Pseudo-elision. The assumption of elision between two consonants that cannot be clustered without one of them becoming syllabic, or consonant clusters that go against English clustering habits (for example, “th’sea” and “th’loss”). (Chatman 1960:152-153 and 162-163)

The underlying (C)V(V) syllable structure that Tahitian shares with other Polynesian languages may render irrelevant many of the syllable controlling schemes described above. Schemes pertinent to vowels, however (i.e. synaeresis and monosyllabification), may prove to be of value.

2.4.2.1.1 Examples of sound parallelism

Lord provides an example from a Serbo-Croatian epic of assonance and an inverted pattern of alliteration:

The importance of alliteration is apparent in such a line as “Kazaše ga u gradu Kajnida,” “They pointed him out in the city of Kajnida,” in which the k-g alliteration is arranged in chiastic order, k-g-g-k. Nothing would seem to have hindered the singer from using u Kajnida gradu in the second half of the line, but he appears to have preferred the chiastic order, in part also perhaps under the influence of the a-u-a-u assonance in the middle of the line. The singers have a
sensitivity to proportion and completeness of form even within the limits of a single line.  
(Lord 1960:42)

Lord notes that in Serbo-Croatian epics patterns of alliteration and assonance guide the use and deployment of oral poetic formulae. Their sound clusters are organized by a “key word”, which appears to bridge “idea and sound” (Lord 1956:302 cited in Foley 1988:40).

Hawaiian poets would sometimes “indulge in ‘linked assonance,’ by which the sounds of the last word of one verse echo in the first word of the next” (Roberts 1926:66 and Elbert & Mahoe 1970:11, cited in Love 1991:82).

According to Love, rhyme has found widespread use in the oral poetry of Fiji and of Western Polynesia, but nowhere else in Polynesia (Love 1991:82). Horatio Hale states that in Fijian oral poetry, the *vowels* of the last two syllables of a stanza’s first line should be similarly repeated in each succeeding line. To the degree that this is achieved, “the better is the poetry esteemed” (Hale 1846:384 cited in Love 1991:83; my emphasis). Quain remarks that, “Consonants have no importance in [Fijian] rhyme” (Quain 1942:15).

Concerning rhyme in Tonga, Collocott observes that, as was noted for Fijian, “interposition of a consonant [between rhyming vowels] does not destroy the rhyme” (Collocott 1928:63 cited in Love 1991:83). He further notes that “each verse in a stanza ends in the same pair of vowels; and, as in Fiji, a change in pairs can signal the beginning of a new stanza” (Collocott 1928:63 cited in Love 1991:83).

As for rhyme in Samoa, Richard Moyle states that, “Samoan poetry is characterized by the predominance of a single assonant rhyme in shorter creations and two or three assonant rhymes in longer works” (Moyle 1975:238 cited in Love 1991:84). In the case of *solo* poetry, Love finds an average ratio of rhyming to total verses of 83%, with a variation of 18% (Love 1991:90-91).

As with Fijian and Tongan rhyme, consonants in Samoan rhyme have no value (Love 1991:87). Love additionally notes that Samoan rhyming rules treat the vowel pairs /ae/ and /ai/ as equivalent (Love 1991:88).
Concerning the intentional application of rhyme and its chance occurrence in prose, Love provides the following percentages of rhyme use observed for some genres of non-poetic Samoan, where the end of a clause has been substituted for verse boundary:

- Prose written by a native: 40%
- Prose written by a foreigner: 43%
- Prose written by committees: 47%
- Speech in conversation: 51%
- Speech in narration: 54%

(Love 1991:94)

It seems somewhat surprising that the frequency of non-poetic Samoan rhyming is so high. The degree of rhyming mentioned for solo poetry is, after all, just 83%. Nevertheless, Love remarks that “Sāmoans assert they feel no rhyme in nonpoetical discourse” (Love 1991:95). Love notes that written passages tend to rhyme less than spoken ones, which may be due to spoken language being less “worked-over” (Love 1991:94).

2.4.2.2 Parallelism of morphology, syntax, and semantics

2.4.2.2.1 Repeated morphological and syntactic features

Jakobson provides the following not necessarily exhaustive list of morphological and syntactic features that have been observed to repeat poetically:

1. Parts of speech, both mutable and immutable
2. Numbers
3. Genders
4. Cases
5. Grades
6. Tenses
7. Aspects
8. Moods
9. Voices
10. Classes of abstract and concrete words
11. Animates and inanimates
12. Appellatives and proper names
13. Affirmatives and negatives
14. Finite and infinite verbal forms
15. Definite and indefinite pronouns or articles
16. Diverse syntactic elements and constructions
(Jakobson 1968:604)

2.4.2.2 Semantic parallelism

The analysis of meaning proceeds differently for poetry than for prose. Poetry requires a more detailed search, and is open to the possibility of meaning at multiple levels. Jakobson proposes that the constituents of a lexicalized compound may regain their semantic value. He suggests, for example, that “‘Cocktails’ may resume their obliterated kinship with plumage” (Jakobson 1960:376-377).

Analysis of meaning in poetry presumes a high level of semantic organization. Jakobson remarks that “Similarity superimposed on contiguity imparts to poetry its thoroughgoing symbolic, multiplex, polysemantic essence ... anything sequent is a simile” (Jakobson 1960:370).

2.4.2.2.1 Relationship between sound and meaning

Jakobson feels that sound symbolism is integral to meaning in poetry. He remarks that in poetry, “the internal nexus between sound and meaning changes from latent into patent and manifests itself most palpably and intensely” (Jakobson 1960:373). Concerning sound and meaning parallelism, Jakobson proposes that the occurrence of sound similarity will naturally invite evaluation as to whether or not there is also a similarity and/or dissimilarity of meaning (Jakobson 1960:372).

Hymes notes that a word that sums up or expresses the theme of some short lyrics will often contain the lyrics’ dominant sounds. In this way, “there is a coming together both of sound and meaning” (Hymes 1960:128-129). James Lynch found this to be the case in Keats’ sonnet “On First Looking Into Chapman’s Homer”, where the word silent both sums up the sonnet’s theme and dominates its sound structure (Lynch 1953:219 cited in Hymes 1960:110-111).

2.4.2.2.3 Canonical parallelism

In 1778, Robert Lowth first brought to light a style of semantic parallelism common to Hebrew poetry of the Old Testament. He states:
The poetical conformation of the sentences, which has been so often alluded to as characteristic of the Hebrew poetry, consists chiefly in a certain equality, resemblance, or parallelism between the members of each period; so that in two lines (or members of the same period) things for the most part shall answer to things, and words to words, as if fitted to each other by a kind of rule or measure. This parallelism has much variety and many gradations; it is sometimes more accurate and manifest, sometimes more vague and obscure ...

(Lowth 1829:157)

A host of researchers were quick to investigate the poetic style described by Lowth, which is referred to by Jakobson as canonical parallelism (Fox 1977:60), and by some others simply as parallelism. It has been detected in much of the oral, and in some of the written poetries of the world.

In some traditions, such as certain genres of poetry from East Asia, matching semantic elements occur primarily within a repeating syntactic frame. William Norman points out that the Chinese and Japanese have long had “a considerable body of native scholarship on the subject” (Norman 1980:387). He notes, though, that a syntactic frame is not a requirement for material from the Old Testament (Norman 1980:390-391).

Robert Alter observes that Biblical parallelism occurs at the level of the word or the statement, and its elements have either a linear (e.g. $a b a' b'$) or chiastic (e.g. $a b b' a'$) ordering. We find an example of the latter in the lines (in translation) “he preserves the powers of justice” followed by “and the way of his faithful ones he guards” (Alter 1985). Alter elaborates that generally “the dominant pattern is a heightening of specification of ideas, images, actions, themes ... instead of listening to an imagined drumbeat of repetition, we need constantly to look for something new happening” (Alter 1985).

It is possible that canonical parallelism is more common to oral rather than written delivery of traditional material. For example, Phillips finds that for a particular West Sumatran sijobang, 37% of its oral recitation consisted of canonical parallelism, as compared to just 8% in a printed version of the same narrative (Phillips 1981:115).
2.4.2.2.3.1 Paired elements

Norman observes that in Hebrew, conventional pairs can either be semantically synonymous (e.g. people/nation, mountain/hill) or antithetical (e.g. rain/dew, weep/mourn). They form part of a conventional repertoire. One such stock pairing (in translation) is “head” and “pate”. For example, “may they be on the head of Joseph, and on the pate of the devoted one of his brothers” (Genesis 49:26), or “his villainy returns upon his head, and upon his pate his violence descends” (Psalms 7:17). Norman observes that “head” and “pate” also form a stock pair in Ugaritic poetry (Norman 1980:390-391). Stanley Gevirtz has inventoried over sixty pairs of parallel terms common to Ugaritic and Hebrew, which “constituted for the Syro-Palestinian poet … one of the ‘essentials of his craft’” (Gevirtz 1963:8-11).

In many traditions there is a limit, often recognized by both oral poet and audience alike, of the range of words which may pair. In the case of Rotinese, “the use of a word that does not belong to that range will prompt knowledgeable Rotinese to click their teeth and even stop a recitation” (Fox 1988:24)

Below is an example Fox provides of potential pairings for the Rotinese word for “earth”, compared with a corresponding list for Rindi:

Rotinese:

\[ \text{dae} \] ("earth, land, below")

\[ \text{dae} // \text{ai} \] (“tree, wood”)\(^{10}\)
\[ \text{dae} // \text{oe} \] (“water”)
\[ \text{dae} // \text{batu} \] (“stone”)
\[ \text{dae} // \text{lai (n)} \] (“sky, above”)
\[ \text{dae} // \text{tua} \] (“lontar palm”)
\[ \text{dae} // \text{dale} \] (“inside”)
\[ \text{dae} // \text{de’a} \] (“outside”)
\[ \text{dae} // \text{dulu} \] (“east”)

\(^{10}\) Double forward slashes (“//”) separate terms of a canonical pair.
Rindi:

\[\textit{tana} \ (“\text{earth, land, soil, country, ground}”)\]
\[\textit{tana // ai} \ (“\text{tree, wood}”)\]
\[\textit{tana // wai} \ (“\text{water}”)\]
\[\textit{tana // watu} \ (“\text{stone}”)\]
\[\textit{tana // awangu} \ (“\text{sky}”)\]
\[\textit{tana // rumba} \ (“\text{grass}”)\]
\[\textit{tana // luku} \ (“\text{river}”)\]
\[\textit{tana // pindu} \ (“\text{gate}”)\]
\[\textit{tana // paraingu} \ (“\text{domain}”)\]

(Fox 1988:25)

Fox suggests that understanding the pairing requirements of a composition is essential to an understanding of its nature (Fox 1988:23). He states that “in communication of this kind, parallelism is promoted to the status of canon, and paired correspondences, at the semantic and syntactic levels, result in what is essentially a dyadic language - the phenomenon of ‘speaking in pairs’” (Fox 1988:1).

There can also be direct parallelism of lexical items. Hymes demonstrates this in a Klikitat Sahaptin example containing the recurring thematic words (in translation) “people” and “land”:

The key words, ‘people’ and ‘land’ occur in the first two lines of the third, last verse, of the particle-marked first part. In the four remaining parts, which lack much in the way of particle-marking, ‘people’ occurs in the last line in all, accompanied by ‘land’ in the preceding line in the second and fifth; by another use of ‘people’ in the preceding line in the fourth; and by ‘different’ ... in the second and fourth ... Many times, when a sequence of initially marked lines and verses does not seem to have a clear organization into parts, the patterning becomes clear when one has discovered the recurrent ending-point to which each part builds”. (Hymes 1980:23-24)

Hymes subsequently claims that the importance of such organization cannot be exaggerated. The patterning is not mechanical, as with “the four lines of a quatrain, the five lines of a limerick, the six lines of a stanza of a sestina”, but rather a pattern, as it proceeds, arouses and fulfils expectations, which seems to be “the case with all traditional literary form” (Hymes 1980:23-24).

Peter Boodberg offers an interesting ocular metaphor for such pairings, suggesting that “parallelism is not merely a stylistic device of formularistic
syntactical duplication; it is intended to achieve a result reminiscent of binocular vision, the superimposition of two syntactical images in order to endow them with solidity and depth, the repetition of the pattern having the effect of binding together syntagms that appear at first rather loosely aligned” (Boodberg 1954-55 cited in Fox 1988:28)

2.4.2.3.2 Examples of canonical parallelism

According to Norman, Nahuatl poetry is quite similar to Hebrew in its use of canonical parallelism. Below is an example:

4) \textit{tel ca chalchiuitl no xamani}  
   if it is jade it shatters  
   \textit{no teocuitlatl in tlapani}  
   if it is gold it crumbles

5) \textit{ayac chalchiuitl}  
   no one into jade  
   \textit{ayac teocuitlatl mocuepaz}  
   no one into gold will transform himself

6) \textit{ma nel chalchiuitl}  
   even if you were jade  
   \textit{ma nel teocuitlatl}  
   even if you were gold  
   (Norman 1980:390-391; Norman’s emphasis)

Some of the conventionally paired items in Nahuatl poetry are \textit{xochitl} ("flower") and \textit{cuicatl} ("song"), \textit{cuauhtli} ("eagle") and \textit{ocelotl} ("jaguar"), \textit{chalchiuitl} ("jade") and \textit{teocuitlatl} ("precious metal") (Norman 1980:390-391).

Quiché also exhibits semantic pairing, but of a wider range as compared to Hebrew or Nahuatl. Norman finds that pairs can be polar opposites (e.g. “day, night”, “mountain, plain”, “foot, hand”), can differ just by a single semantic component (e.g. “hunger, thirst”, “lake, ocean”), can be near synonyms (e.g. “road, path”, “guard, sentinel”), can represent contiguity (e.g. “fire, trivet”, “ravine, town”), and can represent successive numbers (e.g. “one act of kneeling, two acts
of kneeling”). Norman describes as well a type of pseudo-parallelism for semantic classes that contain a large number of members (e.g. trees, plants, animals). The first item of a pair is modified by the adjective q’ana (“golden”), and the second by the adjective saqa (“silver”); for example (in translation) “golden cowbird, silver cowbird, golden Inca dove, silver Inca dove” (Norman 1980:392-393).

Unlike Hebrew poetry, semantically paired items in Quiché must hold an identical syntactic relation to their respective clauses, with “word-for-word identity between the other lexical items occupying corresponding syntactic positions in the two clauses” (Norman 1980:392-393).

Norman provides the following well-formedness condition for these constructions:

1. Parallel terms must be content words, and they must belong to the same lexical class.
2. Parallel terms must share a number of semantic components.
3. Both terms of a pair must appear in the same syntactic frame.
4. No member of one pair can intervene between the first and second members of another pair.
5. Paired terms which are derived from more basic paired terms must have identical derivational affixes. (Norman 1980:394)

Below is an example from a ceremonial speech delivered at a Quiché marriage ritual:

*karaj ne7 (x)sagirik*
p-erhaps it-got-light

*karaj ne7 spakataj jun saantalaj uwach uleew*
perhaps it-dawned a holy world

*sneek ‘aama chu7loq*
I-was-brought now-here

*sneevoaka chu7loq*
I-was-raised now-here
chwa ri nutz ’aaq
before the my-wall

chwa ri nuk ’uxtuum
before the my-fortress

chwii nub ’ineem
above my-walking

chwii nuchakaneem
above my-crawling
(Norman 1980:388; Norman’s emphasis)

Fox provides an example of similar syntactic frame parallelism from Tzotzil
(in translation):

Jaguar Animal of heaven,
Jaguar Animal of earth.
Patron of heaven,
Patron of earth.
Your legs are lame, Jaguar Animal,
Your legs are long, Jaguar Animal.
Your whiskers are spiny, Jaguar Animal,
Your whiskers are long, Jaguar Animal.
Get up, father,
Get up, mother.
Stand up, father,
Stand up, mother.
Rise up, father,
Rise up, mother.
(Fox 1977:75)

A slightly looser example of a syntactic frame pattern is provided by Sherzer
from the Kuna magical chant “The way of the snake”:

63. kan apisu tar sokekwic i
the specialist is saying

64. “naka pe kakkulapilli mekwitemalatti
“indeed how your lips were placed on

65. kana wisikusarpaye
the specialist knows well”
66. *kanati sokekwicikuaye*
   the specialist is saying

67. *kan apisu tar sokekwici*
   the specialist is saying

68. “*pe akkukala yoletemalatti*
   how your chin was put in place

69. *pe akkukala samattar kutemalattiye*
   how your lower chin was formed

70. *kana tar wisikusarpaye”*
   the specialist knows well”

71. *kanati tar sokekwicitarkuaye*
   the specialist is saying

72. *naka tar kanapisuatisokekwicikasainiye*
   indeed the specialist is saying

73. “*pe ipiyakwakwakana kuttusikwitemalatti*
   “how your pupils were formed

74. *kanati wisikusarpayu*
   the specialist knows well”

75. *kana sokekwici*
   the specialist is saying

76. *kanapisuatisokekwicikusainiye*
   the specialist is saying

77. “*pe kwapina tukku yoletemalatti*
   “how the point of your tongue was put in place

78. *kana wisikusarpayu”*
   the specialist knows well”

79. *kanati sokekwici*
   the specialist is saying
   (Sherzer 1990:258-261)

Sherzer remarks that frame-parallelism in this type of Kuna chant facilitates
the memorization and performance of lists. He notes that it is common for long
taxonomies to be projected onto line, verse, and stanza (Sherzer 1990:249).
Sebeok provides an example that demonstrates the complex semantic parallelism of a Cheremis sonnet:

1. *iumən kükü ačam kodəldaleš*
   sky’s cuckoo, my father, remains

2. *kükü šuldər abam kodəldaleš*
   cuckoo wing, my mother, remains

3. *iumən barseŋge izam kodəldaleš*
   sky’s swallow, my elder brother, remains

4. *barsenje šuldər iəŋgam kodəldaleš*
   swallow wing, my elder brother’s wife, remains

5. *keŋež ləbe šol ʻəm kodəldaleš*
   summer butterfly, my younger brother, remains

6. *ləbe šuldər šüžarem kodəldaleš*
   butterfly wing, my younger sister, remains

7. *keŋež saska ške kaialam*
   summer flower, myself, I depart

8. *saska peledəšem kodəldaleš*
   flower blossoms of mine remains

(Sebeok 1960:224-227)

Sebeok notes that:

The terms on the left side constitute a class of living things, exclusive of human beings. The members of this class resolve into sets of paradigm-like lexical oppositions, of three degrees [sic] of inclusiveness: flora (/saska/ ‘flower,’ in the couplet) versus (alar) fauna, which divides into insect (/ləbe/ ‘butterfly,’ 5-6) versus birds, which, in turn, divides into swallow (/barsenje/, 3-4) versus cuckoo (/kükü/, 1-2). The habitat of the butterfly and the flower is specified temporally (/keŋež/ ‘summer’), as against the spatial identification of that of the birds (/iumən/ ‘sky’s’).

Another dichotomy then crosscuts all of these. A proportion is established where the wing (/šuldər/) is to the creature as the blossom (/peledəš-/) is to the fruit. This is a transverse synecdoche, where the *pars* in the even-numbered lines stands *pro toto* in the odd-numbered lines.

The foregoing variety of contiguous relationships may finally be reduced to a single underlying dichotomy: superordinate versus subordinate. Each member of the class is superordinate to each successive member, and vice versa.

(Sebeok 1960:231)
Canonical parallelism is widespread in the oral poetry of Austronesian languages. In the late 19th century, James Sibree describes “a kind of rhythm very closely resembling the parallelism of Hebrew poetry” in formal Malagasy speeches (Sibree 1880:148). At another edge of Austronesia, Fox remarks that the Hawaiian *Kumulipo* creation chant “provides an excellent example of the extended use of [canonical] parallelism” (Fox 1988:9).

Austronesian canonical parallelism, however, is perhaps most developed in the oral poetry of Indonesia. Below are a few lines of a Kodi divination from eastern Indonesia:

1. *Na wolo huda koko*  
   Who tightened his throat in anger,

2. *Na rawi raka ate*  
   Who embittered his liver with rage,

3. *Na boghe halili ana wawi*  
   So that he let the piglet fall from his armpit,

4. *Na weiha kapa ana manu*  
   So that he let the chick slip from his wing,

5. *Ba duki waingo a mate*  
   Until death was able to come in,

6. *Ba toma waingo a mbunge*  
   Until disappearance arrived,
   (Hoskins 1988:35)

Below are the beginning lines of a chant delivered by a Lionese-speaking village priest on Flores:

1. *Nitu lédo*  
   May *nitu*-spirits make you lose your way,

2. *Pa’i pénggo*  
   May *pa’i*-spirits bend your way,

3. *Pa’i lai lowo*  
   *Pa’i* spirits who walk along the rivers,
4. *Juu lêta wolo*
   *Juu*-spirits who walk on the mountains,
(Aoki 1988:214)

And below is an example of canonical parallelism from a West Sumatra *sijobang* narrative:

1. *bukan mbo ka salah tanyo,*
   I shall not make offensive enquiries,

2. *olun badan ka salah sudi,*
   nor shall I ask offensive questions,

3. *Kombanglah batin nan talotak,*
   Unfold the concealed secret,

4. *bukaklah raik nan tasimpan,*
   disclose the hidden mystery,

5. *Ambo barumah topi jalan,*
   I have a house at the roadside,

6. *dénai bakampueng topi lobueh,*
   I have a homestead at the way-side,
(Phillips 1981:114-115)

Love notes that for Samoans, a pleasing perception of balance in a verse involves semantic parallelism (Love 1991:68-69). A pair of cola can manifest this by semantic duplication or contrast. The following five verses are examples of duplication:

(l) *lau o le fiso* | *lau o le tolo*
   leaf of the fiso | leaf of the tolo

(m) *ʻou te lē lilo* | *ʻou te lē lanu*
   I’m not hidden | I’m not rinsed

(n) *ʻua ʻou to ʻese* | *ʻua ʻou tōvale*
   I make apology | I beg pardon

(o) *ʻausa ʻina manū* | *ʻausa ʻina mala*
   swam lucky | swam hapless
And in the following three verses we notice semantic contrast:

(q)  *ifo i Li’u | a’e i Fuiono*
      down at Li’u | up at Fuiono

(r)  *e lau ‘i ‘ula | ‘a e pou ‘i toa*
      thatched in crimson | but posted in ironwood

(s)  *‘emo le uila | pā le pātasi*
      the lightning flashes | the thunder rolls

(2.4.2.3 Poetic use of contrast to parallelism)

Whereas meter and repetition may establish a pattern, poetry sometimes takes advantage of the effect that results from breaking that pattern. Jakobson states that sound texture is “far from being confined to numerical contrivances, and a phoneme that appears only once, but in a key word, in a pertinent position, against a contrastive background, may acquire a striking significance” (Jakobson 1960:373-374).

Hymes gives an example of use of contrast in Wordworth’s sonnet “London, 1802”. Its word “duties” contains the only weighted occurrence of /uw/ in the poem and acts as a place marker for the following words “on herself” which, he proposes, summarize the poem’s meaning and sound (Hymes 1960:120).

(2.5 A Polynesian and Oceanic context for Tahitian oral poetry)

This chapter so far has discussed the role of poetics within language, surveyed the field of oral studies, and, in the sections that discuss meter and parallelism, inventoried methods of poetic organization employed in many disparate traditions of the world. An effort will next be made to establish a Polynesian and Oceanic context for the early Tahitian material.
Finnegan remarks that oral tradition in Oceania is extremely rich, with traditions of “panegyric and cosmological poetry, dance-songs, religious poems, war and abusive poetry, love lyrics, topical songs, hymns, story-telling and oratory”. She notes that oral tradition has been most specialized in Polynesia; for example in Hawaii, Tahiti, and New Zealand (Finnegan 1988:86). Luomala remarks that the literary specialization of the Polynesians “ranks the area with Ancient Greece, India, and Scandinavia in the earliest era of the bards” (Luomala 1950:879).

Bacil Kirtley similarly states that:

Polynesians created an extremely elaborate cosmogony and cosmology--at least as complete as that of ancient Greece--compiled in several island groups by priestly specialists bent, apparently, upon reducing to the metaphor of their culture much of the imminent universe. (Kirtley 1971:iv)

Kirtley remarks that in Polynesian oral narrative, ideas relating to abstract ethical concepts were rarely treated (Kirtley 1971:iv). This would be in line with Havelock’s observation, mentioned above, that tradition in an oral culture is generally “taught by action, not by idea or principle” (Havelock 1986:75-77).

According to Kaeppler, the same is perhaps true of all of Oceania.

In Oceania there were no long epics to teach abstract moral, as in the Ramayana, no dichotomy of good and evil to be dramatized, as Rangda and Barong of Bali, no insistence on filial piety in which a father’s death or injury must be revenged at all costs, as in Japan. Here, instead, were stories that explained the familiar world and how it came to be the way it is, and stories that sang the praise of the chiefs and their genesis from the beginning of time. Thus, in contrast to Asia, the literature of Oceania was less extensive, less abstract, did not lend itself to dramatization, and was more concerned with explaining the here and now. This traditional literature was even more well known to the people than its counterpart was in Asia because it was useful and relevant from day to day and gave the time-honored sanction of tradition to ordinary affairs as well as to the stratified sociopolitical system of which it often was a part. (Kaeppler 1976:197)
2.5.1 Manner of delivery

Some oral genres in Polynesia were sung, while others were spoken or chanted. In Henry (1928), where source information for transcribed texts has been provided, they are occasionally labelled as “chants”, but never “songs”, and their manner of delivery is almost always “recited”, but never “sung”. In regards to the manner in which an unsung Samoan solo is delivered, Love notes, as mentioned above, the following, “[the oral poet’s] pitches wandered for a phrase or two, and eventually settled on a pitch-area a little below the midpoint of her speaking-voice” (Love 1991:56).

2.5.2 Relationship of genealogy to creation myths

Handy observes in the Marquesas that at a festival for the birth of a chieftain’s child, the focus was on recitation of the creation chant and genealogies (Handy 1930:89). Monberg suggests that “the Polynesian creation chant is in fact a kind of commentated genealogy with an introduction [which] is also true of the myths of the Society Islands”. He proposes that just as there is a connection between chiefly genealogies and creation mythologies, there is “some connection between the birth of a chieftain and the creation of the world” (Monberg 1956:272).

Concerning genealogy and its importance in Tahiti, Ariʻi Taimai states that “every family kept its genealogy secret to protect itself from impostors and every member of the family united to keep it pure” (Adams 1968:17). Handy notes that, “on the Marquesas Islands each family had its own version of the creation chant, which seems to have been preserved as a family treasure in the same way as the genealogies” (Handy 1923:332 cited in Monberg 1956:274).

2.5.3 Contact between oral traditions

2.5.3.1 Fiji-Samoa-Tonga cultural triangle

Several authors note that Fiji, Samoa, and Tonga constituted an economic and cultural triangle. From Cook’s travels, John Martin remarks, “The night dance
which Captain Cook saw ... is the only one accompanied throughout with Tonga songs: the rest ... are accompanied chiefly with Hamoa [sic] songs” (Martin 1817 cited in Love 1991:82). Burrows notes that, “Western Polynesia ... appears to have acquired its special characteristics to a great extent by diffusion from Fiji” (Burrows 1940:361 cited in Love 1991:82). Concerning oral tradition, Love states that the use of rhyme occurred throughout the three island groups, however was rare in the other parts of Polynesia (Love 1991:82).

2.5.3.2 Contact between Samoa and the Society Islands

Monberg describes a widespread Polynesian creation tradition that includes a “divine marriage between the first male and female beings, Rangi and Papa, or, as the case may be, Tumu and Papa, or Vatea and Papa”. From this union is the origin of all life (Monberg 1956:267-268). John Charlot proposes that after a period in which Samoan and Society Island traditions developed independently, the novel Samoan creation myths of Tangaloa (Tahitian “Ta’aroa”) were introduced to the Society Islands (Charlot 1985: 177-178).

Monberg notes that Tangaloa myths are found in the Manua island group in the eastern part of Samoa. He mentions a solo transcribed by Reverend T. Powell in 1870 that states how Tangaloa, after encountering only ocean in the world, first creates islands, and then sends from heaven a vine begetting maggots which turn into humans. Creation in Polynesia would otherwise take place through copulation, but in the Tangaloa/Ta’aroa tradition it is via commands (Monberg 1956:258).

Concerning the challenges Society Islanders underwent in their integration of Ta’aroa creationism, Charlot suggests that the Society Island redactor:

... finds the desired unity behind his discordant traditions in the multi-faceted person of Ta’aroa himself. That is, he substitutes a consistent description of Ta’aroa for an inconsistent collection of traditional narratives. By merely alluding to those stories, he avoids the problems of telling them ... [these] solutions to a clearly acute problem demonstrate impressively the continuing vigor and creativity of Society Islands theological speculation. (Charlot 1985:180)
The fact that traditional content may have been borrowed does not necessarily imply that Samoan poetic organization was adopted as well. However, it would seem to suggest that Tahitian oral poets received some exposure to Samoan poetry.

2.5.3.3 Proposal of a Biblically-inspired Ta`aroa

It has been suggested that Ta`aroa arose as god of creation post-Contact, being somewhat analogous to the God of the Old Testament. Monberg argues that this was probably not the case. He notes that the creation myths in which Ta`aroa dominates seem completely void of Christian thought (Monberg 1956:271). Furthermore, at the time of Cook’s second voyage to Tahiti, which occurred more than 20 years before the arrival of Christianity, Cook had already made note of Ta`aroa in relation to the creation story:

Creation origl. cause of things by many names: Tarroutahitoomoo Tarroa origl. stock--most commonly Tarroa or Tetoomoo--existed before everything except of a rock ...
(Carrington 1939:30)

2.5.3.4 Contact between Oceanic and extra-Oceanic oral traditions

Some motif evidence is suggestive of contact between Oceanic and extra-Oceanic oral traditions. Stith Thompson defines a motif as “the smallest element in a tale having the power to persist in tradition”. He notes that there are three classes of motif: actors (e.g. gods, marvellous creatures, conventionalized human characters), background items (e.g. magic objects, unusual customs, strange beliefs), and single incidents. Thompson notes that it is the single incident class that “can have an independent existence and that may therefore serve as true tale-types” (Thompson 1951:415-416).

Kirtley notes that only a small percentage of Polynesian narratives occur in a large number of island groups, and no tale can be found in its entirety over the extent of Polynesia (Kirtley 1971:vii). Despite indigenous narrative themes being confined to limited contiguous areas, however, “considerable numbers of motifs
and types are shared between groups, often far removed from one another”.
Kirtley further observes that, “A smaller amount of Polynesia’s mythic ideas occurs also in other regions of Oceania, and a still slighter quantity of story materials exists in both Polynesia and extra-Oceanic areas” (Kirtley 1976:235).

Kirtley describes several possible instances of extra-Oceanic motif borrowing. One of these is the swan-maiden, which describes a mythical creature who can shapeshift from human to swan form. William Lessa proposes that the motif originated in India, and then spread into Southeast Asia and Oceania as far as Australia and the Tuamotus (Lessa 1961:160-166).

A second possibility is the vagina-dentata motif, concerning a woman with teeth or fangs in her vagina for the purpose of savaging lovers. It is found in Siberia, North and South America (Hatt 1949:85-87 cited in Kirtley 1976:233), in Japanese and Indic folklore (Penzer 1952:41-44), among the Vataan Ami people of Taiwan (Eberhard 1964:51), and in Polynesian tales from the Marquesas to Samoa. Kirtley proposes that this motif diffused from an eastern Asian matrix (Kirtley 1976:233).

A third possibility is posthole-murder, which could suggest diffusion to or from the Americas. In this motif, a trickster boy has offended older boys, who then lure him into a hole into which they intend to place a house post. The younger boy escapes by trickery or the help of animals, and ends up mocking his would-be murderers from the top of the post (Kirtley 1976:233-235).

In Oceania, this motif is found in several areas of Melanesia, in the Olofat/Nareau mythic cycle of Micronesia, in Tuvalu in Polynesia, and in Polynesian outliers Nukumamu, Ontong Java, and Tikopia (Lessa 1961:393-402 and Firth 1961:101). Leo Frobenius describes a distribution that covers the United States, Central America, and north-western South America (Frobenius 1938-1940:7, 8, map 3 cited in Kirtley 1976:233-235). A strong cognate motif lying “quite within the canon of the narrative type as it occurs in Oceania” is found in the Quiché Mayan Popol Vuh (Goetz and Morley 1950:99-101).

Some motifs are so universal that it may almost be argued that they arose from the collective unconscious rather than a pattern of diffusion. Kirtley describes a tale that combines a nearly universal land-of-amorous-women motif
with the more restricted hero’s-introduction-of-natural-childbirth. In Polynesia, Beckwith locates versions of the tale in the Marquesas, the Tuamotus, Rotuma, Rapa, Rarotonga, New Zealand, and Niue (Beckwith 1940:498-504). It is also found in Melanesia (Riesenfeld 1950:360-361), Fiji, and Micronesia. Kirtley summarizes the Marquesian version as follows:

... when a hero is abandoned at sea and swallowed by a fish, he cuts his way out and comes ashore at an Isle of Women, where the inhabitants take pandanus roots as husbands. He weds a woman, makes her pregnant, and then teaches the islanders the art of natural childbirth as an alternative to their deadly Caesarean practice ... When his hair eventually begins to gray and his wife shows no sign of age, he leaves the island for his first home. (Kirtley 1976:233-235)

Outside of Oceania, hero’s-introduction-of-natural-childbirth is found along the Northwest Coast and in the Cumberland Sound region of North America (Hatt 1949:83-84 cited in Kirtley 1976:233-235). Far more widespread is the land-of-amorous-women motif, which is found among the Atayal people of Taiwan (Norbeck 1950:37-39), and in North America, China, India, Greece, and Ireland (Kirtley 1976:233-235).

The above examples suggest the likelihood of some contact between Oceanic and extra-Oceanic oral tradition. Of perhaps special interest is the possibility of motif diffusion from a Formosan Austronesian homeland, and motif borrowing between Polynesia and the Americas; unless these latter may be attributed to a much older common Asian source.

2.6 Conclusion

The process of automated pattern detection, which will be discussed in chapter 4, should be capable of recognizing a wide range of possibilities for poetic organization, with an emphasis on the nearby poetries of Polynesia and Oceania. The principal aim of this literature review has been to create an inventory towards that end. It is also hoped that the review will provide an interpretive context for any discoveries that may result from the analysis process.
In the next chapter, solutions will be described for three problematic aspects of the data: its inconsistent orthography, the requirement to constrain analysis to just poetry originally composed in the pre-Contact era, and the need to establish a definition for the Tahitian diphthong, which will be required for the analysis of meter.
3 Data preparation

3.1 Introduction

Nearly all texts of the complete corpus of oral material were originally transcribed in the 19th century. For many, information is lacking concerning the identity of the oral poet, and date and place of recitation. Little or no information is provided regarding style of delivery (e.g. spoken, chanted, sung), the recitation environment (e.g. in front of a native audience or performed directly for a Western transcriber), and other circumstances that relate to the event.

For the purposes of both computationally-assisted and fully manual analysis, several difficulties present themselves in the absence of a sound recording or information-rich transcription. However, solutions have been adopted for three problematic aspects of the data: its inconsistent orthography, the stated requirement to constrain analysis to just oral poetry composed pre-Contact, and the need to establish a definition for the Tahitian diphthong, which will be necessary for the analysis of meter.

3.2 Phonemic reconstruction

All of the texts of the corpus were transcribed by non-Polynesians who appear to have attained fluency in the language. Those transcribed by Ormond, of which the corpus is mostly comprised, may subsequently have been edited by Teuira Henry, who also seems to have been fluent in the language.

The following, however, are some problems relating to the transcriptions:

1. Orthography varies substantially from transcriber to transcriber.
2. There is a significant inconsistency in the notation of glottal stops.
3. Very little vowel length information is provided.
4. Contractions are inconsistently represented as one and two words.

5. Dependent morphemes occasionally appear as separate words.

Moreover, it seems that, with few exceptions, the observed orthographic variation reflects neither the phonetics of the speech signal, nor much else of linguistic interest.

To implement pattern detection techniques on inconsistent orthography would likely result in an unacceptable degree of noise and significantly fewer pattern discoveries. Instead, an effort has been made to phonemically reconstruct, and by so doing normalize, the word forms of the texts.

As it does not appear that the language has undergone significant sound change over the course of the past two hundred years, each word’s modern phonemic information has been applied in its reconstruction\(^{11}\). The translation accompanying a transcription sometimes aided in the selection of a particular form in cases of orthographic ambiguity. In rare instances where phonological information for a word is unavailable, the word has been left unchanged.

A short example of transcription forms and their phonemic reconstruction is given below in (3.1):

(3.1) Extract from “Song of Vairao” (Henry 1928:84-85)

*Orsmond’s transcription:*

1. A pe’e mai e
2. E faa’i rà e ta’ai

*Phonemic reconstruction:*

1. ?a pe?e mai e:
2. e fa?ai: ra e ta?ai

\(^{11}\) The resource consulted is the Tahitian Academy’s *Dictionnaire tahitien-français, Fa’atoro parau tahiti-farâni* (Académie Tahitienne 1999), which has become a standard for information pertaining to the lexicon.
Analysis based upon phonemic reconstructions should yield good results if poetic organization took place at the phonemic level, or, if at the phonetic level, phonemic and phonetic forms were quite similar. At this stage, nothing is yet known concerning the likelihood of either possibility.

Attention will next be turned to the requirement to constrain analysis to just oral poetry deemed to have been composed pre-Contact.

### 3.3 Extraction of an early corpus subset

The complete corpus of transcribed oral material contains 225 texts, comprised of about 75,000 words, which came into print during the 19th and early 20th centuries. The lax criterion for inclusion into this corpus is simply that a text’s contents be purported to have been delivered orally.

As stated in chapter 1, the overall aim of this study is to discover as much as possible concerning the organization of Tahitian oral poetry originally composed and performed in the pre-Contact era. The motivation for this is to avoid any possible effects of European influence, of re-analysis of traditional material subsequent to the society’s conversion to Christianity, of literacy, and of post-Contact stylistic evolution.

Pomare II converted to Christianity in 1812. His power over Tahiti and Mo’ore’a was consolidated in 1815 following victory at the battle of Fei Pi (Oliver 1974:1349-1350). Conversion of most of his subjects seems to have followed suit very soon thereafter (Moerenhout 1993:520-521). It should probably be assumed that by the latter half of the 19th century, few oral poets were still living who had been trained during the pre-Christian era. With this in mind, analysis will be restricted to texts transcribed prior to the year 1850.

Unambiguous recitation dates are available for only 63 of the corpus’ 225 texts, or just 29%. Only 37 of these were first recited before 1850. Of these 37, three, subjectively speaking, seem to represent prose. Therefore, we are certain of pre-1850 dates for only 34 poetic texts.
This represents a small subset of the original corpus. In order to increase its number, an automated method will be applied that will attempt to assign pre- or post-1850 classification to the undated texts.

3.3.1 Automated method for pre- and post-1850 assignment

3.3.1.1 Description of the procedure

Assuming that the evolution from early 19th century to modern Tahitian is observable in a changing use of lexicon:¹²

1. Create a document that contains an assortment of dated pre-1850 poetic texts.

2. Create another document of similar size comprised of a sampling of modern Tahitian prose. Modern Tahitian poetry will not be included in this document, just in case a modern poet has attempted to emulate an older style.

3. Using a vector space method for gauging textual similarity, compare all other texts for which recitation dates are known to the early and modern documents described in 1 and 2.

4. For each text undergoing comparison, determine to which document it is more similar, and by what degree. Do this by subtracting the cosines representing the distance to both the pre-1850 and modern documents.

5. Sort results by the cosine difference (discussed in 3.3.1.2.4 below).

6. If possible, determine a location along the sorted results beyond which nearly all texts pre-date 1850.

7. If a satisfactory pre-1850 threshold can be established, compare as many as possible of the corpus’ 162 undated texts to the early and modern documents. If the cosine to the pre-1850 document minus the cosine to the modern document is greater than a threshold value discovered in step 6, classify the undated text as having been recited before 1850.

¹² Henry remarks upon several such changes. She notes, for example, that the expression *mai tahito mai ai* ("from time immemorial") has become *mai tahito roa mai*, and *hiuhu ‘ai’ai* ("boundless glory") has become *hanahana hope ‘ore* (Henry 1928:336).
3.3.1.2 Implementation

3.3.1.2.1 Contents of the pre-1850 document

Of the 34 pre-1850 poetic texts mentioned in 3.3, the following eight, which seem to be representative, were selected for the pre-1850 document referred to in step 1 of the procedure:

Table 3.1. Oral poetic texts included in the pre-1850 document

<table>
<thead>
<tr>
<th>Text</th>
<th>Poetic genre</th>
<th>Word count</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ahnne (1924:20-23)</td>
<td>anau</td>
<td>434</td>
<td>1824</td>
</tr>
<tr>
<td>Henry (1928:306-307)</td>
<td>rauti</td>
<td>244</td>
<td>1839</td>
</tr>
<tr>
<td>Henry (1928:336-338)</td>
<td>‘a’ai</td>
<td>996</td>
<td>1822</td>
</tr>
<tr>
<td>Henry (1928:340-344)</td>
<td>‘a’ai</td>
<td>1,630</td>
<td>1822, 1835</td>
</tr>
<tr>
<td>Henry (1928:364-371)</td>
<td>‘a’ai</td>
<td>2,598</td>
<td>1823, 1840</td>
</tr>
<tr>
<td>Henry (1928:409-413)</td>
<td>‘a’ai</td>
<td>1,389</td>
<td>1833, 1834</td>
</tr>
<tr>
<td>Henry (1928:413-415)</td>
<td>‘a’ai</td>
<td>1,023</td>
<td>1834</td>
</tr>
<tr>
<td>Henry (1928:445-448)</td>
<td>‘a’ai</td>
<td>1,395</td>
<td>1829</td>
</tr>
</tbody>
</table>

Total word count: 9,709

3.3.1.2.2 Contents of the modern document

A random sampling of ten prose texts discovered on the Internet were included in the modern document, referred to in step 2 of the procedure. These are the following:

Table 3.2. Modern prose texts included in the modern document

<table>
<thead>
<tr>
<th>Text</th>
<th>Prose genre</th>
<th>Word count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aorai (2004)</td>
<td>blog</td>
<td>904</td>
</tr>
<tr>
<td>Arahau (2004)</td>
<td>student essay</td>
<td>2,016</td>
</tr>
<tr>
<td>Porinetia … (2003)</td>
<td>article</td>
<td>940</td>
</tr>
<tr>
<td>Te ma’i aho pau (2003)</td>
<td>article</td>
<td>1,148</td>
</tr>
</tbody>
</table>

13 Glosses for these genre labels are ‘a’ai (“myth”), anau (“lamentation”), and rauti (“battle address”).
14 In neither example of the modern oral history genre does content appear to be traditional.
3.3.1.2.3 Description of the vector space method for determining textual similarity

Applying a vector space metaphor to documents is very popular in Information Retrieval. Each term of a document is represented by a dimension of vector space, with the term’s token count corresponding to dimension length. The resulting multidimensional vector serves to mathematically represent the entire document.

In the present analysis, the surface form of a word will serve as the vector space term. In a different comparison, a term could just as easily be metadata (e.g. a word’s part-of-speech category), or information about more than one word (e.g. a bigram or trigram of adjoining words).

For simplicity, vector length will correspond directly to token count. Therefore, if a word type occurs twice in a document, length along that dimension will be twice that as if the word type had only occurred once.

Even though both pre-1850 and modern documents are of similar size, their weights will be mathematically normalized. In this way, the slightly larger modern document will not receive any undue advantage.

In synchronic vector space comparisons, it is common for a stopword list of function words to be subtracted from each document. This has the effect of both speeding up computational processing, and helping semantically weightier words take the lead in establishing similarity. A stopword list will not be applied for the current procedure, however, because it may be that a change of function word use over time is significant.
Once multidimensional vectors have been calculated,\textsuperscript{15} we can compare one document’s vector to that of another to determine their degree of term similarity. If both documents are identical, the angle between their vectors will be 0°. The angle between vectors is often represented by a cosine value. As the cosine of 0° is 1, similarity is commonly gauged by the cosine’s nearness to 1.

Altogether, only 50 of the 63 dated texts were compared to the pre-1850 and modern documents. Eight of the 63 had already been enlisted to make up the pre-1850 document, and another five texts were considered unusable for other reasons.\textsuperscript{16}

### 3.3.1.2.4 Similarity of 50 dated texts to the pre-1850 and modern documents

Vector space similarity results are shown in table 3.3 below. They have been sorted by difference of cosine value.

<table>
<thead>
<tr>
<th>Cosine difference</th>
<th>Cosine to pre-1850 document</th>
<th>Cosine to modern document</th>
<th>Text</th>
<th>Word count</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 0.02582</td>
<td>0.59977</td>
<td>0.62560</td>
<td>Henry (1928:244)</td>
<td>244</td>
<td>1843</td>
</tr>
<tr>
<td>2. 0.02540</td>
<td>0.62128</td>
<td>0.64668</td>
<td>Caillot (1914:131-141)</td>
<td>2,113</td>
<td>1912-1913</td>
</tr>
<tr>
<td>3. 0.01746</td>
<td>0.59930</td>
<td>0.61677</td>
<td>Henry (1928:245-246)</td>
<td>309</td>
<td>1843</td>
</tr>
<tr>
<td>4. 0.01118</td>
<td>0.58518</td>
<td>0.59636</td>
<td>Caillot (1914:117-124)</td>
<td>1,564</td>
<td>1912-1913</td>
</tr>
<tr>
<td>5. 0.00720</td>
<td>0.54744</td>
<td>0.55465</td>
<td>Henry (1928:522-523)</td>
<td>119</td>
<td>1896</td>
</tr>
<tr>
<td>6. 0.00252</td>
<td>0.53277</td>
<td>0.53529</td>
<td>Caillot (1914:111-113)</td>
<td>334</td>
<td>1912-1913</td>
</tr>
<tr>
<td>7. 0.00243</td>
<td>0.53479</td>
<td>0.53722</td>
<td>Henry (1928:521)</td>
<td>140</td>
<td>1896</td>
</tr>
</tbody>
</table>

\textsuperscript{15}See Manning and Schütze (1999:539-543) for a more thorough description of this method of calculation, and for more regarding application of the vector space model in Natural Language Processing.

\textsuperscript{16}One of these texts was nearly identical to a text included in the pre-1850 document. Four other texts had less than 50 words. The risk of error resulting from artifact becomes much greater when comparing very small texts.
<table>
<thead>
<tr>
<th></th>
<th>Cosine difference</th>
<th>Cosine to pre-1850 document</th>
<th>Cosine to modern document</th>
<th>Text</th>
<th>Word count</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.</td>
<td>0.00599</td>
<td>0.52733</td>
<td>0.52134</td>
<td>Alexander (1893:57)</td>
<td>101</td>
<td>1881</td>
</tr>
<tr>
<td>9.</td>
<td>0.00758</td>
<td>0.50773</td>
<td>0.50014</td>
<td>Caillot (1914:114-116)</td>
<td>391</td>
<td>1912-1913</td>
</tr>
<tr>
<td>10.</td>
<td>0.00849</td>
<td>0.54993</td>
<td>0.54143</td>
<td>Henry (1928:334)</td>
<td>239</td>
<td>1891</td>
</tr>
<tr>
<td>11.</td>
<td>0.01553</td>
<td>0.50631</td>
<td>0.49077</td>
<td>Henry (1897:211-212)</td>
<td>165</td>
<td>1897-08</td>
</tr>
<tr>
<td>12.</td>
<td>0.01705</td>
<td>0.48998</td>
<td>0.47293</td>
<td>Alexander (1893:59)</td>
<td>79</td>
<td>1881</td>
</tr>
<tr>
<td>13.</td>
<td>0.01914</td>
<td>0.62301</td>
<td>0.60387</td>
<td>Henry (1928:444)</td>
<td>251</td>
<td>1825</td>
</tr>
<tr>
<td>14.</td>
<td>0.02107</td>
<td>0.62922</td>
<td>0.60815</td>
<td>Alexander (1893:58)</td>
<td>227</td>
<td>1881</td>
</tr>
<tr>
<td>15.</td>
<td>0.02208</td>
<td>0.63646</td>
<td>0.61438</td>
<td>Henry (1928:332-333)</td>
<td>501</td>
<td>1818</td>
</tr>
<tr>
<td>16.</td>
<td>0.02478</td>
<td>0.68863</td>
<td>0.66384</td>
<td>R.T. (1962:30-34)</td>
<td>1,051</td>
<td>1961-06-09</td>
</tr>
<tr>
<td>17.</td>
<td>0.02513</td>
<td>0.61383</td>
<td>0.58870</td>
<td>Henry (1928:398-399)</td>
<td>400</td>
<td>1840</td>
</tr>
<tr>
<td>18.</td>
<td>0.02584</td>
<td>0.65087</td>
<td>0.62503</td>
<td>Henry (1893:106-107)</td>
<td>426</td>
<td>1890</td>
</tr>
<tr>
<td>19.</td>
<td>0.02673</td>
<td>0.69975</td>
<td>0.67302</td>
<td>Henry (1928:468-470)</td>
<td>679</td>
<td>1825-12-24</td>
</tr>
<tr>
<td>20.</td>
<td>0.02963</td>
<td>0.69083</td>
<td>0.66119</td>
<td>Henry (1928:429-430)</td>
<td>498</td>
<td>1825, 1885</td>
</tr>
<tr>
<td>21.</td>
<td>0.03010</td>
<td>0.73925</td>
<td>0.70915</td>
<td>Henry (1928:423-426)</td>
<td>1,131</td>
<td>1887</td>
</tr>
<tr>
<td>22.</td>
<td>0.03199</td>
<td>0.47651</td>
<td>0.44451</td>
<td>Henry (1928:523-524)</td>
<td>54</td>
<td>1896</td>
</tr>
<tr>
<td>23.</td>
<td>0.03475</td>
<td>0.50265</td>
<td>0.46789</td>
<td>Alexander (1893:58-59)</td>
<td>66</td>
<td>1881</td>
</tr>
<tr>
<td>24.</td>
<td>0.03508</td>
<td>0.73723</td>
<td>0.70214</td>
<td>Henry (1928:431-433)</td>
<td>1,000</td>
<td>1825, 1901</td>
</tr>
<tr>
<td>25.</td>
<td>0.03547</td>
<td>0.56914</td>
<td>0.53366</td>
<td>Henry (1928:383)</td>
<td>117</td>
<td>1825, 1840</td>
</tr>
<tr>
<td>26.</td>
<td>0.03716</td>
<td>0.55960</td>
<td>0.52244</td>
<td>Henry (1928:530)</td>
<td>132</td>
<td>1896</td>
</tr>
<tr>
<td>27.</td>
<td>0.03995</td>
<td>0.53283</td>
<td>0.49287</td>
<td>Henry (1928:464)</td>
<td>128</td>
<td>1854</td>
</tr>
<tr>
<td>28.</td>
<td>0.04201</td>
<td>0.72332</td>
<td>0.68131</td>
<td>Henry (1928:427-429)</td>
<td>1,071</td>
<td>1820</td>
</tr>
<tr>
<td>29.</td>
<td>0.04445</td>
<td>0.62339</td>
<td>0.57894</td>
<td>Henry (1928:461-462)</td>
<td>522</td>
<td>1886</td>
</tr>
<tr>
<td>30.</td>
<td>0.04761</td>
<td>0.62884</td>
<td>0.58122</td>
<td>Henry (1928:308-309)</td>
<td>469</td>
<td>1829</td>
</tr>
<tr>
<td>31.</td>
<td>0.05040</td>
<td>0.54771</td>
<td>0.49730</td>
<td>Henry (1928:531)</td>
<td>132</td>
<td>1896</td>
</tr>
<tr>
<td>32.</td>
<td>0.05373</td>
<td>0.78520</td>
<td>0.73147</td>
<td>Henry (1928:448-452)</td>
<td>1,609</td>
<td>1822, 1824</td>
</tr>
<tr>
<td>33.</td>
<td>0.05966</td>
<td>0.79924</td>
<td>0.73957</td>
<td>Henry (1895:256-291)</td>
<td>9,265</td>
<td>before 1839</td>
</tr>
<tr>
<td>34.</td>
<td>0.06147</td>
<td>0.67040</td>
<td>0.60892</td>
<td>Henry (1928:426)</td>
<td>343</td>
<td>1824</td>
</tr>
<tr>
<td>35.</td>
<td>0.06157</td>
<td>0.62770</td>
<td>0.56612</td>
<td>Henry (1928:191-192)</td>
<td>485</td>
<td>1887</td>
</tr>
<tr>
<td>36.</td>
<td>0.06790</td>
<td>0.58573</td>
<td>0.51782</td>
<td>Henry (1894:136-138)</td>
<td>518</td>
<td>1817</td>
</tr>
<tr>
<td>37.</td>
<td>0.06802</td>
<td>0.58172</td>
<td>0.51369</td>
<td>Henry (1928:399-402)</td>
<td>632</td>
<td>1817</td>
</tr>
<tr>
<td>38.</td>
<td>0.07073</td>
<td>0.74588</td>
<td>0.67514</td>
<td>Henry (1928:437-439)</td>
<td>731</td>
<td>1822 or 1824</td>
</tr>
<tr>
<td>39.</td>
<td>0.07676</td>
<td>0.67006</td>
<td>0.59329</td>
<td>Henry (1928:395-398)</td>
<td>1,576</td>
<td>1840</td>
</tr>
<tr>
<td>40.</td>
<td>0.08206</td>
<td>0.64897</td>
<td>0.56690</td>
<td>Henry (1928:458)</td>
<td>320</td>
<td>1824</td>
</tr>
<tr>
<td>41.</td>
<td>0.08413</td>
<td>0.73187</td>
<td>0.64773</td>
<td>Henry (1928:353-354)</td>
<td>719</td>
<td>1822, 1845</td>
</tr>
<tr>
<td>42.</td>
<td>0.09091</td>
<td>0.75396</td>
<td>0.66304</td>
<td>Henry (1928:339-340)</td>
<td>545</td>
<td>1822, 1824, 1833</td>
</tr>
<tr>
<td>43.</td>
<td>0.09172</td>
<td>0.66424</td>
<td>0.57252</td>
<td>Henry (1928:404-405)</td>
<td>315</td>
<td>1822</td>
</tr>
<tr>
<td>44.</td>
<td>0.09350</td>
<td>0.66034</td>
<td>0.56684</td>
<td>Henry (1928:374-376)</td>
<td>385</td>
<td>1840</td>
</tr>
<tr>
<td>45.</td>
<td>0.09619</td>
<td>0.70757</td>
<td>0.61138</td>
<td>Henry (1928:402-403)</td>
<td>533</td>
<td>1822, 1833</td>
</tr>
<tr>
<td>46.</td>
<td>0.09768</td>
<td>0.62187</td>
<td>0.52418</td>
<td>Henry (1928:307-308)</td>
<td>360</td>
<td>1839</td>
</tr>
<tr>
<td>47.</td>
<td>0.10256</td>
<td>0.76705</td>
<td>0.66449</td>
<td>Henry (1928:415-420)</td>
<td>1,665</td>
<td>1833 or 1834</td>
</tr>
<tr>
<td>48.</td>
<td>0.10414</td>
<td>0.80208</td>
<td>0.69794</td>
<td>Henry (1928:405-407)</td>
<td>1,668</td>
<td>1825</td>
</tr>
</tbody>
</table>
The texts in lines 1 through 7 are lexically more similar to the modern document. For these texts, the cosine difference represents the cosine to the pre-1850 document subtracted from the cosine to the modern document. The texts in lines 8 through 50 are lexically more similar to the pre-1850 document. Here, the cosine to the modern document was subtracted from the cosine to the pre-1850 document.

At the extremes, note that the text in line 1 is much less “modern” than the text in line 50 is “early”. The difference in cosines at line 1 is 0.02582, whereas the difference at line 50 is 0.12675; almost five times as much. This is not surprising. With the exception of the text from 1961 in line 16, all texts pre-date the material comprising the modern prose document by at least 80 years.

The task is to determine whether or not a precision-weighted threshold can be located beyond which nearly all texts pre-date 1850. It would appear that just such a threshold can be found between lines 29 and 30; say at a cosine difference of about .045. Nineteen of the 21 texts from lines 30 to 50 date to before 1850, yielding a precision accuracy of 19/21, or roughly 90%. Eight pre-1850 texts were missed that preceded this threshold, yielding a recall accuracy of 19/27, or about 70%.

3.3.1.2.5 Similarity of 115 undated texts to pre-1850 and modern documents

Of the 162 undated texts, 47 will not undergo comparison because they have been judged to be too small. The results from comparing the remaining 115 texts to the pre-1850 and modern documents are given in table 3.4.

---

17 Each of these 47 texts contained less than 50 words. As mentioned previously, the risk of error resulting from artifact becomes much greater when comparing very small texts.
Table 3.4. Vector space similarity of 115 undated texts to the pre-1850 and modern documents

**Texts that are more similar to the modern prose document (from greatest to least cosine difference)**

<table>
<thead>
<tr>
<th>Cosine difference</th>
<th>Cosine to pre-1850 document</th>
<th>Cosine to modern document</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>0.07420</td>
<td>0.69026</td>
<td>Légende des anguilles ... (2004)</td>
</tr>
<tr>
<td>2.</td>
<td>0.04379</td>
<td>0.51458</td>
<td>Henry (1928:273)</td>
</tr>
<tr>
<td>3.</td>
<td>0.03379</td>
<td>0.54444</td>
<td>Henry (1928:320)</td>
</tr>
<tr>
<td>4.</td>
<td>0.03258</td>
<td>0.55242</td>
<td>Henry (1928:272)</td>
</tr>
<tr>
<td>5.</td>
<td>0.02951</td>
<td>0.42360</td>
<td>Adams (1968:27)</td>
</tr>
<tr>
<td>6.</td>
<td>0.02554</td>
<td>0.57589</td>
<td>Henry (1928:237-238)</td>
</tr>
<tr>
<td>7.</td>
<td>0.02143</td>
<td>0.61446</td>
<td>Henry (1928:318-319)</td>
</tr>
<tr>
<td>8.</td>
<td>0.21369</td>
<td>0.55798</td>
<td>Henry (1928:211)</td>
</tr>
<tr>
<td>9.</td>
<td>0.01882</td>
<td>0.48605</td>
<td>Henry (1928:241)</td>
</tr>
<tr>
<td>10.</td>
<td>0.01676</td>
<td>0.44504</td>
<td>Henry (1928:168)</td>
</tr>
<tr>
<td>11.</td>
<td>0.01563</td>
<td>0.55558</td>
<td>Henry (1928:238)</td>
</tr>
<tr>
<td>12.</td>
<td>0.01502</td>
<td>0.48629</td>
<td>Henry (1928:485)</td>
</tr>
<tr>
<td>13.</td>
<td>0.01485</td>
<td>0.55973</td>
<td>Henry (1928:178)</td>
</tr>
<tr>
<td>14.</td>
<td>0.01460</td>
<td>0.50248</td>
<td>Henry (1928:176-177)</td>
</tr>
<tr>
<td>15.</td>
<td>0.01388</td>
<td>0.54685</td>
<td>Henry (1928:143)</td>
</tr>
<tr>
<td>16.</td>
<td>0.01121</td>
<td>0.59496</td>
<td>Chadourne (1922:74-75)</td>
</tr>
<tr>
<td>17.</td>
<td>0.00791</td>
<td>0.47556</td>
<td>Henry (1928:207c)</td>
</tr>
<tr>
<td>18.</td>
<td>0.00648</td>
<td>0.67603</td>
<td>Henry (1928:150-151)</td>
</tr>
<tr>
<td>19.</td>
<td>0.00416</td>
<td>0.67157</td>
<td>Henry (1928:477-478)</td>
</tr>
<tr>
<td>20.</td>
<td>0.00305</td>
<td>0.45525</td>
<td>Henry (1928:550-551)</td>
</tr>
<tr>
<td>21.</td>
<td>0.00033</td>
<td>0.67173</td>
<td>Lagarde (1937:694-699)</td>
</tr>
</tbody>
</table>

**Texts that are more similar to the pre-1850 oral poetic document (from least to greatest cosine difference)**

<table>
<thead>
<tr>
<th>Cosine difference</th>
<th>Cosine to pre-1850 document</th>
<th>Cosine to modern document</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.</td>
<td>0.00239</td>
<td>0.51140</td>
<td>Henry (1928:504a)</td>
</tr>
<tr>
<td>24.</td>
<td>0.00284</td>
<td>0.54101</td>
<td>Henry (1928:550)</td>
</tr>
<tr>
<td>25.</td>
<td>0.00437</td>
<td>0.77073</td>
<td>Leverd (1912:13-25)</td>
</tr>
<tr>
<td>26.</td>
<td>0.00547</td>
<td>0.53677</td>
<td>Henry (1928:132)</td>
</tr>
<tr>
<td>27.</td>
<td>0.00564</td>
<td>0.39691</td>
<td>Adams (1968:84)</td>
</tr>
<tr>
<td>28.</td>
<td>0.00580</td>
<td>0.67437</td>
<td>Henry (1928:479-480)</td>
</tr>
<tr>
<td>29.</td>
<td>0.00588</td>
<td>0.58007</td>
<td>Henry (1928:74-75)</td>
</tr>
</tbody>
</table>

\(^{18}\) If an identifying source reference is ambiguous because more than one complete text is contained on the same page, order within that page has been indicated by a letter placed after the page number.
| 30. | 0.00590 | 0.49828 | 0.49237 | Henry (1928:210) |
| 31. | 0.00823 | 0.47463 | 0.46640 | Henry (1928:321) |
| 32. | 0.01153 | 0.63127 | 0.61974 | Henry (1928:486) |
| 33. | 0.01179 | 0.40742 | 0.39563 | Adams (1968:25) |
| 34. | 0.01286 | 0.62106 | 0.60820 | Henry (1928:175) |
| 35. | 0.01334 | 0.41871 | 0.40537 | Henry (1928:611-612) |
| 36. | 0.01365 | 0.41029 | 0.39664 | Henry (1928:610) |
| 37. | 0.01379 | 0.52206 | 0.50826 | Henry (1928:171b) |
| 38. | 0.01386 | 0.50225 | 0.48838 | Henry (1928:179) |
| 39. | 0.01455 | 0.56187 | 0.54731 | Henry (1928:210-211) |
| 40. | 0.01456 | 0.56058 | 0.54602 | Henry (1928:490) |
| 41. | 0.01551 | 0.54414 | 0.52863 | Henry (1928:199) |
| 42. | 0.01587 | 0.39702 | 0.38114 | Henry (1928:170) |
| 43. | 0.01646 | 0.59897 | 0.58251 | Henry (1928:471) |
| 44. | 0.01869 | 0.42943 | 0.41073 | Henry (1928:174a) |
| 45. | 0.01907 | 0.50767 | 0.48859 | Adams (1968:35) |
| 46. | 0.01919 | 0.64587 | 0.62667 | Henry (1928:215-216) |
| 47. | 0.02016 | 0.55036 | 0.53019 | Henry (1928:102) |
| 48. | 0.02082 | 0.49826 | 0.47744 | Henry (1928:183a) |
| 49. | 0.02339 | 0.62265 | 0.59925 | Henry (1928:310) |
| 50. | 0.02398 | 0.46697 | 0.44299 | Henry (1928:162a) |
| 51. | 0.02410 | 0.50896 | 0.48486 | Henry (1928:80) |
| 52. | 0.02530 | 0.53543 | 0.51012 | Henry (1928:88-89) |
| 53. | 0.02651 | 0.58246 | 0.55595 | Henry (1928:305) |
| 54. | 0.02765 | 0.48737 | 0.45972 | Henry (1928:240a) |
| 55. | 0.02872 | 0.56056 | 0.53183 | Henry (1928:124-125) |
| 56. | 0.02887 | 0.50273 | 0.47386 | Henry (1928:502b) |
| 57. | 0.03058 | 0.54559 | 0.51501 | Henry (1928:76) |
| 58. | 0.03080 | 0.50054 | 0.46973 | Henry (1928:183b) |
| 59. | 0.03095 | 0.59493 | 0.56397 | Chadourne (1922:72-73) |
| 60. | 0.03208 | 0.50100 | 0.46891 | Henry (1928:166) |
| 61. | 0.03220 | 0.71183 | 0.67963 | Henry (1928:379-380) |
| 62. | 0.03299 | 0.50869 | 0.47569 | Henry (1928:240b) |
| 63. | 0.03430 | 0.67188 | 0.63757 | Henry (1928:172-173) |
| 64. | 0.03540 | 0.59394 | 0.55854 | Henry (1928:394) |
| 65. | 0.03570 | 0.48268 | 0.44698 | Adams (1968:60) |
| 66. | 0.03756 | 0.48307 | 0.44550 | Henry (1928:147) |
| 67. | 0.03777 | 0.52365 | 0.48588 | Henry (1928:165a) |
| 68. | 0.03795 | 0.50958 | 0.47163 | Adams (1968:57-59) |
| 69. | 0.03840 | 0.51023 | 0.47182 | Henry (1928:83) |
| 70. | 0.03934 | 0.50217 | 0.46282 | Henry (1928:146-147) |
| 71. | 0.04291 | 0.51994 | 0.47703 | Henry (1928:155) |
| 72. | 0.04305 | 0.64378 | 0.60072 | Henry (1928:474-475) |
| 73. | 0.04469 | 0.55127 | 0.50658 | Henry (1928:540-541) |
| 74. | 0.04478 | 0.49587 | 0.45109 | Henry (1928:74) |
| 75. | 0.04491 | 0.54630 | 0.50139 | Cadousteau (1987:87-88) |
### Cosine difference threshold (.045) for pre-1850 classification

<table>
<thead>
<tr>
<th>Cosine difference</th>
<th>Cosine to pre-1850 document</th>
<th>Cosine to modern document</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.</td>
<td>0.04654</td>
<td>0.55906</td>
<td>0.51251  Henry (1928:81)</td>
</tr>
<tr>
<td>77.</td>
<td>0.04702</td>
<td>0.57787</td>
<td>0.53084  Henry (1928:158-159)</td>
</tr>
<tr>
<td>78.</td>
<td>0.04757</td>
<td>0.54381</td>
<td>0.49624  Henry (1911:8)</td>
</tr>
<tr>
<td>79.</td>
<td>0.04855</td>
<td>0.58490</td>
<td>0.53634  Henry (1928:300)</td>
</tr>
<tr>
<td>80.</td>
<td>0.04962</td>
<td>0.52663</td>
<td>0.47701  Henry (1928:94-95)</td>
</tr>
<tr>
<td>81.</td>
<td>0.04975</td>
<td>0.53934</td>
<td>0.48958  Adams (1968:37)</td>
</tr>
<tr>
<td>82.</td>
<td>0.05003</td>
<td>0.52190</td>
<td>0.47187  Henry (1928:351)</td>
</tr>
<tr>
<td>83.</td>
<td>0.05318</td>
<td>0.57406</td>
<td>0.52087  Henry (1928:161-162)</td>
</tr>
<tr>
<td>84.</td>
<td>0.05583</td>
<td>0.53976</td>
<td>0.48392  Cadousteau (1987:16-17)</td>
</tr>
<tr>
<td>85.</td>
<td>0.05639</td>
<td>0.55390</td>
<td>0.49750  Henry (1928:114)</td>
</tr>
<tr>
<td>86.</td>
<td>0.05723</td>
<td>0.57531</td>
<td>0.51807  Henry (1928:79)</td>
</tr>
<tr>
<td>87.</td>
<td>0.05928</td>
<td>0.62665</td>
<td>0.56736  Henry (1928:591-592)</td>
</tr>
<tr>
<td>88.</td>
<td>0.06026</td>
<td>0.48996</td>
<td>0.42969  Henry (1928:37)</td>
</tr>
<tr>
<td>89.</td>
<td>0.06282</td>
<td>0.39383</td>
<td>0.33100  Henry (1928:174b)</td>
</tr>
<tr>
<td>90.</td>
<td>0.06338</td>
<td>0.49323</td>
<td>0.42984  Henry (1928:500)</td>
</tr>
<tr>
<td>91.</td>
<td>0.06434</td>
<td>0.68411</td>
<td>0.61977  Henry (1928:433-436)</td>
</tr>
<tr>
<td>92.</td>
<td>0.06444</td>
<td>0.60410</td>
<td>0.53966  Chadorne (1922:68-71)</td>
</tr>
<tr>
<td>93.</td>
<td>0.06457</td>
<td>0.51487</td>
<td>0.45029  Henry (1928:122)</td>
</tr>
<tr>
<td>94.</td>
<td>0.06551</td>
<td>0.52547</td>
<td>0.45996  Henry (1928:171a)</td>
</tr>
<tr>
<td>95.</td>
<td>0.06599</td>
<td>0.51194</td>
<td>0.44595  Henry (1928:180-181)</td>
</tr>
<tr>
<td>96.</td>
<td>0.06671</td>
<td>0.52018</td>
<td>0.45347  Henry (1928:364)</td>
</tr>
<tr>
<td>97.</td>
<td>0.06732</td>
<td>0.60560</td>
<td>0.53828  Emory (1938:58-59)</td>
</tr>
<tr>
<td>98.</td>
<td>0.06872</td>
<td>0.60294</td>
<td>0.53422  Henry (1928:164)</td>
</tr>
<tr>
<td>99.</td>
<td>0.06944</td>
<td>0.52320</td>
<td>0.45375  Henry (1928:159-160)</td>
</tr>
<tr>
<td>100.</td>
<td>0.07285</td>
<td>0.62432</td>
<td>0.55146  Henry (1928:70-71)</td>
</tr>
<tr>
<td>101.</td>
<td>0.07488</td>
<td>0.62168</td>
<td>0.54680  Henry (1928:321-322)</td>
</tr>
<tr>
<td>102.</td>
<td>0.07639</td>
<td>0.53549</td>
<td>0.45910  Henry (1928:312)</td>
</tr>
<tr>
<td>103.</td>
<td>0.07797</td>
<td>0.60223</td>
<td>0.52426  Henry (1928:458-459)</td>
</tr>
<tr>
<td>104.</td>
<td>0.07992</td>
<td>0.64654</td>
<td>0.56661  Henry (1928:84-85)</td>
</tr>
<tr>
<td>105.</td>
<td>0.08123</td>
<td>0.58137</td>
<td>0.50014  Henry (1928:72)</td>
</tr>
<tr>
<td>106.</td>
<td>0.08274</td>
<td>0.76258</td>
<td>0.67984  Henry (1928:439-443)</td>
</tr>
<tr>
<td>107.</td>
<td>0.08647</td>
<td>0.55660</td>
<td>0.47012  Smith (1892:31-32)</td>
</tr>
<tr>
<td>108.</td>
<td>0.08959</td>
<td>0.68560</td>
<td>0.59601  Henry (1928:162-164)</td>
</tr>
<tr>
<td>109.</td>
<td>0.09043</td>
<td>0.67534</td>
<td>0.58490  Henry (1928:452-454)</td>
</tr>
<tr>
<td>110.</td>
<td>0.09275</td>
<td>0.70294</td>
<td>0.61018  Emory (1965:459-464)</td>
</tr>
<tr>
<td>111.</td>
<td>0.09863</td>
<td>0.61333</td>
<td>0.51469  Cadousteau (1987:17-19)</td>
</tr>
<tr>
<td>112.</td>
<td>0.11199</td>
<td>0.57924</td>
<td>0.46725  Henry (1928:184)</td>
</tr>
<tr>
<td>113.</td>
<td>0.11238</td>
<td>0.76367</td>
<td>0.65128  Henry (1928:372-374)</td>
</tr>
<tr>
<td>114.</td>
<td>0.11267</td>
<td>0.79249</td>
<td>0.67981  Henry (1928:455-458)</td>
</tr>
<tr>
<td>115.</td>
<td>0.14724</td>
<td>0.80384</td>
<td>0.65659  Henry (1928:355-359)</td>
</tr>
</tbody>
</table>
Of the texts that are more similar to the pre-1850 document, it can be seen that 40 have a cosine difference greater than the established .045 threshold. Most of these texts will be included in the pre-1850 subset of the corpus.

For the following reasons, it is difficult to determine a degree of error regarding the stated aim of this procedure:

1. Because the number of texts for which dates are known is fairly small, the procedure’s 90.5% precision accuracy claim has a margin of error of plus or minus 6.4%.

2. It is not known to what degree dated and undated texts are similar to each other, or to oral material of the period that never happened to be transcribed. To the degree that the texts are not representative of a random sample, the margin of error for precision accuracy may be additionally greater.

3. The year 1850 is a very arbitrary cut-off. For texts recited before that year, there is no certainty that the oral poet’s training pre-dated Tahiti’s conversion to Christianity, or that the material pre-dated European contact.

Despite these error assessment difficulties, however, it is probably safe to assume that most texts to be included in the pre-1850 corpus subset achieve the desired objective, and that the rest are not so far off.

**3.3.2 Texts included in the pre-1850 corpus subset**

The texts listed in table 3.5 below consist of the 34 pre-1850 poetic texts whose dates are known, and 38 of the 40 undated texts that received a pre-1850 classification by the procedure just described. Two of the 40 undated texts have been excluded because, upon closer examination, they appeared to represent prose.

This subset of the larger oral tradition corpus of 225 transcribed texts will from now on be referred to as the pre-1850 oral poetic corpus. All analysis will be restricted to its 72 documents.
Table 3.5. The 72 documents of the pre-1850 oral poetic corpus

<table>
<thead>
<tr>
<th>Text</th>
<th>Poetic genre</th>
<th>Word count</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams (1968:37)</td>
<td>anau</td>
<td>89</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Ahnne (1924:20-23)</td>
<td>anau</td>
<td>434</td>
<td>1824</td>
</tr>
<tr>
<td>Cadousteau (1987:16-17)</td>
<td>paripari</td>
<td>113</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Cadousteau (1987:17-19)</td>
<td>faʻatara</td>
<td>250</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Chadourne (1922:68-71)</td>
<td>rauti</td>
<td>260</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Emory (1938:53-58)</td>
<td>ʻaʻai</td>
<td>1,269</td>
<td>1849-07-16</td>
</tr>
<tr>
<td>Emory (1938:58-59)</td>
<td>ʻaʻai</td>
<td>150</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Emory (1965:459-464)</td>
<td>religious address</td>
<td>464</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1894:136-138)</td>
<td>ʻaʻai</td>
<td>518</td>
<td>1817</td>
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<tr>
<td>Henry (1895:256-291)</td>
<td>ʻaʻai</td>
<td>9,265</td>
<td>before 1839</td>
</tr>
<tr>
<td>Henry (1928:37)</td>
<td>faʻatemi</td>
<td>61</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:70-71)</td>
<td>paripari</td>
<td>320</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:72)</td>
<td>paripari</td>
<td>165</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:79)</td>
<td>faʻatara</td>
<td>117</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:81)</td>
<td>faʻatemi</td>
<td>106</td>
<td>pre-1850</td>
</tr>
<tr>
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<td>faʻatemi</td>
<td>229</td>
<td>pre-1850</td>
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<tr>
<td>Henry (1928:94-95)</td>
<td>paripari</td>
<td>81</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:122)</td>
<td>ʻaʻai</td>
<td>127</td>
<td>pre-1850</td>
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<td>200</td>
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</tr>
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<td>religious address</td>
<td>126</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:162-164)</td>
<td>religious address</td>
<td>543</td>
<td>pre-1850</td>
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<tr>
<td>Henry (1928:164)</td>
<td>ʻaʻai</td>
<td>237</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:171a)</td>
<td>religious address</td>
<td>79</td>
<td>pre-1850</td>
</tr>
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<td>Henry (1928:174b)</td>
<td>religious address</td>
<td>68</td>
<td>pre-1850</td>
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<td>Henry (1928:180-181)</td>
<td>religious address</td>
<td>179</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:184)</td>
<td>religious address</td>
<td>88</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:300)</td>
<td>rauti</td>
<td>206</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:306-307)</td>
<td>rauti</td>
<td>244</td>
<td>1839</td>
</tr>
<tr>
<td>Henry (1928:307-308)</td>
<td>rauti</td>
<td>360</td>
<td>1839</td>
</tr>
<tr>
<td>Henry (1928:308-309)</td>
<td>rauti</td>
<td>469</td>
<td>1829</td>
</tr>
<tr>
<td>Henry (1928:312)</td>
<td>rauti</td>
<td>86</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:321-322)</td>
<td>religious address</td>
<td>195</td>
<td>pre-1850</td>
</tr>
<tr>
<td>Henry (1928:336-338)</td>
<td>ʻaʻai</td>
<td>996</td>
<td>1822</td>
</tr>
<tr>
<td>Henry (1928:339-340)</td>
<td>ʻaʻai</td>
<td>545</td>
<td>1822, 1824, 1833</td>
</tr>
<tr>
<td>Henry (1928:340-344)</td>
<td>ʻaʻai</td>
<td>1,630</td>
<td>1822, 1835</td>
</tr>
</tbody>
</table>

\(^{19}\) Glosses for these genres are ʻaʻai (“myth”), anau (“lamentation”), faʻatara (“praise with challenge”), faʻatemi (“praise”), paripari (“description”), and rauti (“battle address”).
| Henry (1928:351) | ʻa ʻai | 53  | pre-1850 |
| Henry (1928:353-354) | ʻa ʻai | 719 | 1822, 1845 |
| Henry (1928:355-359) | ʻa ʻai | 1,475 | pre-1850 |
| Henry (1928:359-363) | ʻa ʻai | 1,160 | 1818 |
| Henry (1928:364) | ʻa ʻai | 77 | pre-1850 |
| Henry (1928:364-371) | ʻa ʻai | 2,598 | 1823 and 1840 |
| Henry (1928:372-374) | ʻa ʻai | 942 | pre-1850 |
| Henry (1928:374-376) | ʻa ʻai | 385 | 1840 |
| Henry (1928:383) | ʻa ʻai | 117 | 1825, 1840 |
| Henry (1928:395-398) | ʻa ʻai | 1,576 | 1840 |
| Henry (1928:398-399) | ʻa ʻai | 400 | 1840 |
| Henry (1928:399-402) | ʻa ʻai | 632 | 1817 |
| Henry (1928:402-403) | ʻa ʻai | 533 | 1822, 1833 |
| Henry (1928:404-405) | ʻa ʻai | 315 | 1822 |
| Henry (1928:405-407) | ʻa ʻai | 1,668 | 1825 |
| Henry (1928:409-413) | ʻa ʻai | 1,389 | 1833, 1834 |
| Henry (1928:413-415) | ʻa ʻai | 1,023 | 1834 |
| Henry (1928:415-420) | ʻa ʻai | 1,665 | 1833 or 1834 |
| Henry (1928:426) | ʻa ʻai | 343 | 1824 |
| Henry (1928:427-429) | ʻa ʻai | 1,071 | 1820 |
| Henry (1928:429-430) | ʻa ʻai | 498 | 1825, 1885 |
| Henry (1928:431-433) | ʻa ʻai | 1,000 | 1825, 1901 |
| Henry (1928:433-436) | ʻa ʻai | 826 | pre-1850 |
| Henry (1928:437-439) | ʻa ʻai | 731 | 1822 or 1824 |
| Henry (1928:439-443) | ʻa ʻai | 1,327 | pre-1850 |
| Henry (1928:444) | ʻa ʻai | 251 | 1825 |
| Henry (1928:445-448) | ʻa ʻai | 1,395 | 1829 |
| Henry (1928:448-452) | ʻa ʻai | 1,609 | 1822, 1824 |
| Henry (1928:452-454) | ʻa ʻai | 569 | pre-1850 |
| Henry (1928:455-458) | ʻa ʻai | 1,501 | pre-1850 |
| Henry (1928:458) | ʻa ʻai | 320 | 1824 |
| Henry (1928:458-459) | ʻa ʻai | 225 | pre-1850 |
| Henry (1928:468-470) | ʻa ʻai | 679 | 1825-12-24 |
| Henry (1928:500) | ʻa ʻai | 70 | pre-1850 |
With a corpus of early oral poetry now established, the problem of knowing which adjacent vowels constitute a diphthong will be considered. Without such information, it will not be possible to count syllables, nor in turn to detect any metrical patterns that may be based upon syllable count.

3.4 Establishing a description of the Tahitian diphthong

As mentioned in the literature review, the syllable is the foremost linguistic constituent of meter (see Jakobson and Waugh 1987:219-220, and Fabb and Halle 2008:9). Consequently, during the process of analysis, an effort will be made to count syllables in order to discover if they group into metrical patterns. However, it will first be necessary to determine which combinations of adjacent vowels in the corpus material constitute a tautosyllabic diphthong, and which combinations are heterosyllabic.

It would appear that a consensus concerning the Tahitian diphthong is lacking in the literature. This is demonstrated in table 3.6 below, which lists all possible $V_1 V_2$ combinations and whether, for each source, they represent one or two syllables. The original source descriptions are provided in Appendix B.

Table 3.6. Syllable count in the literature for all $V_1 V_2$ combinations

<table>
<thead>
<tr>
<th>$V_1 V_2$</th>
<th>One syllable</th>
<th>Two syllables</th>
</tr>
</thead>
</table>

\(^{20}\) For many sources, diphthong syllable count information is implied rather than directly stated. See Appendix B for the original text of each description.

\(^{21}\) Académie Tahitienne (1986) does not provide descriptions for the same vowel level combinations /œi/, /œi/, /œi/, and /œi/.

\(^{22}\) Burbidge (1930:9) and Christensen (1958:i) include the Rossiter (1919:5) description.


Lovy and Bouge 1953, Tryon 1970


Lovy and Bouge 1953, Tryon 1970


Lovy and Bouge 1953, Tryon 1970, Vernier 1959


Corne 1987, Davies 1823, Lovy and Bouge 1953, Vernier 1959


The following are some possible reasons for this lack of consensus:

1. Depending on the researcher and era, the term *diphthong* may have referred to adjacent vowels which constituted a phoneme, or to a vowel combination that phonetically was heard as a single syllable.

2. In Tahitian song and elaborated speech, each vowel can typically be heard as the nucleus of its own syllable. Diphthongs, whether they be considered phonemic or phonetic, appear to be restricted to normal tempo speech.²³ It is possible, therefore, that speech elicited by researchers was at times elaborated and at times non-elaborated. There may have been stylistic variation from consultant to consultant, or between elicitations from the same consultant. It is

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²³ Differences in the phonology of song and elaborated speech vs. that of normal tempo speech have also been described by Coppenrath and Prévost in the phenomenon of left-shifting /h/ and /ʔ/. They observe that while such shifting occurs in “flowing conversation”, it is “never produced in sung Tahitian” (Coppenrath and Prévost 1974:10-12). Corne, in documenting the same phenomenon, describes the environment as “natural, spontaneous discourse” (Corne 1987:3). Corne has also demonstrated that such shifting is not a recent development, but detectable in Tahitian of the late 18th century (Corne 1984:216-217 and Corne 1987:4-6).
also possible that elaborated speech was interpreted by some researchers to signify an underlying phonemic representation. It is interesting to note that Rossiter 1919, Iorss 1961, Graham 1972, and Peltzer 1996 all describe $V_1V_2$ as universally heterosyllabic.

3. The diphthong may have undergone diachronic change. The sources span nearly two centuries.

4. Dialectal and/or diastratic variation may be a factor.

5. The degree of a researcher’s linguistic training may be a factor, perhaps especially in regards to the earlier sources.

If the tempo at which a text was delivered was slow, it may be necessary to treat all $V_1V_2$ combinations as heterosyllabic. If the style for the oral poet was that of normal conversation, it will most likely be necessary to consider certain $V_1V_2$ combinations as tautosyllabic.

Not knowing which style to assume for these texts, syllabification rules for both will be pursued during the process of syllable count analysis. For the elaborated style, all $V_1V_2$ combinations will be considered heterosyllabic. Concerning the non-elaborated style where diphthongs appear to exist, Lee Bickmore and Académie Tahitienne (1986:5) are in near agreement in their descriptions, and their promising consensus will be attempted first. As stated by Bickmore:

In a $V_1V_2$ sequence, if $V_1$ is more sonorous than $V_2$, then $V_1$ and $V_2$ are tautosyllabic (where $V_2$ results in a phonetic off-glide), except in the case of /eu/; otherwise $V_1$ and $V_2$ are heterosyllabic. In cases of level sonority across different vowels, the sequence is generally heterosyllabic ... (Bickmore 1995:414).

If analysis results substantiate one of these diphthong descriptions through the discovery of patterns of meter, then it may be possible to propose a style designation - elaborated or non-elaborated - for the material of the pre-1850 corpus. If no metrical patterns emerge, then it may be that either none existed, or that neither set of syllabification rules represents a correct diphthong description.
3.5 Conclusion

In this chapter, three requirements for data preparation have been discussed. The first concerns the problem of inconsistent orthography. In order to assist the computational process of pattern matching, an attempt has been made to normalize each word of the transcriptions.

In an effort to constrain analysis to just oral poetry composed pre-Contact, a smaller corpus has been compiled of only those texts considered to have a recitation date of before 1850. Dating for almost half of these texts was provided in the source material. Dating for the remainder was achieved through a process of automated classification. All analysis will be restricted to the 72 texts of this pre-1850 oral poetic corpus.

Detection of meter in the data may very well depend upon counting syllables, which in turn requires an accurate description of which combinations of two short vowels are tautosyllabic, and which are heterosyllabic. However, no clear consensus concerning the Tahitian diphthong emerges from the literature. Therefore, computational analysis will consider two different possibilities: that all vowel combinations are heterosyllabic, as may occur in Tahitian sung or elaborated speech, and that some vowel combinations form diphthongs, as typically occurs in normal tempo speech.

In the next chapter, the automated and manual processes of pattern detection will be described.
4 Description of the pattern detection process

4.1 Introduction

Among the oral poetries of the world, it seems that a wide range of linguistic features may be organized in uncountable creative ways. At the level of just the phoneme, for instance, poetic organization may be at the level of the phoneme itself, a class of phonemes (e.g. as in an assonant pattern where only the vowels are significant), a phonemic feature (e.g. a pattern of contrasting +acute and -acute), etc. For the purposes of this analysis, the term linguistic feature will refer to any linguistic information detectable at the level of phoneme, syllable, word, or line that could serve to form a pattern of poetic meter or parallelism.

For completeness, pattern detection should include any feature that an oral poet may wish to employ in the process of composition. Moreover, such analysis should not be restricted to observation of a single feature in isolation (single-feature analysis), but should be sufficiently expansive so as to detect a poet’s efforts to coordinate more than one feature (multi-feature analysis). Line, word, and syllable boundaries may or may not be significant, and therefore all possibilities for boundary should be taken into account.

A two part method of pattern detection has been employed in this analysis. First, an automated process generates pattern candidates. These then are subject to manual review in an effort to separate noise, prose structure, and other less than promising hits from those that may be worthy of further examination and comparison. It will not be the function of the automated process to determine whether or not a given pattern is poetic. Its role will be restricted to generating raw candidates for manual review; the majority of which will be rejected.

Wholly manual analysis will be pursued for some types of information where tagging is lacking, such as semantic patterns, oral traditional formulae, etc. Because of the potential enormity of the manual requirement, it is intended

24 No Tahitian thesaurus or WordNet-type resource was discovered that might have served as a framework for semantic tagging.
that the automated process be able to detect an extensive range of organizational possibilities; however not be unfettered to the point of intractability.

It is by no means implied that all possible patterns of poetic organization will be detected by this computationally-assisted process. However, as mentioned in the chapter 1, it is anticipated that it should be capable of recognizing a significantly greater number of patterns as compared to a process that is fully manual.

This chapter will first seek to describe the automated process of pattern candidate generation, both for single- and multi-feature analysis. It will next discuss the manual review process, including the criteria necessary for determining whether a given pattern is suggestive of poetic organization. Manual review will subsequently be applied to a sample Tahitian text.

4.2 Automated pattern candidate generation

Table 4.1 presents an initial list of linguistic features that were selected for inclusion into the automated process. Nearly all play a poetic role in one or more of the world’s oral traditions and poetries, with special attention to those of Oceania.

Table 4.1. Initial list of linguistic features to be included in automated process

Relating to meter

- Primary word stress count (e.g. /i[0] to:[1] tane[1] tere-qa[a(1)]

- Primary and secondary word stress count (e.g. /i[0] to:[1] tane[1] tere-,ra?qa[2]/)

- Word syllable count assuming elaborated speech (e.g. /i[1] to:[1] tane[2] tere-qa[a(4)])

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25 In these examples, information to be included in a linguistic feature tag appears in bold.
26 The gloss for /i to: tane tere-qa/a/ is “at Tane’s voyage”.
27 Where all V1V2 combinations are treated as heterosyllabic.
• Word syllable count assuming non-elaborated speech\(^{28}\) (e.g. /i[1] to[1] tæn[e2] tere-raʔa[4]/)

• Word mora count (e.g. /i[1] to[2] tæn[e3] tere-raʔa[4]/)

Relating to parallelism

At the level of the phoneme, one or a series of:

• Phoneme (e.g. /i t o: t a; n e t e r e r a ? a/)  
• Consonant\(^{29}\) (e.g. /i t o: t a: n e t e r e r a ? a/)  
• Vowel\(^{30}\) (e.g. /i t o: t a: n e t e r e r a ? a/)  
• Phonemic features of each consonant (e.g. /i[+acute] o: t[+acute] a: n[+acute] e t[+acute] e r[+acute] e r[+acute] a ?[-acute] a/)  
• Phonemic features of each vowel (e.g. /i[+acute] t o:[-acute] t æ:[-acute] n e[+acute] t e[+acute] r e[+acute] a[+acute] ? a[-acute]/)

At the level of the syllable, one or a series of:

• Syllable form (e.g. /i to: ta; ne te re ra ?a/)  
• Syllable-initial phoneme (e.g. /i to: ta: ne te ra ?a/)  
• Syllable onset (e.g. /i to: ta: ne te re ra ?a/)  
• Syllable rhyme (e.g. /i to: ta; ne te re ra ?a/)

\(^{28}\) Where some V\(_1\)V\(_2\) combinations are treated as tautosyllabic, according to Bickmore’s description for the diphthong (see Bickmore 1995:414).

\(^{29}\) Analysis of this feature should detect use of consonance.

\(^{30}\) Except for mora count detection, long vowels are conflated with short vowels in order to increase the quantity of potential matches. Analysis of this feature should detect use of assonance.

\(^{31}\) An analysis for each of the following Jakobsonian acoustic features was initially attempted: +/-voiced, +/- sonorant, +/- continuant, +/- acute, +/- flat, +/- diffuse, +/- syllabic. Phonemic feature analysis was abandoned, however, for reasons that will be discussed in 4.5 below.
Phonemic features of syllable-initial phoneme (e.g. /i[+acute] t[+acute]o: t[+acute]a: n[+acute]e t[+acute]e r[+acute]e r[+acute]aʔ[+acute]/)

Phonemic features of syllable onset (e.g. /i[+acute] t[+acute]o: n[+acute]e t[+acute]e r[+acute]e r[+acute]aʔ[+acute]/)

Phonemic features of syllable rhyme (e.g. /i[+acute] toː taː ne[+acute] te[+acute] re[+acute] raʔ[+acute]/)

At the level of the word, one or a series of:

- Word form (e.g. /i toː tane tere-raʔa/)
- Word consonants32 (e.g. /i toː tane tere-raʔa/)
- Word vowels33 (e.g. /i toː tane tere-raʔa/)
- Word lemma (e.g. /i toː tane tere/)
- Word part-of-speech34 (e.g. /i[P] toː[POSS] tane[PROP] tere-raʔa[NOUN]/)
- Word CV shape (e.g. /i[V] toː[CVV] tane[CVVCV] tere-raʔa[CVCVVCVCV]/)
- Word-initial syllable (e.g. /i toː tane tere-raʔa/)
- Word-final syllable (e.g. /i toː tane tere-raʔa/)
- Word-initial syllable onset35 (e.g. /i toː tane tere-raʔa/)
- Word-final syllable onset (e.g. /i toː tane tere-raʔa/)

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32 This feature is equivalent to the consonant feature at the phoneme level, except that now word boundary is treated as significant.
33 This feature is equivalent to the vowel feature at the phoneme level, except that now word boundary is treated as significant.
34 Rudimentary part-of-speech tagging was performed using a simple part-of-speech tagger written in Perl, the output of which was corrected by hand.
35 Analysis of this feature should detect use of alliteration.
• Word-initial syllable rhyme (e.g. /i toː tæːn e tere-raʔa/

• Word-final syllable rhyme (e.g. /i toː tæːn e tere-raʔa/)  

• Word-initial phoneme (e.g. /i toː tæːn e tere-raʔa/)  

• Word-final phoneme (e.g. /i toː tæːn e tere-raʔa/)  

• Phonemic features of word-initial syllable onset (e.g. /i t[+acute]oː t[+acute]æːn e t[+acute]ereraʔa/)  

• Phonemic features of word-final syllable onset (e.g. /i t[+acute]oː tam[+acute]e tere-raʔa[-acute]a/)  

• Phonemic features of word-initial syllable rhyme (e.g. /i[+acute] toː t[+acute]æːn e te[+acute]raʔa/)  

• Phonemic features of word-final syllable rhyme (e.g. /i[+acute] toː t[+acute]æːn e tere-raʔa[-acute]a/)  

• Phonemic features of word-initial phoneme (e.g. /i[+acute] t[+acute]oː t[+acute]æːn e t[+acute]ereraʔa/)  

• Phonemic features of word-final phoneme (e.g. /i[+acute] t[+acute]oː t[+acute]æːn e tere-raʔa[-acute]a/)  

At the level of the line, one or a series of:  

• Any of the linguistic features listed above where line boundary is treated as significant.

Pattern candidates will be automatically generated initially for each of the features listed in table 4.1, and at all combinations of boundary significance. Patterns will be reviewed that represent repeated unigram tokens of a feature (e.g. the part-of-speech of a single word), bigram tokens (e.g. the parts-of-speech of two adjoining words), trigram tokens, and so on to larger n-gram tokens. The value of n will be permitted to range from 1 to 15 for single-feature analysis, and from 1 to 10 for multi-feature analysis.36 The first verse

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36 The motivation for these limits on the range of n will be discussed in 4.2.2.3 below.
of the well known children’s poem *Mary had a little lamb* will be used to demonstrate the application of both the single- and multi-feature algorithms.

### 4.2.1 Single-feature analysis

In single-feature analysis, only one linguistic feature is analyzed at a time. The first verse of *Mary had a little lamb* has been tagged for four word-level linguistic features, shown in (4.1) below.

The possibility exists, however meagre, of poetic parallelism whenever an n-gram token occurs more than once. Some recurring tokens of these four tagged features will be presented in (4.4) through (4.10) below, along with a discussion of whether or not the motivation for their recurrence may have been poetic.

(4.1) First verse of *Mary had a little lamb* tagged for word form\(^\text{37}\), lemma, simple part-of-speech\(^\text{38}\), and word syllable count

1. Mary had a little lamb
   
   \begin{align*}
   &\text{Mary} \quad \text{had} \quad \text{a} \quad \text{little} \quad \text{lamb} \\
   &\text{mɛi} \quad \text{hæd} \quad ə \quad \text{lɪdal} \quad \text{læm} \\
   &\text{NOUN} \quad \text{VERB} \quad \text{FUNC} \quad \text{MODIF} \quad \text{NOUN} \\
   &2 \quad 1 \quad 1 \quad 2 \quad 1
   \end{align*}

2. whose fleece was white as snow
   
   \begin{align*}
   &\text{whose} \quad \text{fleece} \quad \text{was} \quad \text{white} \quad \text{as} \quad \text{snow} \\
   &\text{huːz} \quad \text{flɪs} \quad \text{wæz} \quad \text{æz} \quad \text{snoʊ} \\
   &\text{FUNC} \quad \text{NOUN} \quad \text{VERB} \quad \text{FUNC} \quad \text{NOUN} \\
   &1 \quad 1 \quad 1 \quad 1 \quad 1
   \end{align*}

3. and everywhere that Mary went
   
   \begin{align*}
   &\text{and} \quad \text{everywhere} \quad \text{that} \quad \text{Mary} \quad \text{went} \\
   &\text{ænd} \quad \text{ɛnɪweɪ} \quad \text{ðæt} \quad \text{mɛi} \quad \text{wɛnt} \\
   &\text{FUNC} \quad \text{NOUN} \quad \text{FUNC} \quad \text{NOUN} \quad \text{VERB} \\
   &1 \quad 3 \quad 1 \quad 2 \quad 1
   \end{align*}

\(^{37}\) IPA forms here will reflect a General American English recitation. 

\(^{38}\) Part-of-speech tagging for this poem will be reduced to the four simple categories of FUNC (any function word), MODIF (any modifier), NOUN (any type of noun), and VERB (any type of VERB).
N-gram tokens consist simply of a series of linguistic feature tags. For example, in (4.2) below we see all unigram, bigram, and trigram tokens for just the first two lines of the verse, where the linguistic feature is the word form. In (4.3) below is a similar list for simple part-of-speech.

(4.2) Unigram, bigram, and trigram tokens for first two lines of Mary had a little lamb, where the linguistic feature is the word form

\[ n = 1 \]

\[
\begin{align*}
\text{<line_boundary>} & \\
/m\epsilon\mu/ & \\
/h\epsilon\text{d}/ & \\
/\text{a}/ & \\
/l\epsilon\text{d}\epsilon/ & \\
/l\text{æm}/ & \\
\text{<line_boundary>} & \\
/h\epsilon\text{u}:z/ & \\
/f\epsilon\text{i}\text{i}/ & \\
/w\epsilon\text{z}/ & \\
/w\epsilon\text{t}/ & \\
/\text{æz}/ & \\
/sn\epsilon\text{u}/ & \\
\text{<line_boundary>} & \\
\end{align*}
\]

\[ n = 2 \]

\[
\begin{align*}
\text{<line_boundary>}/m\epsilon\mu/ & \\
/m\epsilon\mu/-/h\epsilon\text{d}/ & \\
/h\epsilon\text{d}/-/\text{a}/ & \\
/\text{a}/-/l\epsilon\text{d}\epsilon/ & \\
/l\epsilon\text{d}\epsilon/-/l\text{æm}/ & \\
\end{align*}
\]
(4.3) Unigram, bigram, and trigram tokens for first two lines of *Mary had a little lamb*, where the linguistic feature is simple part-of-speech
In (4.4) below, we note that there are three unigram tokens that occur more than once. In terms of poetic intent, it is perhaps of thematic interest that the two content words among these tokens are /mek/ and /lærn/; the poem’s two characters.
(4.4) Unigram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Word form
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   *me* Mary *h* had a little lamb
   2. whose fleece was white as snow
      *hu* whose *flit* fleece was white as snow
   3. and everywhere that Mary went
      *aend* and *ev* everywhere that Mary went
   4. her lamb was sure to go
      *h* her *laem* lamb was sure to go

In (4.5) below, we find all results of repeated lemma bigram tokens, where the sole repeated pattern is /gou/ - *line_boundary*. The semantic parallelism here is possibly intentional, as the pattern occurs on two successive lines.

(4.5) Bigram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Lemma
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   *me* Mary *h* had a little lamb
   2. whose fleece was white as snow
      *hu* whose *flit* fleece was white as snow
   3. and everywhere that Mary went
      *aend* and *ev* everywhere that Mary went
   4. her lamb was sure to go
      *h* her *laem* lamb was sure to go
In (4.6) below, we note two pair of simple part-of-speech bigram tokens. The pattern for the first is *NOUN-*<line_boundary>*, and for the second *VERB-*<line_boundary>*. It seems plausible that their placement, one pattern directly following the other, is intentionally poetic.

(4.6) Some bigram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Simple part-of-speech
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   NOUN VERB FUNC MODIF NOUN

2. whose fleece was white as snow
   FUNC NOUN VERB MODIF FUNC NOUN

3. and everywhere that Mary went
   FUNC NOUN FUNC NOUN VERB

4. her lamb was sure to go
   FUNC NOUN VERB MODIF FUNC VERB

In (4.7) below, we find four occurrences, one per line, of the part-of-speech bigram *NOUN-VERB*. English being an SVO language, however, this will be dismissed during the manual review process as a pattern common to prose.

(4.7) Some bigram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Simple part-of-speech
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 4

1. Mary had a little lamb
   NOUN VERB FUNC MODIF NOUN

2. whose fleece was white as snow
   FUNC NOUN VERB MODIF FUNC NOUN
3. and everywhere that Mary went
   FUNC NOUN FUNC NOUN VERB

4. her lamb was sure to go
   FUNC NOUN VERB MODIF FUNC VERB

In (4.8) below, we find two occurrences of the 6-gram part-of-speech
token `<line_boundary>-FUNC-NOUN-VERB-MODIF-FUNC`, corresponding
to `<line_boundary> whose fleece was white as, and `<line_boundary> her lamb was sure to`. Despite the repetition of so much information, further examination reveals that the function words at each pattern instance are
dissimilar, and so poetic intent seems less likely. However, this interpretation might change were the same pattern found to recur elsewhere in the full poem.

(4.8) 6-gram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Simple part-of-speech
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   NOUN VERB FUNC MODIF NOUN

2. whose fleece was white as snow
   FUNC NOUN VERB MODIF FUNC NOUN

3. and everywhere that Mary went
   FUNC NOUN FUNC NOUN VERB

4. her lamb was sure to go
   FUNC NOUN VERB MODIF FUNC VERB

Poetic patterns are hard to establish for very small poems, such as the verse being analyzed, except when similar patterns can be witnessed across a number of texts, perhaps of the same genre. The manual review criteria for identifying poetic patterns will be discussed in 4.3.1 below.
In (4.9) below, we find repetition of the 11-gram syllable count token: 1-2-1-<line_boundary>-1-1-1-1-1-1-<line_boundary>, corresponding to a little lamb <line_boundary> whose fleece was white as snow <line_boundary>, and that Mary went <line_boundary> her lamb was sure to go <line_boundary>. It would seem that the parallelism here is metrically significant, although it is difficult to be sure given just a single recurrence.

(4.9) 11-gram repetition in *Mary had a little lamb*
Level of analysis: Word
Linguistic feature: Word syllable count
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   2 1 1 2 1

2. whose fleece was white as snow
   1 1 1 1 1 1

3. and everywhere that Mary went
   1 3 1 2 1

4. her lamb was sure to go
   1 1 1 1 1 1

In (4.10) below, we turn to analysis at the syllable level. Here, we find the apparent end-rhyming bigram /ou/<-line_boundary>, which corresponds to snow <line_boundary>, and go <line_boundary>. With prior knowledge that end-rhyme on alternating lines is common in English poetry, we conclude that the intent is poetic.
(4.10) Some bigram repetition in *Mary had a little lamb*
Level of analysis: Syllable
Linguistic feature: Syllable rhyme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   e i æd ø i øl æm

2. whose fleece was white as snow
   uːz iːs øz æt æz ou

3. and everywhere that Mary went
   ænd e v i e t æt e i ent

4. her lamb was sure to go
   e æm øz ø u ou

4.2.2 Multi-feature analysis

4.2.2.1 Inspiration from data-oriented parsing

In multi-feature analysis, n-gram tokens combine different layers of linguistic features. Its application is inspired by the data-oriented parsing (DOP) approach to syntactic analysis. Data-oriented parsing extracts syntactic subtrees from a corpus of sentences and provides a method for their re-assembly into new trees, resulting in a corpus-based stochastic grammar (see Bod 1998).

In the step of subtree extraction, a sentence is broken down into all possible component subtrees, which are then placed into a *bag* of subtrees (see Bod 1998:16-17). Identical subtrees are added together, with eventual probabilistic implications.

If we assume a simplified tree structure for the three sentences *John reads, John eats,* and *Mary reads,* as shown in (4.11) below:
(4.11) Simplified syntactic trees for sentences *John reads, John eats,* and *Mary reads*

```
S
  NP    VP
   John reads
```
```
S
  NP    VP
   John eats
```
```
S
  NP    VP
   Mary reads
```

The resulting DOP bag of component subtrees would be as shown in (4.12):

(4.12) DOP bag of trees and subtrees for sentences *John reads, John eats,* and *Mary reads*

```
S
  NP    VP
   John reads
```
```
S
  NP    VP
   reads
```
```
S
  NP    VP
   John
```
```
S
  NP    VP
   John eats
```
```
S
  NP    VP
   eats
```
```
S
  NP    VP
   John
```
```
S
  NP    VP
   Mary reads
```
```
S
  NP    VP
   reads
```
```
S
  NP    VP
   Mary
```

Adding like subtrees together, we find in (4.13) below all of the subtrees that have occurred more than once:
(4.13) DOP subtrees that occur more than once for sentences *John reads, John eats*, and *Mary reads*

*Subtrees that occur three times*

1. 

   \[
   \begin{array}{c}
   S \\
   \text{NP} & \text{VP} \\
   \end{array}
   \]

*Subtrees that occur twice*

2. 

   \[
   \begin{array}{c}
   S \\
   \text{NP} & \text{VP} \\
   \text{reads} \\
   \end{array}
   \]

3. 

   \[
   \begin{array}{c}
   S \\
   \text{NP} & \text{VP} \\
   \text{John} \\
   \end{array}
   \]

4. 

   \[
   \begin{array}{c}
   \text{NP} \\
   \text{John} \\
   \end{array}
   \]

5. 

   \[
   \begin{array}{c}
   \text{VP} \\
   \text{reads} \\
   \end{array}
   \]

From these very simple sentences, the following grammatical patterns initially emerge:

1. An *NP* is always followed by a *VP*.
2. The surface form *reads* is always preceded by an *NP*.
3. The surface form *John* is always followed by a *VP*.
4. The surface form John is always an NP.

5. The surface form reads is always a VP.

Of special interest for multi-feature analysis are the second and third subtrees of (4.13). They are effectively bigrams of two layers of information: syntactic nodes VP and NP attached to surface forms reads and John, respectively. It seems reasonable, then, that a generalized DOP approach could be applied to the tokenization and counting, across a span of n-gram values and feature layers, of the linguistic elements of a text.

4.2.2.2 Benefit of multi-feature analysis

We had noted in (4.8) above that repetition of the 6-gram token <line_boundary>-FUNC-NOUN-VERB-MODIF-FUNC was probably not poetic. Even less so would be repetition of the trigram contained within it NOUN-VERB-MODIF, so common to the prose of an SVO language such as English. However, multi-feature analysis, with sufficient semantic tagging, furnishes a more complex token from the same words of that trigram:

Semantics: lamb-part-
Word:/wǝz/-
Part-of-Speech: MODIF

This information-rich token is shown in context in (4.14) below:

(4.14) Some multi-feature trigram repetition in Mary had a little lamb
Level of analysis: Word
Linguistic features: Word form, simple part-of-speech, and Mary-part and lamb-part semantic tagging
Boundary relevance: All boundaries are ignored.
Minimum occurrences = 2

1. Mary had a little lamb
   mɛǝɪ hæd ǝ ldəl læm
   NOUN VERB FUNC MODIF NOUN
   Mary-part lamb-part
2. whose fleece was white as snow
   huːz ˈflɪs ˈwɔz ˈwɛt æz ˈsnoʊ
   FUNC NOUN VERB MODIF FUNC NOUN
   lamb-part

3. and everywhere that Mary went
   ænd ɛvˈɪwɛt ˈdæt ˈmeɪ ˈwɛnt
   FUNC NOUN FUNC NOUN VERB
   Mary-part

4. her lamb was sure to go
   hər ˈlæm ˈwɔz ʃʊr tu ˈgoʊ
   FUNC NOUN VERB MODIF FUNC VERB
   lamb-part

   This parallelism of the pattern in (4.14) is much less abstract than NOUN-VERB-MODIF, and thus more suggestive of some type of poetic organization. Such a pattern would not have been directly detectable by single-feature analysis.

   There are innumerable ways by which an oral poet could possibly coordinate linguistic features. In a Tahitian example from the pre-1850 corpus given in (4.15) below, we discover tokens combining the parallelism of words, word vowels, parts-of-speech, and syllable count.

   In addition to the words /e noho/ that repeat in lines 1 and 4, the syllable count of lines 1 through 3 is found to repeat in lines 4 through 6. In lines 3 and 6, we also note complete repetition of part-of-speech and vowels.
(4.15) Some multi-feature 11-gram repetition in an extract of “Warning by messengers of the pa`i-ataua service” (Henry 1928:158-159)
Level of analysis: Word
Linguistic features: Word form, word-vowel, part-of-speech, syllable count
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
Minimum occurrences = 2

1. e noho
   e o o
   IPFV V
   1 2
   IPFV sit
   Sit

2. i ni?a
   i i a
   P LOC
   1 2
   at above
   on

3. i te mahora
   i e a o a
   DIROBJ ART N
   1 1 3
   at the yard
   the yard,

4. e noho
   e o o
   IPFV V
   1 2
   IPFV sit
   Sit,

---

39 In examples containing Tahitian text, the first line provides an IPA representation of each word, with sometimes an indication of syntactic pause. The second to last line displays a morpheme-by-morpheme gloss, which attempts to adhere to the Leipzig glossing rules. See Appendix A for a list of grammatical abbreviations. The last line provides an English translation. Information concerning the inter-linear data of any other lines will be provided at the beginning of an example or in footnotes. All English translations are ultimately my own, made with reference to the Tahitian Academy’s unabridged Tahitian-French bilingual dictionary (Académie Tahitienne 1999) and to English and French translations of source texts that were provided by their transcribers, or editors.
5. e ?upu
   e u u
   IPFV V
   1 2
   IPFV recite.a.prayer
   recite

6. i te ?aho?a
   i e a o a
   DIROBJ ART N
   1 1 3
   DIROBJ the brush.clearing.prayer
   the brush clearing prayer.

The discovery of the patterns shown in (4.15) resulted from a review of certain repeating multi-feature tokens that were found to overlap. Two of these tokens were:

<line_boundary>-
Word:/e/-
Word:/noho/-
<line_boundary>-
Syllable_count:1-
Syllable_count:2-
<line_boundary>-
Word:/i/-
Word:/te/-
Word-vowel:a-o-a-
<line_boundary>

and:

<line_boundary>-
Word:/e/-
Word:/noho/-
<line_boundary>-
Syllable_count:1-
Syllable_count:2-
<line_boundary>-
Part-of-speech:DIROBJ-
Part-of-speech:ART-
Part-of-speech:N-
<line_boundary>
4.2.2.3 Combinatorial explosion

Inherent to multi-feature analysis are difficulties that arise from a combinatorial explosion of n-grams. For example, for the four layers of tagging provided in (4.1) above, the four single-feature bigrams corresponding to just the first two words of *Mary had a little lamb*:

```
Word:/mɛɹɪ-/Word:/hæd/
Lemma:/mɛɹɪ-/Lemma:/hæv/
POS:NOUN-POS:VERB
Syllable_count:2-Syllable_count:1
```

expand to 16 single- and multi-feature bigrams:

```
Word:/mɛɹɪ-/Word:/hæd/
Word:/mɛɹɪ-/Lemma:/hæv/
Word:/mɛɹɪ-/POS:VERB
Word:/mɛɹɪ-/Syllable_count:1
Lemma:/mɛɹɪ-/Word:/hæd/
Lemma:/mɛɹɪ-/Lemma:/hæv/
Lemma:/mɛɹɪ-/POS:VERB
Lemma:/mɛɹɪ-/Syllable_count:1
POS:NOUN-Word:/hæd/
POS:NOUN-Lemma:/hæv/
POS:NOUN-POS:VERB
POS:NOUN-Syllable_count:1
Syllable_count:2-Word:/hæd/
Syllable_count:2-Lemma:/hæv/
Syllable_count:2-POS:VERB
Syllable_count:2-Syllable_count:1
```

For the poem’s first three words, the initial trigram tokens:

```
Word:/mɛɹɪ-/Word:/hæd/-Word:/ǝ/
Lemma:/mɛɹɪ-/Lemma:/hæv/-Lemma:/ǝ/
POS:NOUN-POS:VERB-POS:FUNC
Syllable_count:2-Syllable_count:1-Syllable_count:1
```

expand 16 times to 64 single- and multi-feature trigrams.

The total number of single- and multi-feature n-gram tokens generated for a given text can be determined as follows:
Figure 4.1. Calculation for all single- and multi-feature tokens of a text

Given:

\[ C = \text{The count of all single- and multi-feature tokens that might be generated from a text at a given level of analysis (e.g. word level, syllable level).} \]

\[ E = \text{The number of linguistic elements in the text (e.g. in the first verse of Mary had a little lamb, we analyzed at the word level where there are 22 words and 5 instances of } \langle \text{line_boundary} \rangle, \text{for a total of 27 word-level elements).} \]

\[ N = \text{The current n-gram n number.} \]

\[ \text{Max } N = \text{The } n \text{ number of the largest desired n-gram. For an n-gram token to be able to occur at least twice, and thereby potentially demonstrate a pattern, } max n \text{ should not exceed half the total number of linguistic elements (e.g. for word-level analysis of the first verse of Mary had a little lamb, it would not be useful for } n \text{ to be larger than 13).} \]

\[ F = \text{The number of tagged linguistic features (e.g. the first verse of Mary had a little lamb has been tagged for four features).} \]

\[
C = \sum_{N=1}^{\text{Max } N} (E - (N - 1)) \cdot F^N
\]

In (4.16), we find that multi-feature tokenization of just the first verse of Mary had a little lamb will generate over a billion single- and multi-feature tokens:

(4.16) Count of all single- and multi-feature n-gram tokens for the first verse of Mary had a little lamb, at four layers of word-level tagging, and where line boundary is significant

<table>
<thead>
<tr>
<th>( n )</th>
<th>Tokens at given ( n )</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>((27 - 0) \cdot 4^1 = 108)</td>
</tr>
<tr>
<td>2</td>
<td>((27 - 1) \cdot 4^2 = 416)</td>
</tr>
<tr>
<td>3</td>
<td>((27 - 2) \cdot 4^3 = 1,600)</td>
</tr>
<tr>
<td>4</td>
<td>((27 - 3) \cdot 4^4 = 6,144)</td>
</tr>
<tr>
<td>5</td>
<td>((27 - 4) \cdot 4^5 = 23,552)</td>
</tr>
<tr>
<td>6</td>
<td>((27 - 5) \cdot 4^6 = 90,112)</td>
</tr>
<tr>
<td>7</td>
<td>((27 - 6) \cdot 4^7 = 344,064)</td>
</tr>
</tbody>
</table>
8 \( (27 - 7) \cdot 4^8 = 1,310,720 \)
9 \( (27 - 8) \cdot 4^9 = 4,980,736 \)
10 \( (27 - 9) \cdot 4^{10} = 18,874,368 \)
11 \( (27 - 10) \cdot 4^{11} = 71,303,168 \)
12 \( (27 - 11) \cdot 4^{12} = 268,435,456 \)
13 \( (27 - 12) \cdot 4^{13} = 1,006,632,960 \)

Count of all tokens: 1,372,003,404

The number of word-level n-grams generated from a typical 1,000 word oral tradition text, after restricting analysis to 10 layers of tagging, is \( 6.82 \times 10^{501} \) tokens. Due to the processing and storage constraints of a typical recent-model computer, it would probably be difficult to handle more than 10 billion tokens at a given analysis pass. Reducing the number of tagged layers to four and maximum \( n \) to 10, however, will diminish the final token count to a much more tractable 1.39 billion. Because single-feature analysis is computationally much simpler, its maximum \( n \) will be set higher at 15.

Such a reduction in the interaction of linguistic features for a given pass suggests that some patterns will be missed by the automated process. Therefore, a certain degree of trial and error will be pursued in order to determine which combinations of four features appear the most promising. With a maximum \( n \) of just 10, it will also be necessary to manually stitch together adjacent and overlapping patterns.

### 4.3 Process of manual review

The automated process tokenizes a text into a very large quantity of n-gram tokens, and then sorts and counts their occurrences. Recurring tokens subsequently undergo manual review.

An example of single-feature raw output for the linguistic feature *word form* is given in (4.18) below, preceded in (4.17) by the text from which it was obtained.

---

Note that table 4.1 proposes tagging for 56 linguistic features at just the level of the word.
(4.17) “Lament of Tauraatua” (Adams 1968:37)

1. taura-atua PAUSE
   Taura-atua
   Taura-atua

2. te: noho mai ra
   DUR live hither there
   is living

3. i to-na ra pae~pae
   in INALIEN.NEUT-3.SG there stone.platform
   at his stone platform

4. i te pae~pae roa PAUSE
   at the stone.platform long
   at the long stone platform.

5. e ?uriri iti au
   IPFV bird(Heteroscelus.incanus) small 1.SG
   I am a small ‘uriri bird

6. e rere
   IPFV fly
   who flies

7. i te ruaroa PAUSE
   DIROBJ the Ruaroa
   to the Ruaroa.

8. e fenua papara
   EXIST land Papara
   Papara is a land

9. i te raʔi ruma~ruma PAUSE
   at the sky sombre
   of sombre skies.

10. e haere a:
    IPFV go continually
    Go all the way

11. i teva PAUSE
    to Teva
    to Teva.
12. te-na: 
DEM-PROX.2 
That is 

12. te ?a?ia PAUSE 
the homeland 
your homeland. 

13. te-i papara 
the-in Papara 
In Papara is 

14. to: fenua ?ura e: PAUSE 
INALIEN,NEUT,2.SG land red oh 
your red land, oh. 

15. mou?a 
mountain 
The mountain 

16. te-i ni?a PAUSE 
the-at above 
above is 

17. mou?a tamaiti PAUSE 
mountain son 
the mountain of the son. 

18. ?e 
and 
And 

19. ?ouitu 
point.of.land 
the point of land 

20. te-i tai PAUSE 
the-at seaward 
that is seaward is 

21. ?ouitu mano~mano PAUSE 
point.of.land very.numerous 
the point of land called very numerous,
22. te fa?ari?-i-ra?a
    the receive-NMLZ
    which is the reception place

23. i-a teri?irere
    to-PROP Teri’irere
    of Teri’irere

24. i ?outu rau
    at point.of.land diverse
    at the diverse points of land

25. ma to?oarai PAUSE
    with To’oarai
    with To’orai.

26. e ti?i na vau PAUSE
    IPFV fetch already 1.SG
    I will fetch,

27. e tu:ra?i e: atu
    IPFV push separate thither
    I will push aside

28. i te ni:?au para
    DIROBJ the coconut.frond ripe
    the ripe coconut fronds

29. o te ruaroa e: PAUSE
    INALIEN.WEAK the Ruaroa oh
    of Ruaroa, oh.

30. ?ia vai noa mai na:-u
    SBJV exist continually hither ALIEN.STRONG-1.SG
    May I always possess

31. e pu:?u ri?:i
    EXIST bud small
    small buds

32. o marae-?ura
    INALIEN.WEAK Marae-‘ura
    of Marae-‘ura
33. te-i tai e: PAUSE
    the-at shore oh
    at the shore, oh.

(4.18) Automatically generated single-feature n-gram tokens in “Lament of Tauraatua” (Adams 1968:37)
Level of analysis: Word
Linguistic features: Word form
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
Range of n: 1 to 15
Minimum occurrences = 2

n = 3
Pattern occurrences             N-gram token
1.  4                             <line_boundary>-word:/i/ word:/te/

n = 2
Pattern occurrences             N-gram token
2.  8                             <line_boundary>-word:/i/
3.  6                             <line_boundary>-word:/e/
4.  4                             word:/i/-word:/te/
5.  3                             <line_boundary>-word:/tei/
6.  3                             /eː/-<line_boundary>
7.  2                             word:/tei/-word:/tai/
8.  2                             word:/te/-word:/ruaroa/
9.  2                             word:/papara/-<line_boundary>
10. 2                             <line_boundary>-word:/o/
11. 2                             <line_boundary>-word:/mouʔa/

n = 1
Pattern occurrences             N-gram token
12. 32                            <line_boundary>
13. 6                             word:/e/
14. 8                             word:/i/
15. 5                             word:/te/
16. 4                             word:/tei/
17. 4                             word:/eː/
18. 3                             word:/ʔoːtuʔa/
19. 2                             word:/te/
20. 2                             word:/tai/
21. 2                             word:/ruaroa/
It will be the task of manual review to determine which of the patterns listed in (4.18) reflect some type of poetic organization. The task will become easier to achieve if the patterns may be viewed in context. To this end, a Perl script is applied that integrates the original text with the generated pattern information, and renders both into interactive HTML documents; one per \( n \) value. Clicking on any element of a pattern within such an HTML document will highlight the full n-gram token to which it belongs, as well as all recurrences in the text.

For example, the token \(<\text{line_boundary}>-\text{word:}\text{i}-\text{word:}\text{te}\) listed in line 1 of (4.18) appears contextually in an HTML document as shown in (4.19):

Level of analysis: Word
Linguistic feature: Word form
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
Minimum occurrences = 2
Pattern: \(<\text{line_boundary}>-\text{word:}\text{i}-\text{word:}\text{te}\)

1. taura-atua \(<\text{line_boundary}>\)
2. te noho mai ra \(<\text{line_boundary}>\)
3. i to-na ra pae~pae \(<\text{line_boundary}>\)
4. \text{i te} pae~pae roa \(<\text{line_boundary}>\)
5. e ?uriiri iti au \(<\text{line_boundary}>\)
6. e rere \(<\text{line_boundary}>\)
7. \text{i te} ruaroa \(<\text{line_boundary}>\)
8. e fenua papara \(<\text{line_boundary}>\)
9. \text{i te} raʔi ruma~ruma \(<\text{line_boundary}>\)
10. e haere a: \(<\text{line_boundary}>\)
11. i teva \(<\text{line_boundary}>\)
12. tena: te ?aʔia \(<\text{line_boundary}>\)
13. te-i papara \(<\text{line_boundary}>\)
This pattern does not hold much interest, however, as colon-initial\(^41\) \textit{i te} ("DIROBJ the") is very common in Tahitian prose. A bigram pattern that is also very common to prose is line-initial \textit{e} ("IPFV" or "EXIST"), listed on line 3 of (4.18). It is shown in context in (4.20):

(4.20) The context of a single-feature bigram token in "Lament of Tauraatua" (Adams 1968:37)
Level of analysis: Word
Linguistic feature: Word form
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
Minimum occurrences = 6
Pattern: <line_boundary>-e

1. taura-atua <line_boundary>
2. te noho mai ra <line_boundary>

\(^{41}\) An explanation will be provided in chapter 5 as to why colon was selected as the poetic line.
In (4.21) below, we note two bigram patterns that may represent poetic organization; especially after a comparison to similar patterns from other texts.

These patterns are \(<line_boundary>-mou?\a\) (“mountain”) and
<line_boundary>-ʔoːtu (“point-of-land”), and they directly follow one another in lines 14 through 21.\textsuperscript{42}

(4.21) The context of two different single-feature bigram tokens in “Lament of Tauraatua” (Adams 1968:37)
Level of analysis: Word
Linguistic feature: Word form
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
Minimum occurrences = 2
First pattern: <line_boundary>-mouʔa
Second pattern: <line_boundary>-ʔoːtu

1. taura-atua <line_boundary>
2. te noho mai ra <line_boundary>
3. i to-na ra pae~pae <line_boundary>
4. i te pae~pae roa <line_boundary>
5. e ?uriri iti au <line_boundary>
6. e rere <line_boundary>
7. i te ruaroa <line_boundary>
8. e fenua papara <line_boundary>
9. i te raʔi ruma~ruma <line_boundary>
10. e haere a: <line_boundary>
11. i teva <line_boundary>
12. tena: te ?aʔia <line_boundary>
13. te-i papara <line_boundary>
14. to: fenua ?ura e: <line_boundary>
15. mouʔa <line_boundary>
16. te-i niʔa <line_boundary>
17. mouʔa tamaiti <line_boundary>
18. ?e <line_boundary>
19. ʔoːtu <line_boundary>
20. te-i tai <line_boundary>
21. ʔoːtu mano~mano <line_boundary>
22. te faʔariʔi-raʔa <line_boundary>
23. i-a teriʔirere <line_boundary>
24. i ʔoːtu rau <line_boundary>
25. ma toʔoarai <line_boundary>
26. e tiʔi na vau <line_boundary>

\textsuperscript{42} Glosses for these lines have been provided in (4.17).
Although “Lament of Tauraatua” seems, for the most part, to be representative of the _anau_ (“lamentation”) genre, the surrounding context of the patterns in (4.21) is more typical of a _paripari fenua_ (“description of land”) text. Nearly identical patterns are found in extracts from two _paripari fenua_ texts given in (4.22) and (4.23) below:

(4.22) Extract from “The districts of Tahiti Nui” (Henry 1928:70-71)

1. te fenua <line_boundary>
   the land.
   the land.

2. te mouʔa <line_boundary>
   the mountain
   the mountains above are

3. i niʔa <line_boundary>
   at above
   above are

4. ò te-vai-tohi <line_boundary>
   PROP Te-vai-tohi
   Te-vai-tohi,

5. ò maʔuru <line_boundary>
   PROP Maʻuru
   Maʻuru,

6. ò <line_boundary>
   and
   and
7. ?o ta-hou-tira <line_boundary>
PROP Ta-hou-tira
Ta-hou-tira.

8. te tahua <line_boundary>
the meeting-grounds
The meeting grounds

9. i raro <line_boundary>
at below
below is

10. ?o te-iri'iri <line_boundary>
PROP Te-'iri'iri
Te-'iri'iri.

11. te ?outu <line_boundary>
the point.of.land
The point of land

12. i tai <line_boundary>
at seaward
that is seaward is

13. ?o pape-he'e <line_boundary>
PROP Pape-he'e
Pape-he'e.

(4.23) Extract from “Mahaena” (Henry 1928:72)

1. ia fenua <line_boundary>
ANAPH land.
it is the land.

2. te moua <line_boundary>
the mountain
The mountain

3. i ni?a <line_boundary>
at above
above is
4. ʔo taia:-mano  <line_boundary>
PROP Taia-mano.
Taia-mano.

5. te-i reira  <line_boundary>
the-at aforementioned
It is there that is found

6. te pare ra  <line_boundary>
the fort there
the fort called

7. ʔo taia:-vete  <line_boundary>
PROP Taia-vete
Taia-vete.

8. te tahua  <line_boundary>
the meeting-ground
The meeting ground

9. i raro  <line_boundary>
at below
below is

10. ʔo poro-ʔura  <line_boundary>
PROP Poro-ʻura
Poro-ʻura.

11. te ʔoutu  <line_boundary>
the point.of.land
The point of land

12. i tai  <line_boundary>
at seaward
that is seaward is

13. ʔo fare-tai  <line_boundary>
PROP Fare-tai
Fare-tai.

After further review of the context of the patterns <line_boundary>-
(e|te)-mouʔa and <line_boundary>-{(e|te)-ʔoutu} in the above texts, a longer and
more complex pattern was discovered: line-boundary (te) N.landmark line-
boundary (te) i LOC line-boundary (ʔo) NPROP line-boundary. It is shown in (4.24), mapped onto the passage from (4.22):

(4.24) Extract from the *paripari fenua* "The districts of Tahiti Nui" (Henry 1928:70-71)

1. te fenua  <line_boundary>
   ART   N
   the land.

2. te mouʔa  <line_boundary>
   ART   N.landmark
   the mountain
   the mountains

3. i niʔa  <line_boundary>
   P   LOC
   at above
   above are

4. ʔo te-vai-tohi  <line_boundary>
   PROP   NPROP
   PROP   Te-vai-tohi
   Te-vai-tohi,

5. ʔo maʔuru  <line_boundary>
   PROP   NPROP
   PROP   Maʻuru
   Maʻuru,

6. ʔe  <line_boundary>
   CONJ
   and
   and

7. ʔo ta-hou-tira  <line_boundary>
   PROP   NPROP
   PROP   Ta-hou-tira
   Ta-hou-tira.

---

43 Patterns that result from the manual review process will be presented in a simpler format than that used for n-gram tokens.
8. te tahuai
   ART N.landmark
   the meeting ground
   The meeting grounds

9. iraro
   P LOC
   at below
   below are

10. te-ʔiriʔiri
    PROP NPROP
    Te-‘iri‘iri
    Te-‘iri‘iri.

11. te ʔo:utu
    ART N.landmark
    the point of land
    The point of land

12. i tai
    P LOC
    at seaward
    that is seaward is

13. pape-he’e
    PROP NPROP
    Pape-he’e
    Pape-he’e.

4.3.1 Criteria for determining poetic organization

During the manual review process, the initial set of criteria for
determining whether or not a pattern should be pursued as poetic are as follows:

1. The pattern must be either extremely rare or non-existent in prose. When it
does occur in prose, it should represent a use of poetic language.\(^{44}\) For the most

\(^{44}\) Roman Jakobson describes the poetic function within prose as follows: “Poetic function is not the
sole function of verbal art but only its dominant, determining function, whereas in all other verbal
activities it acts as a subsidiary, accessory constituent. This function, by promoting the palpability of
signs, deepens the fundamental dichotomy of signs and objects. Hence, when dealing with poetic
function, linguistics cannot limit itself to the field of poetry.” (Jakobson 1960:356-357)
part, the likelihood of a pattern’s being common to Tahitian prose is based on the author’s experience.

2. The pattern must occur at least twice in the same text.

3. The placement of the majority of pattern occurrences should appear intentional.

4. Similar types of pattern must be found in at least two other texts of the same genre.

Patterns that satisfy these criteria will then be compared to the variety of poetic organization presented in the literature review. If a clear similarity is found, it will be concluded that the pattern was most likely poetic. If no correspondence is discovered, then such a conclusion would require strong representation of the same type of pattern across a genre.

It is not the aim of the detection process to prove that a given pattern is poetic through statistical means. Although, as will be seen in the next section, statistical analysis is sometimes applied, proof is generally difficult to obtain; especially when multiple features come into play. The intent, rather, is for the detection process to feed a broader one of poetic literary analysis, and for its claims to be accepted or rejected within that context.

In chapters 5, 6, and 7, pattern types that unambiguously demonstrate poetic organization will be identified as such. Also presented will be types of organization of lesser frequency and/or narrower distribution.

4.3.2 Manual review of a sample text

Single-feature analysis for all of the linguistic features listed in table 4.1 above will now be applied to the sample text “Warning by messengers of the paʻiʻatua service” (Henry 1928:158-159), which appears in its entirety in (4.25):
(4.25) “Warning by messengers of the pa‘i-ataua service” (Henry 1928:158-159)

1. e fati ?ava
   IPFV to.be.broken kava.plant
   Kava plants will be broken.

2. e fati ?ava
   IPFV to.be.broken kava.plant
   Kava plants will be broken.

3. ?a?uanei
   soon
   Soon

4. e fati ai
   IPFV to.be.broken AIPART
   they will be broken.

5. te ara
   the caution
   There is caution

6. i te tai
   DIROBJ the sea
   concerning the sea,

7. e taimara-hia
   IPFV to.sanctify-PASS
   that is sanctified

8. no: te va?a hoe~hoe
   INALIEN.STRONG the outrigger.canoe repeatedly.paddled
   for the continuously paddled outrigger canoe

9. a te atua
   ALIEN.WEAK the god
   of the gods.

10. ?eiaha
    IMP.NEG
    May not

11. te va?a ta?ata
    the outrigger.canoe person
    the outrigger canoes of people
12. ?ia fa?a-farerei  
   IMP CAUS-to.meet  
   attempt to meet it.

13. e ara  
   IPFV to.beware  
   Beware

14. i te ?e:?a  
   DIROBJ the path  
   of the paths

15. i uta  
   at inland  
   that are inland

16. na: te ari?i  
   ALIEN.STRONG the king  
   that belong to the king,

17. e ara  
   IPFV to.beware  
   beware.

18. ?aua?a  
   IMP.NEG  
   May they not

19. e haere-a  
   IPFV to.go-PASS  
   be walked upon,

20. te ara nui  
   the road large  
   the large roads

21. ?e  
   and  
   and

22. te ara ri?i  
   the road small  
   the small roads,
23. ?ua?a ana?e ia
   IMP.NEG right.now ANAPH
not right now.

24. ?ei ahi ta:po?i
   EXISTSUBJ fire cover
May fires be covered.

25. ?eiaha
   IMP.NEG
May there not

26. ?ei tu:rama
   EXISTSUBJ torch.illumination
be torch light

27. ?a mahuta
   lest to.fly
   lest they fly away,

28. te atua
   the god
   the gods.

29. te ra?a
   the sacredness
   The sacredness

30. no: te atua
   INALIEN.STRONG the god
   of gods

31. e purara
   IPFV to.be.dispersed
   will spread about.

32. e vaere?a marae a:po:po:
   EXISTS brush.clearing platform.temple tomorrow
   There will be brush clearing at the platform temple tomorrow.

33. ?e
   and
   And
34. i ?a?ahiata aːpoːpo: atu
    at dawn tomorrow thither
    at dawn the day after tomorrow,

35. e fa?a-ara-ra?a
    EXIST CAUS-awake-NMLZ
    there will be an awakening.

36. e fa?a-ara-ra?a
    EXIST CAUS-awake-NMLZ
    There will be an awakening

37. i te atua
    DIROBJ the god
    of the gods.

38. ?a ara
    IMP awake
    Wake up

39. ?o taura tahu?a
    PROP group priest
    group of priests.

40. ?a ara mai aːpoːpo:
    IMP awake hither tomorrow
    Wake up tomorrow.

41. e hopu
    IPFV to.bathe
    Bathe

42. i te vai
    in the fresh.water
    in fresh water.

43. miri~miri
to.touch
    Touch

44. i te mata
    DIROBJ the face
    your faces.
45. e hume
   IPFV to.put.on.a.belt.of.office
   Put on

46. i te maro ?uo
   DIROBJ the belt.of.office white
   the white belt of office.

47. e noho
   IPFV to.sit
   Sit down

48. i ni?a
   at upon
   upon

49. i te ma:hora
   DIROBJ the yard
   the yard.

50. e noho
   IPFV to.sit
   Sit,

51. e ?upu
   IPFV to.recite.a.prayer
   recite

52. i te ?aho?a
   DIROBJ the prayer
   the prayer

53. no: te vaere?a marae
   INALIEN.STRONG the brush.clearing platform.temple
   for clearing brush at the platform temple.

54. ?o te ara
   EXIST the awakening
   The awakening

55. o te ari?i
   INALIEN.WEAK the god
   of the king is
56. te ara
    the awakening
    the awakening

57. o te ta?ata
    INALIEN.WEAK the person
    of the people;

58. te ara
    the awakening
    the awakening

59. o na: hui tapairu
    INALIEN.WEAK PL collective maiden.in.waiting
    of some of the maiden-in-waiting class

60. e ?e?e
    IPFV to.climb.on
    who will climb

61. i te papa
    at the flat.stone
    upon the flat stones of the platform temple.

62. e ra?a a?opo:
    EXIST sacredness tomorrow
    There will be sacredness tomorrow.

63. e vaere?a marae
    EXIST brush.clearing platform.temple
    There will be brush clearing of the platform temple.

64. ?e
    and
    And

65. i te ?a?ahiata nui atu
    at the dawn great thither
    in the early dawn following

66. e fa?a-ara-ra?a atua
    EXIST CAUS.awake-NMLZ god
    there will be an awakening of the gods.
67. ?o te atua
   EXIST the god
   It will be of the gods that are

68. i ni'i?a
   at above
   above,

69. te atua
   the god
   the gods that are

70. i raro
   at below
   below,

71. te atua
   the god
   the gods that are

72. i tai
   at seaward
   seaward,

73. te atua
   the god
   the gods that are

74. i uta
   at inland
   inland,

75. te atua
   the god
   the gods that are

76. i roto
   at inside
   inside,

77. te atua
   the god
   the gods that are

78. i vaho
   at outside
   outside.
79. e tae ana?e mai
   IPFV to.arrive all hither
   They will all arrive

80. i teie nei ?o:ro?a
   at this PROX.1 religious.ordination
   at this religious ordinance.

81. e ra?a
   EXIST sacredness
   There will be sacredness,

82. mo?a
   holiness
   holiness.

4.3.2.1 First round of manual review

Some of the sample text’s raw pattern output is given in (4.26) through (4.37) below. This selection consists of single-feature raw output where phoneme is the linguistic feature, and for a range of $n$ from 6 to 15. Line boundary is significant for the patterns in (4.26) through (4.34), but is ignored for the patterns in (4.35) through (4.37).

This portion of raw output is representative of that of the overall corpus in that:

1. Many patterns are of little or no interest.
2. Some patterns suggest poetic organization.
3. Some patterns point to a larger, more comprehensive pattern.
4. Some patterns point to a pattern that might be detected better at a different level of analysis.

Patterns that appear promising will be set aside for subsequent rounds of manual review, which will occur after all raw output has undergone an initial examination. In the later rounds, pattern types will also be compared to similar types discovered in other texts of the corpus.
The pattern detected in (4.26) below contains the line-final word *atua* ("god"), followed by a line-initial glottal stop. This simple pattern occurs three times in the sample text but, as its occurrences seem randomly scattered, may be of little interest.

(4.26) Some raw pattern output in extract from sample text “Warning by messengers of the *paʻi-atua* service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 6
Minimum occurrences = 3
Pattern = a t u a line-boundary ?

9. a te atua <line_boundary> atua <line_boundary>
   ALIEN.WEAK the god of the gods.

10. ?eiaha <line_boundary>
    ? <line_boundary>
    IMP.NEG May not ...

37. i te atua <line_boundary>
    atua <line_boundary>
    DIROBJ the god of the gods.

38. ?a ara <line_boundary>
    ? <line_boundary>
    IMP awake Wake up ...

66. e fa?a-ara-ra?a atua <line_boundary>
    atua <line_boundary>
    EXIST CAUS-awake-NMLZ god there will be an awakening of the gods.
The phonemic parallelism in (4.27) below is also unlikely to be poetically significant, as its pattern occurs just twice, and the occurrences are widely separated:

(4.27) Some raw pattern output in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 8
Minimum occurrences = 2
Pattern = a line-boundary n o: t e v a

...
The pattern in (4.28) may hold some interest. Although only appearing twice, its occurrences are in close proximity to each other. It will be set aside for a second round of manual review.

(4.28) Some raw pattern output in extract from sample text “Warning by messengers of the pa‘i-atau service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: All boundaries are ignored.
N = 8
Minimum occurrences = 2
Pattern = e a r a line-boundary i t e

5. te ara <line_boundary>
e ara <line_boundary>
the caution
There is caution

6. i te tai <line_boundary>
i te <line_boundary>
DIROBJ the sea
concerning the sea,
...

13. e ara <line_boundary>
e ara <line_boundary>
IPFV to.beware
Beware

14. i te ?e:a <line_boundary>
i te <line_boundary>
DIROBJ the path
of the paths

In the pattern in (4.29) below, we note an assonant series of /a/, which overlaps with simple end-rhyme for the words atua (“god”), ara (“awake”), and tahuʔa (“priest”) in lines 37, 38, and 39. Having taken note above of similar assonance and end-rhyme elsewhere in Polynesia, this pattern seems to demonstrate a degree of poetic organization.
(4.29) Some raw pattern output in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 7
Minimum occurrences = 2
Pattern = a line-boundary ?a a r a

37. i te atua <line_boundar Y> a <line_boundar Y>
   DIROBJ the god of the gods.

38. ?a ara <line_boundar Y>
   ?a ara <line_boundar Y>
   IMP awake
   Wake up

39. ?o taura tahu?a <line_boundar Y>
   a <line_boundar Y>
   PROP group priest
   group of priests.

40. ?a ara mai a:p:o:p:o: <line_boundar Y>
    ?a ara <line_boundar Y>
    IMP awake hither tomorrow
    Wake up tomorrow.

The pattern in (4.30) below is similar to that of (4.29). In addition to the line boundary in both being preceded by the phoneme /a/, the strings of phonemes following the boundary are almost anagrams of one another, as well as of the series /e a r a/ of the pattern in (4.28). It is possible that these three patterns will be found to combine into a greater pattern. This possibility will be taken up in a second round of manual review.
(4.30) Some raw pattern output in extract from sample text “Warning by messengers of the pa ʻi-atua service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 7
Minimum occurrences = 2
Pattern = a line-boundary e r a ʔa

61. i te papa <line_boundary>
    a <line_boundary>
    at the flat stone
    upon the flat stones of the platform temple.

62. e raʔa apo:po: <line_boundary>
    e raʔa <line_boundary>
    EXIST sacredness tomorrow
    There will be sacredness tomorrow.

... 

80. i teie nei ?o:roʔa <line_boundary>
    a <line_boundary>
    at this PROX.1 religious ordinance
    at this religious ordinance.

81. e raʔa <line_boundary>
    e raʔa <line_boundary>
    EXIST sacredness
    There will be sacredness.

The pattern in (4.31) only occurs twice. The large separation between its occurrences is probably attributable to chance.
(4.31) Some raw pattern output in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)

Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = a i line-boundary t e a

4. e  f a t i a i  <line_boundary>  
   IPFV  to.be.broken  AIPART
   they will be broken.

5. t e a r a  <line_boundary>
   t e a  <line_boundary>
   the  caution
   There is caution

...  

72. i t a i  <line_boundary>
   ai  <line_boundary>
   at  seaward
   seaward,

73. t e a t u a  <line_boundary>
   t e a  <line_boundary>
   the  god
   the gods that are

The portion of the pattern in (4.32) below that follows the line boundary is similar, in near-anagram fashion, to the pre-line-boundary phonemes in (4.28), and to the post-line-boundary phonemes of (4.29) and (4.30). If it can be demonstrated that these four patterns combine into a larger pattern, then that larger pattern will have occurred eight times.
Without reference to any of the patterns reviewed thus far, the patterns in (4.33) and (4.34) below would not appear to hold much interest. However, if we take note of the words that overlap with the ends of these patterns, we find that ara (“awakening”) in lines 54 of (4.33) and 58 of (4.34) and atua (“god”) in lines 67 of (4.33) and 75 of (4.34) have already been encountered elsewhere; for example in (4.31). The patterns in (4.33) and (4.34) may be of interest after all, and therefore will be set aside for a second round of manual review.
(4.33) Some raw pattern output in extract from sample text "Warning by messengers of the paʻi-ataua service" (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = line-boundary ʔ o t e a

53. no:  te vaere?a marae <line_boundary> ʔo 5 3. noːte vaereʔa marae <line_boundary> ʔo

INALIEN.STRONG the brush.clearing platform.temple for clearing brush at the platform temple.

54. ʔo te ara <line_boundary>
ʔo te a <line_boundary>
EXIST the awakening
The awakening

... 

56. e faʔa-ara-raʔa atua <line_boundary> ʔo 6 6. e faʔa-ara-raʔa atua <line_boundary> ʔo

EXIST CAUS.awake-NMLZ god
there will be an awakening of the gods.

57. ʔo te atua <line_boundary>
ʔo te a <line_boundary>
EXIST the god
It will be of the gods that are

(4.34) Some raw pattern output in extract from sample text "Warning by messengers of the paʻi-ataua service" (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = t a line-boundary t e a

58. o te taʔata <line_boundary> ʔa 5 7. o te taʔata <line_boundary> ʔa

INALIEN.WEAK the person
of the people;
In the pattern in \((4.35)\) below, all phonemes, except for initial /a/ and final /r/, comprise the words \(te\) \(atua\) \(i\) ("the gods that are at"), which we shall eventually encounter in the word-level patterns of \((4.44)\), \((4.45)\), and \((4.47)\). Analysis of the current pattern will consequently be delayed until a review of those word-level patterns.

(4.35) Some raw pattern output in extract from sample text "Warning by messengers of the \(pa'\)\(i\)-\(atua\) service" (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: All boundaries are ignored.
N = 9
Minimum occurrences = 2
Pattern = \(a\) \(t\) \(e\) \(a\) \(t\) \(u\) \(a\) \(i\) \(r\)

68. \(i\) \(n\)i?a
\(a\)
at above
above,

69. \(te\) \(atua\)
\(te\) \(atu\)a
the god
the gods that are

70. \(i\) \(raro\)
\(i\) \(r\)
at below
below,
... 

74. i uta
    a
    at inland
    inland,

75. te atua
    te atua
    the god
    the gods that are

76. i roto
    i r
    at inside
    inside,

Once again, we note in (4.36) below a phoneme-level pattern that only appears twice in the text, and with apparently chance placement. Perhaps the repetition of its two words te atua (“the gods”), however, will prove to be of some interest at the word level during subsequent review.

(4.36) Some raw pattern output in extract from sample text “Warning by messengers of the pa’i-atua service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: All boundaries are ignored.
N = 7
Minimum occurrences = 2
Pattern = a t e a t u a

9. a te atua
    a te atua
    ALIEN.WEAK the god
    of the gods.

... 

27. ?a mahuta
    a
    lest to.fly
    lest they fly away,
28. te atua
te atua
the god
the gods.

Again, we find in (4.37) below a pattern that only occurs twice, with placement that seems attributable to chance:

(4.37) Some raw pattern output in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: All boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = a aː p oː p oː:

34. iʔaʔahiata aːpoːpoː atu
   a aːpoːpoː:
at dawn tomorrow thither
at dawn the day after tomorrow,
...

62. e raʔa aːpoːpoː:
a aːpoːpoː:
EXIST sacredness tomorrow
There will be sacredness tomorrow.

4.3.2.2 Results from manual review

Skipping ahead, in (4.38) through (4.47) below will be presented some of the more promising patterns detected in the sample text. All have survived several rounds of manual review.

In (4.38), we find in lines 23, 24, and 25 repetition of the phoneme-level series line-boundary ʔe i a h, which ignores word boundary. Note that four of the pattern’s elements, ʔe i a, also appear in line 23 before the pattern’s first occurrence, and the four elements line-boundary ʔe i show up in lines 25 and 26 after the pattern’s second occurrence. Perhaps it is the function of these leading and trailing segments to serve as a transition.
(4.38) Potentially poetic pattern in extract from sample text “Warning by messengers of the paʻi-atau service” (Henry 1928:158-159)
Level of analysis: Phoneme
Linguistic feature: Phoneme
Boundary relevance: Line boundary is significant. Word and syllable boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = line-boundary \( ?e \ ia \ h \)

23. \( ?a\)ua?a anesthesia <line_boundary>
\( ?e \ ia \) <line_boundary>
IMP.NEG right.now ANAPH not right now.

24. \( ?e\)i ahi tapo?i <line_boundary>
\( ?e\)i ah <line_boundary>
EXIST.SUBJ fire cover
May fires be covered.

25. \( ?e\)iaha <line_boundary>
\( ?e\)iah <line_boundary>
IMP.NEG
May there not

26. \( ?e\)i tu:rama
\( ?e\)i <line_boundary>
EXIST.SUBJ torch.illumination
be torch light

For the pattern in (4.39) below, both word and line boundaries are ignored. Two factors that might argue here for poetic intent are that both occurrences of the pattern are close to one another, and that assonance has been found to be fairly commonplace in the corpus.\(^{45}\)

\(^{45}\) The use of assonance will be discussed in chapter 6.
(4.39) Potentially poetic pattern in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)

Level of analysis: Syllable
Linguistic feature: Syllable rhyme
Boundary relevance: Syllable boundary is significant. Line and word boundaries are ignored.
N = 6
Minimum occurrences = 2
Pattern = e e i e a a

60. e ʔeʔe
     e e
     IPFV to.climb.on
     who will climb

61. i te papa
     i e a a
     at the flat.stone
     upon the flat stones of the platform temple.

62. e raʔa ʔapolopo:
     EXIST sacredness tomorrow
     There will be sacredness tomorrow.

63. e vaereʔa marae
     e
     EXIST brush.clearing platform.temple
     There will be brush clearing of the platform temple.

64. ?e
     e
     and
     And

65. i te ?aʔahiata nui atu
     i e a a
     at the dawn great thither
     in the early dawn following

The pattern in (4.40) below seems to be poetic in that its three occurrences occur on nearly every other line:
(4.40) Potentially poetic pattern in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)  
Level of analysis: Word  
Linguistic feature: Word-initial syllable  
Boundary relevance: Line, word, and syllable boundaries are significant.  
N = 4  
Minimum occurrences = 3  
Pattern = line-boundary i te ma

44. i te mata <line_boundary>  
   i te ma <line_boundary>  
   DIROBJ the face  
your faces.

45. e hume <line_boundary>  
   IPFV to.put.on.a.belt.of.office  
   Put on

46. i te maro ?uo <line_boundary>  
   i te ma <line_boundary>  
   DIROBJ the belt.of.office white  
   the white belt of office.

47. e noho <line_boundary>  
   IPFV to.sit  
   Sit down

48. i ni?a <line_boundary>  
   <line_boundary>  
   at upon  
   upon

49. i te mahora <line_boundary>  
   i te ma <line_boundary>  
   DIROBJ the yard  
   the yard.

Partially overlapping with (4.40) is the assonant pattern in (4.41) below, a portion of which had been investigated in (4.15). The pattern’s three occurrences are each separated by two other lines, the first of which consists of the words e noho (“sit down”).
(4.41) Potentially poetic pattern in extract from sample text “Warning by messengers of the pa’i-atua service” (Henry 1928:158-159)

Level of analysis: Syllable
Linguistic feature: Syllable rhyme
Boundary relevance: Line and syllable boundaries are significant. Word boundary is ignored.
N = 5
Minimum occurrences = 3
Pattern = line-boundary i e a o

46. i te maro ?uo <line_boundary>
i e a o <line_boundary>
DIROBJ the belt.of.office white
the white belt of office.

47. e noho <line_boundary>
<line_boundary>
IPFV to.sit
Sit down

48. i ni?a <line_boundary>
<line_boundary>
at upon
upon

49. i te mahora <line_boundary>
i e a o <line_boundary>
DIROBJ the yard
the yard.

50. e noho <line_boundary>
<line_boundary>
IPFV to.sit
Sit,

51. e ?upu <line_boundary>
<line_boundary>
IPFV to.recite.a.prayer
recite

52. i te ?aho:a <line_boundary>
i e a o <line_boundary>
DIROBJ the prayer
the prayer
In (4.42), we find in the concluding lines of the text an instance of end-rhyme that happens to repeat the full syllable.

(4.42) Potentially poetic pattern in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)
Level of analysis: Word
Linguistic feature: Word-final syllable
Boundary relevance: Line and syllable boundaries are significant. Word boundary is ignored.
N = 2
Minimum occurrences = 3
Pattern = ʔa line-boundary

80. i teie nei ʔo:roʔa ʔa <line_boundary>
   at this PROX.1 religious.ordination
   at this religious ordinance.

81. e raʔa ʔa <line_boundary>
   EXIST sacredness
   There will be sacredness,

82. moʔa ʔa <line_boundary>
   holiness
   holiness.

In (4.43) below, we note six occurrences of the six element part-of-speech pattern ART N line-boundary P LOC line-boundary. As all but one of the words are identical for each occurrence, this syntactic frame pattern could be simplified to te atua line-boundary i LOC line-boundary.
(4.43) Potentially poetic pattern in extract from sample text “Warning by messengers of the pa’i-atua service” (Henry 1928:158-159)
Level of analysis: Word
Linguistic feature: Part-of-speech
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
N = 6
Minimum occurrences = 6
Pattern = ART N line-boundary P LOC line-boundary

67. ʔo te atua <line_boundary>
    ART N <line_boundary>
    EXIST the god
    It will be of the gods that are

68. i ni?a <line_boundary>
    P LOC <line_boundary>
    at above
    above,

69. te atua <line_boundary>
    ART N <line_boundary>
    the god
    the gods that are

70. i raro <line_boundary>
    P LOC <line_boundary>
    at below
    below,

71. te atua <line_boundary>
    ART N <line_boundary>
    the god
    the gods that are

72. i tai <line_boundary>
    P LOC <line_boundary>
    at seaward
    seaward,

73. te atua <line_boundary>
    ART N <line_boundary>
    the god
    the gods that are
We find in (4.44) below that a six element CV-shape pattern overlaps the part-of-speech pattern of (4.43) for four of its six occurrences. This overlap occurs in lines 67 through 70, and 75 through 79. This pattern could be simplified to *te atua* line-boundary i CVCV line-boundary.

(4.44) Potentially poetic pattern in extract from sample text “Warning by messengers of the *paʻi-atua* service” (Henry 1928:158-159)
Level of analysis: Word
Linguistic feature: CV-shape
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
N = 6
Minimum occurrences = 4
Pattern = CV VCVV line-boundary V CVCV line-boundary

67. ʔo te atua <line_boundary>
    CV VCVV <line_boundary>
EXIST the god
It will be of the gods that are
68. i ni?a <line_boundary>
   V CVCV <line_boundary>
at above <line_boundary>
above,

69. te atua <line_boundary>
   CV VCVV <line_boundary>
   the god <line_boundary>
   the gods that are <line_boundary>

70. i raro <line_boundary>
   V CVCV <line_boundary>
at below <line_boundary>
below,

71. te atua <line_boundary>
   the god <line_boundary>
   the gods that are <line_boundary>

72. i tai <line_boundary>
   at seaward <line_boundary>
   seaward,

73. te atua <line_boundary>
   the god <line_boundary>
   the gods that are <line_boundary>

74. i uta <line_boundary>
   at inland <line_boundary>
inland,

75. te atua <line_boundary>
   CV VCVV <line_boundary>
   the god <line_boundary>
   the gods that are <line_boundary>

76. i roto <line_boundary>
   V CVCV <line_boundary>
at inside <line_boundary>
inside,
We note in (4.45) below that lone lemmas of the form *ara* occur 13 times in the text: The first three relate to the meaning of “being aware”, the second two to “road”, and the last eight to “awake”.

(4.45) Potentially poetic pattern in extract from sample text “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)
Linguistic level: Word
Linguistic feature: Lemma
Boundary relevance: Word boundary is significant. Line and syllable boundaries are ignored.
N = 1
Minimum occurrences = 13
Pattern = *ara*

5. te ara
   ara
   the caution
   There is caution
   ...

13. e ara
   ara
   IPFV to.beware
   Beware
   ...

17. e ara
   ara
   IPFV to.beware
   beware.
   ...

20. te ara nui
    ara
    the road large
    the large roads
22. te ara riʔi
   ara
   the road small
   the small roads,

35. e faʔa-ara-raʔa
   ara
   EXIST CAUS-aware-NMLZ
   there will be an awakening.

36. e faʔa-ara-raʔa
   ara
   EXIST CAUS-aware-NMLZ
   There will be an awakening

38. ?a ara
   ara
   IMP awake
   Wake up

40. ?a ara mai aŋo-po:
   ara
   IMP awake hither tomorrow
   Wake up tomorrow.

54. ?o te ara
   ara
   EXIST the awakening
   The awakening

56. te ara
   ara
   the awakening
   the awakening
58. te ara
   ara
   the awakening
   the awakening
...

66. e fa?a-ara-ra?a atua
   ara
   EXIST CAUS-awake-NMLZ god
   there will be an awakening of the gods.

Besides ara, the only other frequently occurring content word is atua ("god"), which appears 11 times in the text, and is shown in (4.46) below. The frequent use of these words may prove to be thematic.

(4.46) Potentially poetic pattern in extract from sample text "Warning by messengers of the pa'i-atua service" (Henry 1928:158-159)
Linguistic level: Word
Linguistic feature: Lemma
Boundary relevance: Word boundary is significant. Line and syllable boundaries are ignored.
N = 1
Minimum occurrences = 11
Pattern = atua

9. a te atua
   atua
   ALIEN.WEAK the god
   of the gods.
...

28. te atua
    atua
    the god
    the gods.
...

30. no: te atua
    atua
    INALIEN.STRONG the god
    of gods
...
37. i te atua
   DIROBJ the god
   of the gods.
...

66. e fa?a-ara-ra?a atua
   EXIST CAUS-awake-NMLZ god
   there will be an awakening of the gods.

67. ?o te atua
   EXIST the god
   It will be of the gods that are
...

69. te atua
   the god
   the gods that are
...

71. te atua
   the god
   the gods that are
...

73. te atua
   the god
   the gods that are
...

75. te atua
   the god
   the gods that are
...

77. te atua
   the god
   the gods that are
In addition to *ara* and *atua*, many other words in the text contain two or more occurrences of the phoneme /a/. We find in (4.47) below that 53 of the sample text’s 82 lines (or 64.6%) contain at least one word fitting this pattern.

(4.47) Potentially poetic pattern in sample text “Warning by messengers of the pa’i-atua service” (Henry 1928:158-159)

Linguistic level: Word
Linguistic feature: Word vowels
Boundary relevance: Line and word boundaries are significant. Syllable boundary is ignored.
N = 2
Minimum occurrences = 11
Pattern = **word-boundary** V* a V* a V* word-boundary

1. e fati ?ava <line_boundary> a a <line_boundary>
   IPFV to.be.broken kava.plant
   Kava plants will be broken.

2. e fati ?ava <line_boundary> a a <line_boundary>
   IPFV to.be.broken kava.plant
   Kava plants will be broken.

3. ?a:?uanei <line_boundary> a a <line_boundary>
   soon
   Soon

4. e fati ai <line_boundary>
   IPFV to.be.broken AIPART
   they will be broken.

5. te ara <line_boundary> a a <line_boundary>
   the caution
   There is caution

6. i te tai <line_boundary>
   DIROBJ the sea
   concerning the sea,
7. e taimara-hia a a a <line_boundary>
   IPFV to.sanctify-PASS
   that is sanctified

8. no: te va?a hoe~hoe a a <line_boundary>
   INALIEN.STRONG the outrigger.canoe repeatedly.paddled
   for the continuously paddled outrigger canoe

9. a te atua a a <line_boundary>
   ALIEN.WEAK the god
   of the gods.

10. ?eiaha a a <line_boundary>
    IMP.NEG
    May not

11. te va?a ta?ata a a a a <line_boundary>
    the outrigger.canoe person
    the outrigger canoes of people

12. ?ia fa?a-farerei a a a a <line_boundary>
    IMP CAUS-to-meet
    attempt to meet it.

13. e ara a a <line_boundary>
    IPFV to.beware
    Beware

14. i te ?e:?a <line_boundary>
    DIROBJ the path
    of the paths

15. i uta <line_boundary>
    at inland
    that are inland
16. na: te ari?i
   [line_boundary]
   [line_boundary]
   ALIEN.STRONG the king
   that belong to the king.

17. e ara
    [line_boundary]
    a a
    [line_boundary]
   IPFV to.beware
   beware.

18. ?aua?a
    [line_boundary]
    a a
    [line_boundary]
   IMP.NEG May they not

19. e haere-a
    [line_boundary]
    a a
    [line_boundary]
   IPFV to.go-PASS
   be walked upon,

20. te ara nui
    [line_boundary]
    a a
    [line_boundary]
   the road large
   the large roads

21. ?e
    [line_boundary]
    [line_boundary]
   and
   and

22. te ara ri?i
    [line_boundary]
    a a
    [line_boundary]
   the road small
   the small roads,

23. ?aua?a ana?e ia
    [line_boundary]
    a a a a a
    [line_boundary]
   IMP.NEG right.now ANAPH
   not right now.

24. ?ei ahi tapo?i
    [line_boundary]
    [line_boundary]
   EXIST.SUBJ fire cover
   May fires be covered.
25. ?eiaha  a a  IMP.NEG
May there not

26. ?ei  a a  EXIST.SUBJ torch.illumination
be torch light

27. ?a  mahuta  a a  lest to.fly
lest they fly away,

28. te  atua  a a  the god
the gods.

29. te  ra?a  a a  the sacredness
The sacredness

30. no:  te  atua  a a  INALIEN.STRONG the god
of gods

31. e  purara  a a  IPFV to.be.dispersed
will spread about.

32. e  vaere?a  marae  a:po:po:  EXIST brush.clearing platform.temple tomorrow
There will be brush clearing at the platform temple tomorrow.

33. ?e  a a  and
And
34. i ta:ahiata a:popo: atu a a a a a
   at dawn tomorrow thither
   at dawn the day after tomorrow,

35. e fa'a-ara-ra?a a a a a a a
   EXIST CAUS-aware-NMLZ
   there will be an awakening.

36. e fa'a-ara-ra?a a a a a a a
   EXIST CAUS-aware-NMLZ
   There will be an awakening

37. i te atua a a a a a
   DIROBJ the god
   of the gods.

38. ?a ara a a a a a
   IMP awake
   Wake up

39. ?o taura tahu?a a a a a a a
   PROP group priest
   group of priests.

40. ?a ara mai a:popo: a a a a
   IMP awake hither tomorrow
   Wake up tomorrow.

41. e hopu a a a a a a
   IPFV to.bathe
   Bathe

42. i te vai a a a a a
   in the fresh.water
   in fresh water.
43. miri-miri  <line_boundary>  
  to.touch  
  Touch  

44. i  te mata  <line_boundary>  
   a a  <line_boundary>  
  DIROBJ the face  
  your faces.  

45. e  hume  <line_boundary>  
  IPFV to.put.on.a.belt.of.office  
  Put on  

46. i  te maro  ?uo  <line_boundary>  
  DIROBJ the belt.of.office white  
  the white belt of office.  

47. e  noho  <line_boundary>  
  IPFV to.sit  
  Sit down  

48. i  ni?a  <line_boundary>  
  at upon  
  upon  

49. i  te ma:hora  <line_boundary>  
  DIROBJ the yard  
  the yard.  

50. e  noho  <line_boundary>  
  IPFV to.sit  
  Sit,  

51. e  ?upu  <line_boundary>  
  IPFV to.recite.a.prayer  
  recite
52. i te aho:a DIROBJ the prayer

53. no: te vaere:a marae<br>INALIEN.STRONG the brush.clearing platform.temple
for clearing brush at the platform temple.

54. ?o te ara<br>EXIST the awakening
The awakening

55. o te ari:i<br>INALIEN.WEAK the god of the king is

56. te ara<br>the awakening
The awakening

57. o te ta?ata<br>INALIEN.WEAK the person of the people;

58. te ara<br>the awakening
The awakening

59. o na: hui tapairu<br>INALIEN.WEAK PL collective maiden.in.waiting
of some of the maiden-in-waiting class

60. e ?e:e<br>IPFV to.climb.on
who will climb
61. i te papa a a <line_boundary> at the flat.stone
upon the flat stones of the platform temple.

62. e ra?a a a a <line_boundary> EXIST sacredness tomorrow
There will be sacredness tomorrow.

63. e vaere?a marae a a <line_boundary> EXIST brush.clearing platform.temple
There will be brush clearing of the platform temple.

64. ?e a a <line_boundary> and
And

65. i te ?a?ahiata nui atu a a a <line_boundary> at the dawn great thither
in the early dawn following

66. e fa?a-ara-ra?a atua a a a a a a <line_boundary> EXIST CAUS-awake-NMLZ god
there will be an awakening of the gods.

67. ?o te atua a a <line_boundary> EXIST the god
It will be of the gods that are

68. i ni?a a a <line_boundary> at above
above,

69. te atua a a <line_boundary> the god
the gods that are
70. i raro <line_boundary>
    <line_boundary>
    at below
    below,

71. te atua <line_boundary>
    a a <line_boundary>
    the god
    the gods that are

72. i tai <line_boundary>
    <line_boundary>
    at seaward
    seaward,

73. te atua <line_boundary>
    a a <line_boundary>
    the god
    the gods that are

74. i uta <line_boundary>
    <line_boundary>
    at inland
    inland,

75. te atua <line_boundary>
    a a <line_boundary>
    the god
    the gods that are

76. i roto <line_boundary>
    <line_boundary>
    at inside
    inside,

77. te atua <line_boundary>
    a a <line_boundary>
    the god
    the gods that are

78. i vaho <line_boundary>
    <line_boundary>
    at outside
    outside.
79. e tae ana?e mai <line_boundary>
    a a <line_boundary>
    IPFV to.arrive all hither
    They will all arrive

80. i teie nei ?o:ro?a <line_boundary>
    <line_boundary>
    at this PROX.1 religious.ordinance
    at this religious ordinance.

81. e ra?a <line_boundary>
    a a <line_boundary>
    EXIST sacredness
    There will be sacredness,

82. mo?a <line_boundary>
    <line_boundary>
    holiness
    holiness.

Should occurrence of this pattern in roughly two-thirds of the text’s lines be regarded as out of the ordinary? Although its frequency may appear high, it should be noted that, as typologically might be anticipated, /a/ is the most common vowel of the corpus. Application of a little statistical analysis reveals the following:

1. In a very small pre-1850 prose corpus comprised of seven documents and 7,282 words,⁴⁶ the percentage of cola that contain the pattern word-boundary V* a V* a V* word-boundary is 47.8%. The corresponding percentage from the complete pre-1850 oral poetic corpus is 39.4%.

2. When considering texts individually, the percentage of cola with this pattern in the prose corpus texts ranges from 28.6% to 51.8%, with a mean of 46.9%, and standard deviation of 7.6%. In the oral poetic corpus, the corresponding range is from 13.6% to 68.8%, with a mean of 37.4%, and standard deviation of 9.6%.

The frequency noted for our sample text lies between two and three standard deviations from the means of both the pre-1850 prose and oral poetic

⁴⁶ The contents of this corpus are Burau and Miro (1836), Cadousteau (1987:20-21), Cadousteau (1987:25-27), Henry (1928:5), Pomare II (1812), Pomare II (1817a), and Pomare II (1817b).
corpora. Therefore, it is likely that the sample text’s pattern use was intentional, although the statistical support is not overwhelming.

4.4 Simplification of analysis process

The sample text’s potentially poetic results, just discussed, represent patterns of the following linguistic features:

At the level of the phoneme:

• Phoneme

At the level of the syllable:

• Syllable rhyme

At the level of the word:

• CV-shape
• Lemma
• Part-of-speech
• Word-initial syllable
• Word-final phoneme
• Word vowels

This is a small subset of the 110 features that were possible from the list in table 4.1. After performing a complete analysis on seven seemingly representative texts from the pre-1850 corpus,\(^{47}\) it was found that for many of those 110 linguistic features, patterns of interest do not emerge.

In an effort to reduce both the automated and manual analysis requirement, some features will now be excluded from the table 4.1 list before analysis is applied to the entire corpus. These features are word mora count, word CV-shape, and all seven acoustic phonemic features.

That mora count should play no poetic role is unexpected, as it serves a metrical function in several Polynesian poverties.\(^{48}\) More will be said about mora count in chapter 5.

\(^{47}\) These texts represent roughly 10% of the corpus’ contents.
\(^{48}\) See, for example, Love (1991), Biggs (1980), and Moyle (1981).
Of the items in the table 4.1, only CV-shape was not noted elsewhere in world poetry. It was conjectured that, for a CV language such as Tahitian, such a feature may have had relevance. However, review of data from the seven representative texts suggested that CV-shape patterns were nearly always redundant with patterns corresponding to other linguistic features; such as we noted in (4.44) and (4.45) above.

Manual review of raw output relating to the acoustic phonemic features turned out to be unfeasible. The binary nature of each feature led to easy pattern recurrence, and thence to haystacks of false positives with never a needle in sight. In contrast to the abandonment of mora count and CV-shape detection, which was motivated by the data, phonemic feature analysis was dropped for purely practical considerations.

In table 4.2 is the reduced list of linguistic features to be included for automated analysis of the pre-1850 corpus:

Table 4.2. Reduced list of linguistic features to be included in automated process

*Relating to meter*

- Primary word stress count
- Primary and secondary word stress count
- Word syllable count assuming elaborated speech
- Word syllable count assuming non-elaborated speech

*Relating to parallelism*

*At the level of the phoneme, one or a series of:*

- Phoneme
- Consonant
- Vowel

*At the level of the syllable, one or a series of:*

- Syllable form
- Syllable-initial phoneme
- Syllable onset
- Syllable rhyme
At the level of the word, one or a series of:

- Word form
- Word consonants
- Word vowels
- Word lemma
- Word part-of-speech
- Word-initial syllable
- Word-final syllable
- Word-initial syllable onset
- Word-final syllable onset
- Word-initial syllable rhyme
- Word-final syllable rhyme
- Word-initial phoneme
- Word-final phoneme

At the level of the line, one or a series of:

- Any of the linguistic features listed above where line boundary is treated as significant.

4.5 Conclusion

The process of analysis described in this chapter was applied to all 72 texts of the pre-1850 oral poetic corpus. The results for an individual text were often as had been found for our sample text: even after several rounds of manual review, the types of organization that emerged were not always conclusively poetic.

However, when results from single texts were compared with one another, some clear types of poetic organization stood out. These have been grouped together by patterns that relate to meter and parallelism, and features of the poetry relevant to manner of composition. The analysis findings will be discussed and inventoried in the next three chapters.
5 Meter

5.1 Introduction

From the process of analysis described in chapter 4, two varieties of counting meter were discovered in the pre-1850 corpus, serving to regulate line tallies of syllable count and word stress. This chapter will discuss the preparations that were necessary for their detection, the metrical line upon which they depend, the approximate frequency of their application, the types of pattern encountered, and counting pattern arrangement.

An effort will be made to demonstrate statistically that syllabic counting patterns represent poetic intent, rather than merely a haphazard assemblage of counts. An example shall also be discussed that appears to furnish evidence of the continued use of counting meter in present-day rhetorical prose.

5.1.1 Detecting elements of meter

As mentioned in the literature review, concerning the structural requirements for meter, John Lotz remarks that, “syntactic constituents provide the frame for which the numerical regulation of the phonological material can be stated.” The syntactic frame he refers to can be a word, a colon, or a sentence (Lotz 1960:140-143).

According to Roman Jakobson, the types of linguistic features that might exhibit such numerical regulation are:

- Patterns of syllables
- Syntactic pause or its absence
- Word stress or its absence
- Prosodic long or short
- Word boundary or its absence
- Morae
  (Jakobson and Waugh 1987:219-220)

For any detection of meter, it will first be necessary to identify a syntactic frame that serves as its metrical line. In the analysis process, several potential syntactic frames were evaluated for each of the linguistic feature levels
suggested by Jakobson except for prosodic long or short, as prosody information is lacking in the transcribed data, and there would seem to be no adequate method for its reconstruction.

As mentioned in chapter 3, patterns of syllables will be sought under assumptions of both elaborated and non-elaborated speech. In elaborated speech, in which diphthong formation does not occur, only syllables with long vowels are heavy, and all short vowels are treated as the nuclei of their own syllables. In non-elaborated (i.e. normal tempo) speech, heavy syllables can contain either a long vowel or a diphthong.

Of the numerical regulation features listed by Jakobson, it should be possible to reconstruct information relevant to word boundary, mora count, and elaborated syllable count from the reconstructed word forms discussed in chapter 3.

It was mentioned in chapter 4 that corpus texts were tagged for part-of-speech using a simple algorithm, the output of which was corrected by hand. From that data, it should be possible to reconstruct information relevant to syntactic pause.

Reconstruction of word stress will proceed as suggested by Lee Bickmore’s algorithm for stress placement. His general rule states that “In Tahitian main stress falls (i) on the final syllable if it contains a long vowel or diphthong; otherwise (ii) on the antepenult if it contains a long vowel and the penult is light; otherwise (iii) on the penult” (Bickmore 1995:420). Bickmore additionally posits a rule of final extrametricality (Bickmore 1995:422-423), and implies that function words consisting of a single mora, such as e (“EXIST”), cannot take stress (see Bickmore 1995:412).

As mentioned in chapter 3, reconstruction of non-elaborated syllable count will generally proceed as suggested by Bickmore’s description for the Tahitian diphthong (1995:414), which is similar to that of Académie Tahitienne (1986:5). There is an apparently common aspect of non-elaborated speech that Bickmore does not treat, however, but that could influence both word stress and syllable count reconstruction.
Generally in non-elaborated speech, when a high vowel that is morpheme-initial or preceded by a morpheme-initial glottal stop is directly followed by non-back vowel, it is realized as a glide at the phonetic level. For example, /ʔia/ (“SBJV”) becomes realized as [ʔa] but not *[ʔi.a], and /ue~ue/ (“to shake”) as ['we~we] but not *[u.e~'u.e]. This glide formation rule does not seem to apply, however, to content words where the phonetic form would be reduced to a single mora. Therefore, /ua/ (“rain”) is realized as ['u.a] but not *[wa], and /ui/ (“to question”) as ['u.i] but not *[wi]. This may correlate to Bickmore’s observation that monosyllabic content words are always long (see Bickmore 1995:412). Perhaps a content word must be able to bear stress.

Another consideration in the determination of syllable count concerns adjacent vowels at word boundaries. In non-elaborated speech, two words are heard to share a syllable when identical short vowels meet (Coppenrath and Prévost 1974:10-11). At least for the corpus data, this process seems blocked when the initial syllable of the second word is found to bear stress. Therefore, the combination of word-final and word-initial /a/ in /#ta.ʔa.ta# #a.to.ʔa#/ (“person also”) are heard as a single heavy syllable, resulting in a perceived count of just five syllables instead of six for the two words. However, word-final and word-initial /a/ of /#ta.ʔa.ta# #a.ta#/ (“laughing person”) do not combine, due to the stress on the initial syllable of the second word.

Finally, it has been observed in the literature that /a/ or /o/ of a light syllable becomes shortened when preceding an /r/ that is the onset of a heavy syllable (see Coppenrath and Prévost 1974:8, Corne 1984:216-217, and Haudricourt 1982:209-210). For example, /parau/ (“to speak”) is realized as [pə'rau], and /poroːmu/ (“road”) as [pɔ'roːmu]. André Haudricourt suggests that, for some speakers, the short vowel completely disappears at the phonetic level, resulting in consonant clustering (e.g. ['praʊ] and ['prɔːmu] respectively). He proposes the phenomenon to be a recent effect of Tahitian and French bilingualism (Haudricourt 1982:209-210). Chris Corne convincingly challenges this latter assertion, however, presenting early evidence of similar

If consonant clustering at the phonetic level, either for the late 18th century or modern Tahitian speaker, does indeed occur, then the syllable count of an affected word would be expected to decrement. This possibility shall be kept in mind during the manual review of analysis results.

With the data normalized and means for metrical pattern detection established, the 72 texts of the pre-1850 corpus were submitted to the process of analysis described in chapter 4. Next, findings will be presented concerning two varieties of meter encountered.

5.2 Syllabic counting meter

Of the two varieties of meter detected in the corpus, the most frequently occurring is that of syllabic count, where each non-elaborated syllable of a colon line receives a count, and line count is regulated by an external pattern. Its application in the corpus appears to be somewhat sporadic. It is encountered, nevertheless, in the majority of texts, and has fairly even distribution across the poetic genres. There are no instances in the corpus where its metrical patterns govern all of a text’s lines.

5.2.1 The colon line

The syntactic frame under which syllabic counting meter is numerically regulated is the colon, which corresponds more or less to syntactic phrase (e.g. VP, NP). There are a few slight divergences from a standard phrase definition, however, which became evident from requirements of the data.

5.2.1.1 Most common phrasal patterns

The following are the poetic colon’s most commonly encountered phrasal patterns, including a description of any variation from what might be expected of a standard syntactic phrase:
1. Verb phrase colon, incorporating a trailing personal pronoun:

\[(\text{ASP}^{50}) \text{VP ((DIROBJ PROP) PPRON)}\]

Examples:

(5.1) ʔua ʔo:pua
PFV plan
planned

(5.2) faʔa-tupu atu ra
CAUS-occur thither there
occurred there

(5.3) i rave ai ʔoia
PFV take AIPART 3.SG
he did

(5.4) ʔua riro i-a-na
PFV convey DIROBJ-PROP-3.SG
was conveyed to him

2. Noun phrase colon:

(DIROBJ) NP

Examples:

(5.5) te ʔino
the evil
the evil

(5.6) i te fenua
DIROBJ the land
to the land

(5.7) ʔo tane
PROP Tane
Tane

---

49 Any other type of NP will split off to form its own colon.
50 See Appendix A for a list of grammatical abbreviations.
(5.8) taʔaroa
Taʔaroa
Taʔaroa

3. Possessive phrase colon:

(DIROBJ) POSS (NP) NP

Examples:

(5.9) o te mau tahuʔa
INALIEN.WEAK the PL artisan
of the artisans

(5.10) na: taʔaroa
ALIEN.STRONG Taʔaroa
belonging to Taʔaroa

(5.11) i tat-na ?aʔpaʔi
DIROBJ ALIEN.NEUT-3.SG bat
to his bat

(5.12) ta: taʔaroa fenua
ALIEN.NEUT Taʔaroa land
Taʔaroa’s land

4. Prepositional phrase colon:

P (NP) NP

Examples:

(5.13) no te pə mai
from the night hither
from the night

(5.14) mai hea ?oe
from where 2.SG
where are you coming from?
5. Existential phrase colon:

EXIST NP

Examples:

(5.15) e paʔi taro
EXIST patch taro
it is a taro patch

(5.16) ?o te tuo:
EXIST the yell
it is the yell

(5.17) ?ei atua mana
EXIST.SBJV god powerful
as a powerful god

6. Locative colon:

DIROBJ LOC

Examples:

(5.18) i roto
DIROBJ in
inside

(5.19) i niʔa
DIROBJ up
over

5.2.1.2 Noun phrase enjambment

It appears that enjambment occasionally occurs when it becomes metrically desirable for trailing modifiers of a longer noun phrase to be carried over to a new line. In (5.20), for example, a more consistent metrical pattern within the context of the larger passage emerges when hope roa, the last two modifiers of ta ’ata, do so.
(5.20)\textsuperscript{51} Extract from “Tane, the man-god” (Henry 1928:364-371)

<table>
<thead>
<tr>
<th>μ</th>
<th>σ\textsubscript{e}</th>
<th>σ\textsubscript{ne}</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>2</td>
<td>3</td>
<td>EXIST.SBJV person handsome  \textit{a man handsome}</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>3</td>
<td>1. ʔei taʔata purotu</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>3</td>
<td>2. hope roa PAUSE</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>2</td>
<td>end very beyond all others.</td>
</tr>
</tbody>
</table>

\textbf{5.2.1.3 Treatment of ‘e (“and”)’}

It is common for the word ‘e (“and”) to precede a colon. Generally when
this happens, its syllable count of 1 can simply be added to that of the colon.
However when ʔe is used to separate multiple items of a list, it appears
metrically desirable for it to be unassociated with either the preceding or
following colon, and for its syllable count to be ignored.

\textsuperscript{51} For this and the other similarly formatted examples, the first line provides an IPA representation of each word, as well as indication of syntactic pause. The second line displays each word’s mora count. The third line provides each word’s syllable count assuming elaborated speech (where all V\textsubscript{1}V\textsubscript{2} combinations are heterosyllabic). The fourth line gives each word’s syllable count assuming non-elaborated speech (where some V\textsubscript{1}V\textsubscript{2} combinations form diphthongs). The fifth line provides a morpheme-by-morpheme gloss, and the sixth line an English translation. The three leftmost columns present a tally of colon counts: under heading μ is the tally of morae, under heading σ\textsubscript{e} the tally of syllables assuming elaborated speech, and under heading σ\textsubscript{ne} the tally of syllables assuming non-elaborated speech.
Example:

(5.21) Extract from “Chaotic period” (Henry 1928:340-344)

$$\mu \quad \sigma_e \quad \sigma_{re}$$  Text

1.  haʔuti~ʔuti
    5  5
    5  5
    5  5
    move.repeatedly
    Moved quickly

2.  e    aho
    3  1    2
    3  1    2
    3  1    2
    EXIST  breath
    breath

3.  o    te  moana  PAUSE
    5  1    1    3
    5  1    1    3
    5  1    1    3
    INALIEN.WEAK  the  ocean
    of the ocean,

4.  o    te  vai  PAUSE
    4  1    1    2
    4  1    1    2
    3  1    1    1
    INALIEN.WEAK  the  fresh.water
    of the rivers,

5.  ?e
    0  1(0)\textsuperscript{52}
    0  1(0)
    0  1(0)
    and
    and

\textsuperscript{52} A syllable count within parentheses represents the word’s metrical count when this differs from its prose syllable count in isolation.
6. o te fenua PAUSE
5 1 1 3
5 1 1 3
5 1 1 3
INALIEN.WEAK the land
of the land.

5.2.2 Pattern types

The role of a counting pattern is the external regulation of line count. Counting patterns will be recognized which minimally consist of three colon counts if the counts are repeated or incremental, of five counts if inverted, and of four pattern elements if there is count or pattern alternation. Patterns of two repeated counts will be recognized if encountered either adjacent to or within longer patterns. Patterns consisting of three or more counts will be permitted to overlap.

The following are descriptions of what seem to be the most common and identifiable types of such patterns discovered in the corpus material.

5.2.2.1 Patterns of repetition

A common pattern is that of count repetition. It appears that any count may be repeated any number of times, although a count of one is rare; it being unusual for a colon to contain only one syllable.

The non-elaborated counts from the passage in (5.22) below may be grouped as follows:

6,6,6
5,5
3,3,3
4,4
(5.22) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

Text

1. taː taːne ia haʔa  
   9 2 3 2 2  
   7 1 2 2 2  
   6 1 2 1 2  
   ALIEN.NEUT Tane ANAPH work  
   It is what Tane did

2. i rave ai ?oia  
   8 1 2 2 3  
   8 1 2 2 3  
   6 1 2 1 2  
   PFV take AIPART 3.SG  
   as he took

3. i taː-na ?aːpaʔi PAUSE  
   8 1 3 4  
   6 1 2 3  
   6 1 2 3  
   DIROBJ ALIEN.NEUT-3.SG bat  
   his bat.

4. ?e ?ua ?oːpuə  
   7 1 2 4  
   6 1 2 3  
   5 1 1 3  
   And PFV plan  
   And he planned

5. i te tuːvaʔu PAUSE  
   6 1 1 4  
   5 1 1 3  
   5 1 1 3  
   DIROBJ the banish  
   to banish.

6. ?e ?ua ?i:  
   5 1 2 2  
   4 1 2 1  
   3 1 1 1  
   and PFV full  
   And full was
5.2.2.2 Patterns of incremental count

Another common pattern type is that of incremental count, for which it appears that any count may serve as starting point. The number of counts of an incremental sequence rarely exceeds five.

In (5.23) below, we observe an incremental pattern of non-elaborated counts followed by one of repetition, which may be grouped as follows:

7, 8, 9, 10
6, 6
(5.23) Extract from “Tane, the man god” (Henry 1928:364-371)

\[ \mu \sigma_e \sigma_{ne} \text{ Text} \]

<p>| | | | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. ( \text{ʔo tane moeoho PAUSE} )</td>
<td>8</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>EXIST Tane sleep anxiously</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>It is Tane causer of anxious sleep.</td>
<td></td>
<td></td>
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</tbody>
</table>

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</thead>
<tbody>
<tr>
<td>2. ( \text{tō: te feia: tarai va?a PAUSE} )</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>INALIEN.NEUT the people carve outrigger</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Those of the outrigger carving people,</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

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</thead>
<tbody>
<tr>
<td>3. ( \text{tō: te feia: papa'i fare PAUSE} )</td>
<td>12</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>INALIEN.NEUT the people knock house</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>those of the house building people,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<p>| | | | | | |</p>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4. ( \text{tō: te feia: fa?a-ti?a marae PAUSE} )</td>
<td>14</td>
<td>2</td>
<td>1</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>INALIEN.NEUT the people CAUS-erect platform temple</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>those of the platform temple erecting people,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

|   |   |   |   |   |
|---|---|---|---|
| 5. \( i \text{ na'?o ana?e} \) | 6 | 1 | 2 | 3 |
|   | 6 | 1 | 2 | 3 |
|   | 6 | 1 | 2 | 3 |
| PFV say all |   |   |   |   |
| said all |   |   |   |   |

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>6. ( i-a \text{ mau tahu?a e:} )</td>
<td>9</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>to-PROP PL artisan QUOTE to the artisans:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In (5.24), we note an incremental pattern of non-elaborated counts that repeats:

a  4,5,6
a’ 4,5,6

(5.24) Extract from “Creation of the world” (Henry 1928:336-338)

<table>
<thead>
<tr>
<th>μ</th>
<th>σ_e</th>
<th>σ_ne</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>?a</td>
<td>ta:pe?a</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INCEPT hold</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>They held</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| 2. | i   | te  | fenua |
|    | 5   | 1   | 1    |
|    | 5   | 1   | 1    |
|    | 5   | 1   | 1    |
|    | DIROBJ the land |
|    | the land |

| 3. | ?e  | te  | ra?i | piri |
|    | 6   | 1   | 1    |
|    | 6   | 1   | 1    |
|    | 6   | 1   | 1    |
|    | and the sky close |
|    | and the sky close together |

| 4. | i   | raroei | PAUSE |
|    | 5   | 1     | 2    |
|    | 5   | 1     | 2    |
|    | 4   | 1     | 2    |
|    | DIROBJ down here |
|    | down here. |

| 5. | na:| ta?aroa |
|    | 6  | 2     | 4    |
|    | 6  | 1     | 4    |
|    | 5  | 1     | 4    |
|    | ALIEN.STRONG Ta’aaroa |
|    | To Ta’aaroa belongs |
6. te mau mea atoʔa
8 1 2 2 3
8 1 2 2 3
6 1 1 2 3(2)
the PL thing all
all things.

5.2.2.3 Patterns of inverted count\textsuperscript{53}

Very often the most elaborate pattern type is that of inverted count. It appears that any sequence of counts can form the first half of this type of pattern.

In (5.25) below, we note a short example of inverted non-elaborated count, followed by repetition of that pattern’s final count:

\begin{verbatim}
a 3
b 4
c 6
b’ 4
a’ 3
3,3
\end{verbatim}

(5.25) Extract from “Tane, the man god” (Henry 1928:364-371)

\begin{verbatim}
\mu \sigma_e \sigma_{ne} Text
1. ?o tane
4 1 3
3 1 2
3 1 2
EXIST Tane
Tane is
2. te atua
4 1 3
4 1 3
4 1 3
the god
the god
\end{verbatim}

\textsuperscript{53} As mentioned in chapter 2, the term \textit{chiasmus} is often restricted in the literature to inverted semantic parallelism, common to many Greek, Latin, and Hebrew texts. Patterns of non-semantic chiasmus will simply be referred to here as \textit{inverted}.
In (5.26), we observe a longer inverted pattern of 13 non-elaborated counts, followed by repetition of the last count:

<table>
<thead>
<tr>
<th></th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
<th>g</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
(5.26) Extract from “Order finally established” (Henry 1928:395-398)

$$\mu \sigma_e \sigma_{ne} \text{ Text}$$

1. e paʔi taro
   5 1 2 2
   5 1 2 2
   5 1 2 2
   \text{EXIST patch taro}
   \text{Taro patches are}

2. te raʔau
   5 1 4
   4 1 3
   3 1 2
   \text{the plant}
   \text{the plant}

3. e tiʔa
   3 1 2
   3 1 2
   3 1 2
   \text{IPFV stand}
   \text{that will stand}

4. i te aro
   4 1 1 2
   3 1 1 2
   4 1 1 2
   \text{DIROBJ the presence}
   \text{in the presence}
5.  o       atea  PAUSE
    5  1  4
    4  1  3
    4  1  3
    INALIEN.WEAK  Atea
    of Atea.

6.  e      moʔore:  PAUSE
    5  1  4
    4  1  3
    4  1  3
    EXIST  duck
    Ducks,

7.  e      meho  mata
    5  1  2  2
    5  1  2  2
    5  1  2  2
    EXIST  rail  face
    rails whose face

8.  ?e  te  ?arvae
    6  1  1  4
    5  1  1  3
    4  1  1  2
    and the leg
    and legs

9.  ?ute~ʔute
    4  4
    4  4
    4  4
    red
    are red

10.  ?o  te  tuo:  PAUSE
     5  1  1  3
     4  1  1  2
     4  1  1  2
     EXIST  the  shout
     and who shout
In (5.27) below, we encounter a yet longer pattern of 15 non-elaborated counts:

- a 6
- b 4
- c 5
- d 3
- e 3
- f 3
- g 4
- h 5
- g’ 4
- f’ 3
- e’ 3
- d’ 3
- c’ 5
(5.27) Extract from “The genealogies of the gods” (Henry 1928:355-359)

<table>
<thead>
<tr>
<th>μ</th>
<th>σe</th>
<th>σne</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>e</td>
<td>atua</td>
<td>ana?e</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>3</td>
<td>3(2)</td>
</tr>
<tr>
<td>EXIST</td>
<td>god</td>
<td>all</td>
<td></td>
</tr>
<tr>
<td>They were all gods,</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>te</td>
<td>tahu?a</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>EXIST</td>
<td>artisan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>the artisans</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>?e</td>
<td>te</td>
<td>?a?rere</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>and</td>
<td>the</td>
<td>messenger</td>
<td></td>
</tr>
<tr>
<td>and</td>
<td>the</td>
<td>messengers.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>e</td>
<td>mana</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>EXIST</td>
<td>power</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Power</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>to:</td>
<td>ra:tou</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>INALIEN,NEUT</td>
<td>3.PL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>was theirs</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
6. i te po:
   4 1 1 2
   3 1 1 1
   3 1 1 1
   in the Realm of Darkness
   in the Realm of Darkness

7. ?e i te ao PAUSE
   5 1 1 1 2
   5 1 1 1 2
   4 1 1 1 1
   and in the world
   and in the world.

8. rahu-a mai ra
   6 3 2 1
   6 3 2 1
   5 3 1 1
   conjure-PASS hither there
   He was conjured forth,

9. te atua
   4 1 3
   4 1 3
   4 1 3
   the god
   the god

10. ?o ra?a PAUSE
    3 1 2
     3 1 2
     3 1 2
     PROP Ra’a
     Ra’a.

11. e mo?a PAUSE
    3 1 2
     3 1 2
     3 1 2
     EXIST sacredness
     Sacredness,
12. e mana PAUSE
3 1 2
3 1 2
3 1 2
EXIST power
power,

13. e hana–hana PAUSE
5 1 4
5 1 4
5 1 4
EXIST glory
glory,

14. e mau riri PAUSE
5 1 2 2
5 1 2 2
4 1 1 2
EXIST to.hold anger
the ability to hold anger

15. to: raʔa atua PAUSE
7 2 2 3
6 1 2 3
6 1 2 3
INALIEN.NEUT Ra‘a god
belonged to the god Ra‘a.

In (5.28) below, we note an example of an inverted pattern that is
preceded by a 3,3,3 pattern of repetition, and followed by the possibly
unaffiliated counts 5 and 4. These non-elaborated patterns may be grouped as
follows:

3,3,3

a 8
b 6
c 3
b’ 6
a’ 8
5
4
Note that the counts at the inverted pattern’s borders, when summed, are equal. It is perhaps intentional that both of these, if re-analyzed, serve to extend that pattern:

\[
\begin{array}{cccc}
  a & 9 \\
  b & 8 \\
  c & 6 \\
  d & 3 \\
  c' & 6 \\
  b' & 8 \\
  a' & 9 \\
\end{array}
\]

(5.28) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

\[
\begin{array}{cccc}
  \mu & \sigma_e & \sigma_{ne} & \text{Text} \\
  1. & ?a & \text{riri} & \\
   & 3 & 1 & 2 \\
   & 3 & 1 & 2 \\
   & 3 & 1 & 2 \\
   & \text{INCEPT} & \text{angry} & \\
   & \text{Angered became} & \\
  2. & ?o & \text{tane} & \text{PAUSE} \\
   & 4 & 1 & 3 \\
   & 3 & 1 & 2 \\
   & 3 & 1 & 2 \\
   & \text{PROP} & \text{Tane} & \\
   & Tane, & \\
  3. & \text{atua} & \\
   & 3 & 3 \\
   & 3 & 3 \\
   & 3 & 3 \\
   & \text{god} & \\
   & \text{god} & \\
  4. & o & \text{te mau mea purotu} & \text{PAUSE} \\
   & 9 & 1 & 1 & 2 & 2 & 3 \\
   & 9 & 1 & 1 & 2 & 2 & 3 \\
   & 8 & 1 & 1 & 1 & 2 & 3 \\
   & \text{of the PL thing beautiful} & \\
   & \text{of all beautiful things}. & \\
\end{array}
\]
5. titiri iho ai
8 4 2 2
7 3 2 2
6 3 2 1
throw downward AIPART
He threw

6. i raro PAUSE
3 1 2
3 1 2
3 1 2
DIROBJ down
down

7. e ?auhune nui PAUSE
7 1 4 2
7 1 4 2
6 1 3 2
EXIST harvest great
great harvests,

8. e mataru ora-ora PAUSE
8 1 3 4
8 1 3 4
8 1 3 4
EXIST school.of.fish living
living schools of fish,

9. ?ei ha?a-pori
6 2 4
6 2 4
5 1 4
EXIST.SBJV CAUS-fat
as a means to fatten

10. i te ao nei PAUSE
6 1 1 2 2
6 1 1 2 2
4 1 1 1 1
DIROBJ the world here
this world.
5.2.2.4 Alternating patterns

Finally, there is a type of pattern that allows for the alternation of any sequence of counts; however not of inverted patterns. As with the other pattern types, there are few limitations to its implementation.

In (5.29) below, we find an example of alternation of an unpatterned sequence of non-elaborated counts 6,3,5 with a pattern of repetition 3,3,3, followed by three apparently unrelated counts:

a  6,3,5  
b  3,3,3  
a’ 6,3,5  
b’ 3,3,3  

4  
5  
3  

(5.29) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

<table>
<thead>
<tr>
<th>μ</th>
<th>σ_e</th>
<th>σ_ne</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>tiri</td>
<td>a:</td>
<td>iho</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>2</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>cast.down</td>
<td>continually</td>
<td>downward</td>
</tr>
<tr>
<td></td>
<td>cast down</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>i</td>
<td>raro</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIROBJ</td>
<td>down</td>
<td></td>
</tr>
<tr>
<td></td>
<td>below</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>e</td>
<td>mata</td>
<td>ara</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EXIST</td>
<td>eye</td>
<td>awake</td>
</tr>
<tr>
<td></td>
<td>an awake eye</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

203
4. i te ao PAUSE
   4
   3
DIROBJ the day
for the day,

5. e moe
   3
   3
   3
EXIST sleep
and a sleeping one

6. no: te po: PAUSE
   5
   3
   3
INALIEN.STRONG the night
for the night.

7. i macrama~rama
   7
   6
   6
PFV lit
Lit was

8. te ao nei
   5
   3
   3
the world here
this world

9. i te ?a: raro
   6
   5
   5
DIROBJ the burning down
by the lower burning
10. o te ra:
4 1 1 2
3 1 1 1
3 1 1 1
INALIEN.WEAK the sun
of the sun

11. i te ao PAUSE
4 1 1 2
4 1 1 2
3 1 1 1
DIROBJ the day
in the daytime.

12. i tupu
3 1 2
3 1 2
3 1 2
PFV take.place
Took place

13. te taʔoto
4 1 3
4 1 3
4 1 3
the sleep
the sleep

14. o te taʔata
5 1 1 3
5 1 1 3
5 1 1 3
INALIEN.WEAK the person
of man

15. i te po: PAUSE
4 1 1 2
3 1 1 1
3 1 1 1
DIROBJ the night
at night.
5.2.3 Pattern arrangement

There appears to be a large degree of freedom in regards to the possible arrangement of syllabic counting patterns. Repeated, incremental, inverted, and alternating patterns, as well as non-elaborated counts apparently unaffiliated with any of these, follow each other in a seemingly haphazard sequence. In some text segments, however, smaller patterns are contained within a loosely inverted structure.

In (5.30) below, we note a fairly typical sequence of patterns, consisting of an inverted pattern of non-elaborated counts followed by two of repetition:

a 8  
b 3  
c 4  
b’ 3  
a’ 8  
7,7  
4,4,4,4

(5.30) Extract from “Tane, the man god” (Henry 1928:364-371)

<table>
<thead>
<tr>
<th>μ</th>
<th>σe</th>
<th>σne</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>?ia fa?a-noho-hia ra:</td>
</tr>
<tr>
<td>10</td>
<td>2</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>2</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>1</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>SBJV CAUS-set-PASS therefore</td>
<td>May there be set</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>te ihu</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>the nose</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>the nose</td>
</tr>
</tbody>
</table>

206
3. o tama PAUSE
   1 1 2
   1 1 2
   1 1 2
   INALIEN.WEAK the child of the child.

4. ??a noho
   1 2
   1 2
   1 2
   INCEPT set
   It was set

5. ??ei ihu ?iti:ai?aro PAUSE
   12 2 2 8
   10 2 2 6
   8 1 2 5
   as nose straight
   as a straight nose,

6. ??ei ihu fe?u~fe?u PAUSE
   8 2 2 4
   8 2 2 4
   7 1 2 4
   as nose snuffle
   as a sniffling nose,

7. ??ei ihu ?oro~?oro PAUSE
   8 2 2 4
   8 2 2 4
   7 1 2 4
   as nose snore
   as a snoring nose.

8. ??aore a: ra:
   7 3 2 2
   5 3 1 1
   4 2 1 1
   PFV.NEG continually however
   However there was not
In (5.31) below, we observe a fairly typical assemblage of non-elaborated patterns and unaffiliated counts.

<table>
<thead>
<tr>
<th></th>
<th>a 6</th>
<th>b 4</th>
<th>c 5</th>
<th>d 5</th>
<th>d' 5</th>
<th>c' 5</th>
<th>b' 4</th>
<th>a' 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>e</td>
<td>apoʔo</td>
<td>1 4</td>
<td>1 3</td>
<td>1 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>a hole</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>to:</td>
<td>te ihu</td>
<td>2 1</td>
<td>1 2</td>
<td>1 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>o</td>
<td>te tama PAUSE</td>
<td>1 2</td>
<td>1 2</td>
<td>1 2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td></td>
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</tr>
</tbody>
</table>

**Table:**

<table>
<thead>
<tr>
<th></th>
<th>5</th>
<th>7</th>
<th>4</th>
<th>6</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a 4</td>
<td>b 5</td>
<td>a’ 4</td>
<td>b’ 5</td>
<td></td>
</tr>
</tbody>
</table>
(5.31) Extract from "Song of Vairao" (Henry 1928:84-85)

| 1. fa?a rua rahi  |
|---|---|---|
| 6 | 2 | 2 |
| 6 | 2 | 2 |
| 6 | 2 | 2 |
| valley | two | big |
| Large double valley |

| 2. ta?iri pu:  |
|---|---|---|
| 6 | 4 | 2 |
| 4 | 3 | 1 |
| 4 | 3 | 1 |
| strike | centre |
| where strikes at the centre |

| 3. te mata?i e: PAUSE  |
|---|---|---|
| 6 | 1 | 3 |
| 5 | 1 | 3 |
| 5 | 1 | 3 |
| the | wind | oh |
| the wind. |

| 4. na: ni?a iho  |
|---|---|---|
| 6 | 2 | 2 |
| 5 | 1 | 2 |
| 5 | 1 | 2 |
| by | above | adjacent |
| From on top |

| 5. na: ma?atea  |
|---|---|---|
| 6 | 2 | 4 |
| 5 | 1 | 4 |
| 5 | 1 | 4 |
| by | Ma‘atea |
| of Mount Ma‘atea |

| 6. i pa?i~pa?i  |
|---|---|---|
| 5 | 1 | 4 |
| 5 | 1 | 4 |
| 5 | 1 | 4 |
| PFV | lightly.strike |
| comes | light wind |
7. e hamuri PAUSE
   4 1 3
   4 1 3
   4 1 3
   EXIST Hamuri.wind
   and the Hamuri wind.

8. totoro aʔe ra
   6 3 2 1
   6 3 2 1
   6 3 2 1
   crawl across there
   Crawling across

9. i te pou tini PAUSE
   6 1 1 2 2
   6 1 1 2 2
   5 1 1 1 2
   DIROBJ the pillar numerous
   many pillars

10. i te ?utua:fare
    8 1 1 6
    7 1 1 5
    7 1 1 5
    DIROBJ the house
    in the house

11. o te toa PAUSE
    4 1 1 2
    4 1 1 2
    4 1 1 2
    INALIEN.WEAK the warrior
    of the warrior.

12. i hitimahuta
    6 1 5
    6 1 5
    6 1 5
    PFV somersault
    Somersaulting
Patterns are occasionally contained within a loosely inverted structure. In (5.32) below, we find that some unaffiliated counts and several short patterns of repetition have been included within the non-elaborated inverted pattern. These may be grouped as follows:

\[a\] 8
\[b\] 4
\[c\] 4
The initial counts of 8,4,4 are mirrored with the final counts 4,4,8. Note that the short inverted pattern of 5,7,5 lies near the middle of the 23 cola. The end-points and center of this loosely inverted pattern are thus established.

(5.32) Extract from “Tane, the man god” (Henry 1928:364-371)

<table>
<thead>
<tr>
<th></th>
<th>?ei</th>
<th>huːhaː</th>
<th>?aːvari-vari</th>
<th>PAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>5</td>
</tr>
</tbody>
</table>

EXIST.SBJV  thigh  invigorated
May the thighs be invigorated.

<table>
<thead>
<tr>
<th></th>
<th>faʔa-naho</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>CAUS-organized</td>
</tr>
</tbody>
</table>

212
3. i te turi PAUSE
   4 1 1 2
   4 1 1 2
   4 1 1 2
   DIROBJ the knee
   the knees,

4. ?ei turi ?opa PAUSE
   6 2 2 2
   6 2 2 2
   5 1 2 2
   EXIST.SBJV knee angled
   as bended knees.

5. ?a fa?a-noho
   5 1 4
   5 1 4
   5 1 4
   IMP CAUS-organized
   Organize

6. i te ivi fara
   6 1 1 2 2
   6 1 1 2 2
   6 1 1 2 2
   DIROBJ the bone shin
   the shin bones

7. no: te ?a?vae
   7 2 1 4
   5 1 1 3
   4 1 1 2
   INALIEN.STRONG the leg
   of the legs

8. o te tama PAUSE
   4 1 1 2
   4 1 1 2
   4 1 1 2
   INALIEN.WEAK the child
   of the child,
9. teʔa:vaerou~rou PAUSE
   the legs cartilage
   the legs still of cartilage,

10. ?ei mo:moat tau PAUSE
    EXIST.SBJV ankle full
    may they have full ankles,

11. ?ei poroʔa:va PAUSE
    EXIST.SBJV ball foot
    may they have heels,

12. ?ei tapuaʔeʔa:va PAUSE
    EXIST.SBJV sole foot
    may they have soles,

13. ?ei mani~mani PAUSE
    EXIST.SBJV digit
    may they have toes,

14. ?e
    and
    and
15. te maiʔuʔu pana~pana
9  1  4  4
9  1  4  4
8  1  3  4
EXIST.SBJV toenail picked
picked toenails

16. noː te tama PAUSE
5  2  1  2
4  1  1  2
4  1  1  2
INALIEN.STRONG the child
for the child.

17. ?ia hope maitaʔi roa
10 2  2  4  2
10 2  2  4  2
8  1  2  3  2
SBJV complete good very
May it be completed very well

18. te tupu
3  1  2
3  1  2
3  1  2
the grow
the growth

19. o te tama PAUSE
4  1  1  2
4  1  1  2
4  1  1  2
INALIEN.WEAK the child
of the child.

20. ?a vehi raː
5  1  2  2
4  1  2  1
4  1  2  1
IMP envelope however
Cover, however,
5.2.4 Comparison of moraic, elaborated syllabic, and non-elaborated syllabic counting patterns

It was mentioned in the literature review that Jacob Love identified the mora as the standard mensural unit for the Samoan solo (Love 1991:57). Regarding Eastern Polynesia, Bruce Biggs discovered a consistent count of eight morae per half-line (or “rule of eight”) in Maori song texts (see Biggs 1980), which was also observed by Kevin Salisbury in mako songs of Pukapuka, and by Steven Roger Fischer in chants from Tokelau, Mangareva, Hawaii, Mangaia, and the Tuamotus (McLean 1996:258-259). However, despite the role it enjoys in these nearby traditions, there appears to be no strong evidence of metrical organization by mora for the early Tahitian material.

Concerning organization by syllable count, patterns corresponding to an assumption of elaborated speech (where all $V_1V_2$ combinations are heterosyllabic) were not nearly as complex or consistent as those of non-elaborated speech (where some $V_1V_2$ combinations form diphthongs), except where counts under both syllable definitions happen, by chance, to coincide.
An example of just such a coincidence, which additionally seems to include a good pattern of mora count, is found in (5.33) below:

(5.33) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.31)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>6,6,6,6,6</td>
<td>a  6</td>
<td>a  6</td>
</tr>
<tr>
<td></td>
<td>b  4</td>
<td>b  4</td>
</tr>
<tr>
<td>5</td>
<td>c  5</td>
<td>c  5</td>
</tr>
<tr>
<td>4</td>
<td>d  5</td>
<td>d  5</td>
</tr>
<tr>
<td>6</td>
<td>d’ 5</td>
<td>d’ 5</td>
</tr>
<tr>
<td>6</td>
<td>c’ 5</td>
<td>c’ 5</td>
</tr>
<tr>
<td>8</td>
<td>b’ 4</td>
<td>b’ 4</td>
</tr>
<tr>
<td>4</td>
<td>a’ 6</td>
<td>a’ 6</td>
</tr>
<tr>
<td>a  6,5</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>b  6</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>a’ 6,5</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>a  4</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>b  5</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>a’ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b’ 5</td>
</tr>
</tbody>
</table>

However, much more typical of the data are the ten comparisons given below. In contrast to the patterns of non-elaborated syllable count, the patterns that result from counting morae and elaborated syllables consistently appear inferior; as might be expected should their organization be accidental.

(5.34) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.22)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>7</td>
<td>6,6,6</td>
</tr>
<tr>
<td>8</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td>5,5</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>3,3,3</td>
</tr>
</tbody>
</table>
(5.35) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.23)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
<td>7,8,9,10</td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td>6,6</td>
</tr>
<tr>
<td>12</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>8</td>
<td></td>
</tr>
</tbody>
</table>

(5.36) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.24)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>4,5,6</td>
<td>a  4,5,6</td>
</tr>
<tr>
<td>a</td>
<td>5</td>
<td>a’ 4,5,6</td>
</tr>
<tr>
<td>b</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>a’</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>b’</td>
<td>6</td>
<td>8</td>
</tr>
</tbody>
</table>

8

(5.37) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.25)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>3</td>
<td>a  3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>b  4</td>
</tr>
<tr>
<td>7</td>
<td>7</td>
<td>c  6</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>b’ 4</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>a’ 3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>3,3</td>
</tr>
</tbody>
</table>
(5.38) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.26)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>5,5</td>
<td>a</td>
</tr>
<tr>
<td>b</td>
<td>3,4,5</td>
<td>b</td>
</tr>
<tr>
<td>a’</td>
<td>5,5</td>
<td>c</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>4,4</td>
<td>d</td>
</tr>
<tr>
<td>4</td>
<td>5,5</td>
<td>e</td>
</tr>
<tr>
<td>5</td>
<td>4,4</td>
<td>f</td>
</tr>
<tr>
<td>3</td>
<td>3,3</td>
<td>g</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>5,5</td>
<td>d’</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(5.39) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.27)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>7</td>
<td>a</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>b</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>c</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>d</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>e</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>f</td>
</tr>
<tr>
<td>4,5,6</td>
<td>b’ 3</td>
<td>g</td>
</tr>
<tr>
<td></td>
<td>a’ 5</td>
<td>h</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>g’ 4</td>
</tr>
<tr>
<td>6</td>
<td>f’ 3</td>
<td></td>
</tr>
<tr>
<td>3,3,3</td>
<td>4</td>
<td>e’ 3</td>
</tr>
<tr>
<td>5,5</td>
<td>3,3,3</td>
<td>c’ 5</td>
</tr>
<tr>
<td>7</td>
<td>5,5</td>
<td>b’ 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>a’ 6</td>
</tr>
</tbody>
</table>

219
(5.40) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.28)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>3,3,3</td>
<td>3,3,3</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>a 8</td>
</tr>
<tr>
<td>9</td>
<td>7</td>
<td>b 6</td>
</tr>
<tr>
<td>8</td>
<td>3</td>
<td>c 3</td>
</tr>
<tr>
<td>3</td>
<td>7</td>
<td>b’ 6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>a’ 8</td>
</tr>
<tr>
<td>8</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>4</td>
</tr>
</tbody>
</table>

(5.41) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.29)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>7</td>
<td>a 6,3,5</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>b 3,3,3</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>a’ 6,3,5</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>b’ 3,3,3</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>a 5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>b 3,4</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>b’ 3,4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>a’ 5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

(5.42) Moraic, elaborated syllabic, and non-elaborated syllabic counting patterns for the passage in (5.30)

<table>
<thead>
<tr>
<th>Mora count</th>
<th>Elaborated syllable count</th>
<th>Non-elaborated syllable count</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>9</td>
<td>a 8</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>b 3</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>c 4</td>
</tr>
</tbody>
</table>
Having argued for the superiority of patterns of non-elaborated syllable count over those of both the elaborated syllable and the mora, their frequency will next be compared to that of chance occurrence in prose.
5.2.5 Frequency of syllabic counting patterns in prose and oral poetry

Due to the compositional freedom that has been noted for the four types of syllabic counting pattern, it might be anticipated that their random occurrence be commonplace in prose. If their prose frequency were found to be equivalent to that of poetry, then it may be argued that the motivation behind any such organization is not necessarily poetic.

In order to determine whether or not this is the case, it will first be necessary to establish baseline pattern frequencies for several examples of prose, against which similarly derived frequencies for the oral poetic genres can be compared. Metrical frequency will be defined as the percentage of a text’s cola that could conceivably form part of any of the four described types of syllabic counting pattern.

For the purposes of a fully-automated comparison, the criteria for associating a colon’s syllable count with any potential pattern will be as follows: A pattern must minimally consist of three colon counts if the counts are repeated or incremental, of five counts if inverted, and of four pattern elements if there is count or pattern alternation. Patterns will be permitted to overlap.\(^\text{54}\) For simplicity, loosely inverted structures and patterns of just two repeated counts will be excluded from consideration.

It is important to emphasize, regarding the poetic genres, that calculation of pattern frequency is only intended to approximate the percentage of metrically organized cola. Presumably, many loose patterns will be overlooked, and unintentional patterns included. It would seem impossible to reconstruct, especially by means of an automated procedure, a true measure of poetic intent.

It is merely hoped that these calculations will serve as a general indication of relative pattern frequency. It is presumed that a statistically significant increase of such patterns for genres of the pre-1850 corpus would confirm implementation of a degree of intentional metrical organization.

\(^\text{54}\) Overlap permits inclusion of all counts of a pattern such as 5,5,5,6,7, which would otherwise be restricted to either the pattern 5,5,5, or 5,6,7.
In table 5.1 are frequency results for some examples of early and modern prose:

Table 5.1. Syllabic counting pattern frequencies for some examples of early and modern prose

**Early 19th century prose**

<table>
<thead>
<tr>
<th>Description of text</th>
<th>Word count</th>
<th>Average words per colon</th>
<th>Written, or transcribed speech</th>
<th>Percentage of cola in a pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Letter from Pomare II to Rowland Hassall</td>
<td>414</td>
<td>3.2</td>
<td>written</td>
<td>29%</td>
</tr>
<tr>
<td>(Pomare II 1817a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pomare II’s legal code for Tahiti</td>
<td>9,696</td>
<td>2.9</td>
<td>written</td>
<td>20%</td>
</tr>
<tr>
<td>(Pomare II 1825)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conversation between two Tahitian men</td>
<td>5,261</td>
<td>2.8</td>
<td>speech</td>
<td>24%</td>
</tr>
<tr>
<td>(Burau and Miro 1836)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tetuna’e Nui’s maxims to grandson</td>
<td>320</td>
<td>2.7</td>
<td>speech</td>
<td>21%</td>
</tr>
<tr>
<td>(Cadousteau 1987)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Modern prose**

<table>
<thead>
<tr>
<th>Description of text</th>
<th>Word count</th>
<th>Average words per colon</th>
<th>Written, or transcribed speech</th>
<th>Percentage of cola in a pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tahitian translation of article on asthma</td>
<td>1,142</td>
<td>3.1</td>
<td>written</td>
<td>12%</td>
</tr>
<tr>
<td>(Te ma’i aho pau 2003)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Account of a turtle spearing trip</td>
<td>568</td>
<td>2.8</td>
<td>written</td>
<td>17%</td>
</tr>
<tr>
<td>(Yon Yuc 1997)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blog entry on the <em>mā ʻohi</em> (“Polynesian”)</td>
<td>1,591</td>
<td>2.9</td>
<td>written</td>
<td>23%</td>
</tr>
<tr>
<td>language (TKNui 2003a)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
At 12%, Te ma’i aho pau (2003) is the prose text with the smallest percentage of patterned cola. This should not be surprising, as it represents a Tahitian translation of a French article on asthma. Its prose style is quite distinct as compared to material originally composed in Tahitian.

At 29%, the Pomare II (1817a) letter has the greatest percentage of patterned cola. This also is not so surprising, as the king was surely schooled in oral poetry (see Peltzer 1985:2), and could very likely have incorporated elements of that instruction into his prose.

The average number of words per colon is fairly consistent across these texts, at 2.9. There does also not appear to be any correlation between frequency percentage and whether a text was written, or represents transcribed speech.

If the understandably low and high results from table 5.1 are excluded from consideration, we note a pattern frequency mean of 21%, and a sample standard deviation of 2.73 percentage points.

In table 5.2 are frequency results for the early oral poetic genres:

Table 5.2. Syllabic counting pattern frequencies for the oral poetic genres of the pre-1850 corpus

<table>
<thead>
<tr>
<th>Genre</th>
<th>Number of texts in genre</th>
<th>Average words per text</th>
<th>Average words per colon</th>
<th>Percentage of cola in a pattern</th>
<th>Standard deviation from prose mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>‘a’ai</td>
<td>44</td>
<td>929&lt;sup&gt;58&lt;/sup&gt;</td>
<td>2.7</td>
<td>32%</td>
<td>&gt; 4σ</td>
</tr>
<tr>
<td>anau</td>
<td>3</td>
<td>271</td>
<td>3.1</td>
<td>31%</td>
<td>&gt; 3σ</td>
</tr>
<tr>
<td>fa’ataroa</td>
<td>2</td>
<td>184</td>
<td>2.6</td>
<td>30%</td>
<td>&gt; 3σ</td>
</tr>
<tr>
<td>fa’ateni</td>
<td>3</td>
<td>133</td>
<td>2.8</td>
<td>22%</td>
<td>&lt; 1σ</td>
</tr>
<tr>
<td>paripari</td>
<td>4</td>
<td>171</td>
<td>2.5</td>
<td>29%</td>
<td>&gt; 2σ</td>
</tr>
<tr>
<td>rauti</td>
<td>6</td>
<td>235</td>
<td>2.5</td>
<td>37%</td>
<td>&gt; 5σ</td>
</tr>
<tr>
<td>Religious address</td>
<td>10</td>
<td>208</td>
<td>2.7</td>
<td>30%</td>
<td>&gt; 3σ</td>
</tr>
</tbody>
</table>

<sup>55</sup> All four types of syllabic counting pattern can be found in all of the genres, and at roughly similar frequencies.

<sup>56</sup> As mentioned, the low and high prose results have been excluded from this calculation.

<sup>57</sup> Glosses for the genres are ‘a’ai (“myth”), anau (“lamentation”), fa’ataroa (“praise with challenge”), fa’ateni (“praise”), paripari (“description”), and rauti (“battle address”).

<sup>58</sup> Exclusion of the lengthy Te parau a Honoura (“The tale of Honoura”) text (see Henry 1895:256-291) would reduce the average word count of the ‘a’ai genre to 749.
We note that average words per colon is also fairly consistent across the oral poetic genres, at 2.7; quite similar to the 2.9 average for the prose texts. Therefore, any increased difficulty that may be anticipated to arise from organizing larger colon counts into patterns would probably not prove to be a factor.

The counting pattern frequencies for all poetic genres except the faʻateni (“praise”) appear to be significantly larger than what would be anticipated from a prose text. Most importantly, the ‘a’ai (“myth”) genre, representing the majority of pre-1850 data, is more than four standard deviations from the prose mean. It could be reasonably inferred, therefore, that at least some syllabic counting patterns of the pre-1850 corpus were metrically motivated. It should be noted that greater pattern frequency for the poetic genres does not, in and of itself, tell the complete story. The oral poetic patterns are often longer and, subjectively speaking, of a higher poetic quality.

Perhaps the chance occurrence in prose of patterns of syllable count served as an impetus for an increased use in poetry. This possibility will be discussed further in chapter 8.

5.2.6 An example of syllabic counting meter in modern prose

An intriguing prose text from table 5.1 consists of a segment of E aha te faufa ’a o te reo mā ’ohi i teie tau? (“What is the importance of the Polynesian language in the present era?”) (TKNui 2003a). This segment represents part of a blog entry posted at the Tahitian Academy’s website by anonymous blogger TKNui. The writing style seems structured and rhetorical. Some of its syllabic counting patterns are sufficiently long so as to appear poetically motivated.

For example, in the passage in (5.44) below, we observe three pair of repeated counts and a few unaffiliated counts embedded within a loosely inverted structure, similar to that of the passage in (5.32) above. An inverted sequence of counts 5,7,5 lies directly at the center of the pattern at lines 12, 13, and 14. Line 13, in fact, completes a long sentence that TKNui begins on line
1. The counts of the last two lines of the passage echo the final two of the pattern. These final lines also form the last sentence of the paragraph.

The passage’s counts may be grouped as follows:

<table>
<thead>
<tr>
<th>a</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>4</td>
</tr>
<tr>
<td>c</td>
<td>5</td>
</tr>
<tr>
<td>d</td>
<td>4</td>
</tr>
</tbody>
</table>

3,3

e  5
f  4
3,3

g  5
h  7
g  5
6
f  4
e  5
d  4
c  5
5
7,7
b  4
a  5
4
5
(5.44) Extract from “E aha te faufa’a o te reo mā’ohi i teie tau?” segment (TKNui 2003a)

\[ \mu \sigma_e \sigma_{ne} \] Text

1. \( ?a \) tata \( mai \) PAUSE
   7
   6
   5
   IMP explain hither
   Explain,

2. \( ?ia \) matara
   5
   5
   4
   SBJV opened up
   so that may be opened up

3. \( ?e \)
   0
   0
   0
   and
   and

4. \( ?ia \) ?ite-hia
   6
   6
   5
   SBJV know-PASS
   so that may be known

5. te faufa?a
   5
   5
   4
   the importance
   the importance

6. e vai ra
   4
   4
   3
   IPFV exist there
   that exists
7. i roto
   3 1 2
   3 1 2
   3 1 2
   DIROBJ in
   within

8. i taua mau parau
   9 1 3 2 3
   9 1 3 2 3
   5 1 2 1 1
   DIROBJ those PL word
   those words

9. moʔe–moʔe
   4 4
   4 4
   4 4
   hidden
   that are hidden

10. te-i roto
    4 2 2
    4 2 2
    3 1 2
    that-DIROBJ in
    within

11. i te parau
    5 1 1 3
    5 1 1 3
    3 1 1 1
    DIROBJ the word
    the words

12. noː te manaʔo
    6 2 1 3
    5 1 1 3
    5 1 1 3
    INALIEN.STRONG the thought
    of the thoughts
13. o te feia: tahito PAUSE

9 1 1 4 3
8 1 1 3 3
7 1 1 2 3

INALIEN.WEAK the people old of the people of old.

14. te manaʔo ia

6 1 3 2
6 1 3 2
5 1 3 1

the thought ANAPH
They are the thoughts

15. o te mau tupuna PAUSE

7 1 1 2 3
7 1 1 2 3
6 1 1 1 3

INALIEN.WEAK the PL ancestor of the ancestors,

16. te manaʔo

4 1 3
4 1 3
4 1 3

the thought
the thoughts

17. e vau~vau mai ra

8 1 4 2 1
8 1 4 2 1
5 1 2 1 1

IPFV expound hither there that expound

18. i te huru

4 1 1 2
4 1 1 2
4 1 1 2

DIROBJ the condition the condition
19. o te nunaʔa

INalien.weak the nation

20. o te reira tau PAUSE

INalien.weak the aforementioned time.period

of that period of time.

21. te huru atoʔa ia

the condition all ANAPH
It is also the condition

22. i ?ahu-hia tatou PAUSE

PFV clothe-PASS 1.pl.incl that we are clothed in.

23. parau tupuna PAUSE

The ancestor’s word,

24. puta tupuna PAUSE

book ancestor
the ancestors book.
25. tupuna ma: PAUSE

5 3 2
4 3 1
4 3 1
ancestor group
Ancestors,

26. te-i hea ?outou PAUSE

8 2 2 4
8 2 2 4
5 1 2 2
the-in where 2.PL
where are you?

This TKNui passage will be re-visited in chapter 8, where it will be proposed that this present-day example of syllabic counting meter may be suggestive of a continued tradition of composition-in-performance.

5.3 Word stress counting meter

In some passages of the pre-1850 corpus, a second variety of counting meter was detected. Rather than counting syllables, it tallies occurrences of word stress. Its application is much less frequent than that of syllabic counting meter, occurring mostly in coordination with patterns of syntactic frame parallelism;\(^59\) from the simple (e.g. poetically organized lists) to the more complex (e.g. canonical parallelism).

For passages that represent lists, its line is a full list item; otherwise, the line is the colon. Its pattern types are the same as those that have been described for syllabic counting meter: repeated, incremental, inverted, and alternating. Patterns of repeated count, however, seem to be the most common.\(^60\)

Generally, its application co-occurs with that of syllabic counting meter, resulting in two independently functioning meters for the same passage of text. Occasionally, it acts as a passage’s sole metrical device.

\(^59\) Syntactic frame parallelism, as a method of poetic organization, will be discussed in chapter 6.

\(^60\) Nearly all examples in this section will be of repeated count. For examples of incremental count, see lines 11-13 and 25-27 of (7.5), of inverted count, see lines 139-143 of (7.7), and of alternating count, see lines 28-33 of (7.5).
In the list in (5.45) below, we observe a syllabic counting pattern of inverted parallelism co-occurring with word stress counting patterns of repetition. These patterns may be grouped as follows:

<table>
<thead>
<tr>
<th>Non-elaborated syllable count</th>
<th>Word stress count</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 5</td>
<td>2,2,2,2</td>
</tr>
<tr>
<td>b 4</td>
<td>3,3</td>
</tr>
<tr>
<td>c 3</td>
<td></td>
</tr>
<tr>
<td>d 3</td>
<td></td>
</tr>
<tr>
<td>d’ 3</td>
<td></td>
</tr>
<tr>
<td>c’ 3</td>
<td></td>
</tr>
<tr>
<td>b’ 4</td>
<td></td>
</tr>
<tr>
<td>a’ 5</td>
<td></td>
</tr>
</tbody>
</table>

5
8

(5.45)\textsuperscript{61} Extract from "The genealogies of the gods" (Henry 1928:355-359)

\begin{tabular}{llll}
\(\sigma_{ne}\) & Stress & Text \\
1. & ?o & neva~'neva & PAUSE \\
5 & 1 & 4 & \\
2 & 0 & 2 & \\
& PROP & Nevaneva & \\
& & Nevaneva, & \\
2. & ?o & 'iri-nau & PAUSE \\
4 & 1 & 3 & \\
2 & 0 & 2 & \\
& PROP & Iri-nau & \\
& & Iri-nau, & \\
\end{tabular}

\textsuperscript{61} For this and other similarly formatted examples, the first line provides an IPA representation of each word, as well as indication of syntactic pause. The second line displays each word’s syllable count assuming non-elaborated speech. The third line gives each word’s combined count of primary, secondary, and tertiary stress. The fourth line provides a morpheme-by-morpheme gloss, and the fifth line an English translation. The two leftmost columns present a tally of line counts: under the heading \(\sigma_{ne}\) is the tally of syllable counts per colon assuming non-elaborated speech, and under the heading \textit{Stress} the tally of stress counts per colon or list item, as appropriate. A hyphen in this column indicates that the colon’s word stress count has been carried forward to the end of the list item.
3. ?o ,rei-\text{tu}: \text{PAUSE}
   
   | 3     | 2    |
   | 2     | 0    |
   | \text{PROP} | Rei-tu |
   | Rei-tu, |

4. ?o 'ti?a-
   
   | 3     | 2    |
   | 0     | 1    |
   | \text{PROP} | Ti'a- |
   | Ti'a- |

5. o-uri \text{PAUSE}
   
   | 3     | 3    |
   | 2     | 1    |
   | o-uri |
   | o-uri, |

6. (?o) 'ti?a-
   
   | 3     | 2    |
   | 0     | 1    |
   | \text{PROP} | Ti'a- |
   | Ti'a- |

7. o-atea \text{PAUSE}
   
   | 4     | 4    |
   | 2     | 1    |
   | o-atea |
   | o-atea, |

8. ?e
   
   | 0     | 1(0) |
   | 0     | 0    |
   | and   |
   | and   |

9. ?o te-ari?i-
   
   | 5     | 4    |
   | 0     | 1    |
   | \text{PROP} | Te-ari'i- |
   | Te-ari'i- |
In the list in (5.46) below, we note a syllabic counting pattern of
alternation co-occurring with a word stress counting pattern of repetition.
These may be grouped as follows:

<table>
<thead>
<tr>
<th>Non-elaborated syllable count</th>
<th>Word stress count</th>
</tr>
</thead>
<tbody>
<tr>
<td>a 5</td>
<td>3,3,3,3</td>
</tr>
<tr>
<td>b 4</td>
<td></td>
</tr>
<tr>
<td>a' 5</td>
<td>4</td>
</tr>
<tr>
<td>b' 4</td>
<td></td>
</tr>
<tr>
<td>a'' 5</td>
<td></td>
</tr>
<tr>
<td>b'' 4</td>
<td></td>
</tr>
<tr>
<td>a''' 5</td>
<td></td>
</tr>
<tr>
<td>b''' 4</td>
<td></td>
</tr>
</tbody>
</table>

(5.46) Extract from “Attempt to raise the sky” (Henry 1928:405-407)

σ_{ne} Stress Text

1. e 'ni?a 'roa
5 1 2 2
- 0 1 1
   
   EXIST above very
   high up
2. i-a ˈatea PAUSE
   4 1 3
   3 0 1
to-PROP Atea
to Atea,

3. e ˌ,tara~ta'rai
   5 1 4
   - 0 2
   IPFV carve.continually
to carve up

4. i-a ˈatea PAUSE
   4 1 3
   3 0 1
   DIROBJ-PROP Atea
   Atea,

5. e ˈti?a ˈpapa
   5 1 2 2
   - 0 1 1
   IPFV raise flat.rock
to prop with flat rocks

6. i-a ˈatea PAUSE
   4 1 3
   3 0 1
   DIROBJ-PROP Atea
   Atea,

7. e ˈʔiu~ˈʔiu
   5 1 4
   - 0 2
   IPFV deep.sleep
to put into a deep sleep

8. i-a ˈatea PAUSE
   4 1 3
   3 0 1
   DIROBJ-PROP Atea
   Atea,
In the list in (5.47) below, we find near repetition of a fairly complex syllabic counting pattern, and complete repetition of a pattern of word stress counting meter. These may be grouped as follows:

<table>
<thead>
<tr>
<th>Non-elaborated syllable count</th>
<th>Word stress count</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2</td>
<td>a 2,2,2,2</td>
</tr>
<tr>
<td></td>
<td>b 4</td>
</tr>
<tr>
<td>a 2,4,2,4</td>
<td>a’ 2,2,2,2</td>
</tr>
<tr>
<td>b 2,3</td>
<td>b’ 4</td>
</tr>
<tr>
<td>c 2,7</td>
<td></td>
</tr>
<tr>
<td>a’ 2,4,2,4</td>
<td>2,2</td>
</tr>
<tr>
<td>b’ 2,3,2,3</td>
<td></td>
</tr>
<tr>
<td>c’ 2,7</td>
<td></td>
</tr>
<tr>
<td>2,2,2,2</td>
<td></td>
</tr>
</tbody>
</table>

(5.47) Extract from “Another version of the creation” (Henry 1928:339-340)

<table>
<thead>
<tr>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. i-a 'atea PAUSE</td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>DIROBJ-PROP Atea on Atea.</td>
</tr>
</tbody>
</table>

62 Lines 9 and 10, with a combined stress count of 4, represent a parenthetical sentence within the list.
There was no sun.

There was no moon.

There was no land.

There was no mountain.
Everything was unsettled continuously there continuously unsettled.

There was no human.

There was no pig.

There was no
16. e 'moa PAUSE
3 1 2
2 0 1
EXIST chicken
chicken.

17. 'ʔaore
2 2
- 1
PFV.NEG
There was no

18. e ?uːri: PAUSE
3 1 2
2 0 1
EXIST dog
dog.

19. 'ʔaore
2 2
- 1
PFV.NEG
There was no

20. e 'peu ,ora~ora PAUSE
7 1 2 4
4 0 1 2
EXIST thing living
living thing.

21. 'ʔaore
2 2
- 1
PFV.NEG
There was no

22. e 'tai PAUSE
2 1 1
2 0 1
EXIST sea-water
sea water.

239
23. ʔaore
   2
   - 1
   PFV.NEG
   There was no

24.  e  ˈvai  PAUSE
   2
   1  1
   2
   0  1
   EXIST  fresh-water
   fresh water.

Patterns of syllabic counting meter are nearly absent from the list in (5.48) below, leaving word stress counting meter to function on its own. The patterns may be grouped as follows:

<table>
<thead>
<tr>
<th>Non-elaborated syllable count</th>
<th>Word stress count</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>3,3,3</td>
</tr>
<tr>
<td>6</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>2,2</td>
</tr>
<tr>
<td>3</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>4,4,4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>4,4,4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>σne</td>
</tr>
<tr>
<td>---</td>
<td>------</td>
</tr>
<tr>
<td>1</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>'tane</td>
</tr>
<tr>
<td></td>
<td>-</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. i to'ona
   4 1 3
   - 0 1
   IPFV draw.away
   who drew away

9. i te 'ra?i
   4 1 1 2
   - 0 0 1
   DIROBJ the sky
   the sky

10. i-a 'atea PAUSE
    4 1 3
    4 0 1
    DIROBJ-PROP Atea
    from Atea,

11. 'tane
    2 2
    - 1
    Tane
    Tane

12. i te 'ra?i 'tua 'tini PAUSE
    8 1 1 2 2 2
    4 0 0 1 1 1
    DIROBJ the sky NUMB ten
    of the tenth sky,

13. 'tane
    2 2
    - 1
    Tane
    Tane

14. i te 'ra?i 'hamama PAUSE
    7 1 1 2 3
    3 0 0 1 1
    DIROBJ the sky open
    of the open sky,
15. ˈtane
  2   2
   -  1
    Tane
    Tane

16. inte ˈhora PAUSE
  4   1   1   2
  2   0   0   1
   DIROBJ the open.hand
     of the open hand,

The passage in (5.49) below represents a rare example of word stress counting meter in material that does not represent a list. We note two inverted patterns of syllabic counting meter co-occurring with two word stress count patterns of repetition. These may be grouped as follows:

<table>
<thead>
<tr>
<th>Non-elaborated syllable count</th>
<th>Word stress count</th>
</tr>
</thead>
<tbody>
<tr>
<td>a    4</td>
<td>2,2,2,2,2,2,2,2</td>
</tr>
<tr>
<td>b    5</td>
<td></td>
</tr>
<tr>
<td>c    5</td>
<td>1,1,1,1</td>
</tr>
<tr>
<td>b’   5</td>
<td></td>
</tr>
<tr>
<td>a’   4</td>
<td>2</td>
</tr>
<tr>
<td>6    5</td>
<td></td>
</tr>
<tr>
<td>a    5</td>
<td></td>
</tr>
<tr>
<td>b    4</td>
<td></td>
</tr>
<tr>
<td>c    3</td>
<td></td>
</tr>
<tr>
<td>c’   3</td>
<td></td>
</tr>
<tr>
<td>b’   4</td>
<td></td>
</tr>
<tr>
<td>a’   5</td>
<td></td>
</tr>
</tbody>
</table>
(5.49) Extract from “Birth of the Heavenly Bodies” (Henry 1928:359-363)

<table>
<thead>
<tr>
<th>σne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. fa'na'u 'mau-ra
   2 1 1
   1 1 0
   to.be.born hither there
   Then was born

2. 'ta'-na 'ari'i
   2 2 3
   1 1 1
   ALIEN.NEUT-3.SG king
   his king

3. ?o 'maunu-'ura PAUSE
   5 1 4
   0 2 2
   PROP Maunu-'ura
   Maunu-'ura.

4. ?o 'maunu-'ura
   5 1 4
   0 2 2
   EXIST Maunu-'ura
   It is Maunu-'ura

5. e 'hiti 'mai
   4 1 2 1
   0 1 1 1
   IPFV cross hither
   who rises

6. i te 'ahi-'ahi PAUSE
   6 1 1 4
   0 0 2 2
   DIROBJ the evening
   in the evening.

7. e 'mata 'rua PAUSE
   5 1 2 2
   0 1 1 1
   EXIST face two
   He has two faces.
8. e fe'tu: 'ura PAUSE

5
1 2 2
2 0 1 1
EXIST star red
He is a red star.

9. e a'tua

4 1 3
1 0 1
EXIST god
He is a god

10. e 'rere

3 1 2
1 0 1
EXIST fly
who flies

11. i ta'ra:

3 1 2
1 0 1
DIROBJ remedy
to remedy

12. (i) te fe'au

4 1 1 2
1 0 0 1
DIROBJ the hesitation
hesitation

13. i 'to:-na ra 'tau PAUSE

5 1 2 1 1
2 0 1 0 1
DIROBJ INALIEN.NEUT-3.SG there season
in its season.

Due to the relative scarcity of word stress counting meter in the pre-1850 material, a comparison of its corpus frequency to chance occurrence in prose has not been attempted. It is hoped that its validity as a means of metrical organization will have been successfully demonstrated in patterns such as those just discussed, as well as several more that will be presented in chapter 7.
Having nearly completed a discussion of the two counting meters, we will finally mention an aspect of list item arrangement that is relevant to both.

5.4 Arrangement of list items to accommodate meter

Items of a list are often arranged so as to assist patterns of both varieties of counting meter. It is also typical for longer list items, whose counts may be difficult to accommodate, to be placed at a list’s end. Such terminal placement of longer and metrically non-conforming material may serve to notify the audience that the list, or a section thereof, is now complete.

From the list of (5.50) below, we encounter a complex pattern of syllabic counting meter that appears unlikely to be have been random:

A grouping of 4 counts:
2,2,2
3

A grouping of 4 counts:
2,2,2
3

A grouping of 8 counts:
2,2,2,2,2,2,2
3

A grouping of 16 counts, where longest list item completes the list:
2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2
6
(5.50) Extract from “Tane, the man-god” (Henry 1928:364-371)

<table>
<thead>
<tr>
<th>σne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>′ʔaore</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>PFV.NEG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>There was no</td>
</tr>
</tbody>
</table>

| (e) | ˈmata PAUSE |
| 2   | 1(0) 2    |
| 1   | 0 1      | EXIST face |
|     |          | face. |

| 3.   | ′ʔaore |
| 2    | 2      |
| 1    | 1      | PFV.NEG |
|      |        | There was no |

| (e) | ˈupoʔo PAUSE |
| 3   | 1(0) 3    |
| 1   | 0 1      | EXIST head |
|     |          | head. |

| 5.   | ′ʔaore |
| 2    | 2      |
| 1    | 1      | PFV.NEG |
|      |        | There was no |

| (e) | ˈihu PAUSE |
| 2   | 1(0) 2    |
| 1   | 0 1      | EXIST nose |
|     |          | nose. |

| 7.   | ′ʔaore |
| 2    | 2      |
| 1    | 1      | PFV.NEG |
|      |        | There were no |
8. e ta'riʔa PAUSE

3
1 1
0 1
EXIST ear
ears.

9. ʔaore

2
1
1 PFV.NEG
There was no

10. (e) ṭvaha PAUSE

2
1 1
0 1
EXIST mouth
mouth.

11. ʔaore

2
1
1 PFV.NEG
There was no

12. (e) ʔaʔiː PAUSE

2
1 1
0 1
EXIST neck
neck.

13. ʔaore

2
1
1 PFV.NEG
There was no

14. (e) ʻtua PAUSE

2
1 1
0 1
EXIST back
back.
There was no

There were no

There was no
22. (e) 'pito PAUSE
   2
   1 1(0) 2
   1
   EXIST navel
   navel.

23. 'ʔaore
   2
   2
   1
   PFV.NEG
   There were no

24. (e) 'hu:'ha: PAUSE
   2
   1(0) 2
   2
   EXIST thigh
   thighs.

25. 'ʔaore
   2
   2
   1
   PFV.NEG
   There were no

26. (e) 'tohe PAUSE
   2
   1(0) 2
   1
   EXIST buttock
   buttocks.

27. 'ʔaore
   2
   2
   1
   PFV.NEG
   There were no

28. e 'turi PAUSE
   2
   1(0) 2
   1
   EXIST knee
   knees.
There were no feet.

There were no soles.

In the short word stress pattern in (5.51) below, we again note that the item with longest metrical count serves to complete the list:

1,1,1,1

2

(5.51) Extract from “After the sky was raised” (Henry 1928:413-415)

σ_{ne} Stress Text

1. te 'mato PAUSE

3

1 2

1 0 1

the cliff
the cliff,
2. te 'ʔaivi PAUSE
4
 1 3
 1 0 1
 the hill
the hill,

3. te 'peho PAUSE
3
 1 2
 1 0 1
 the upper.valley
the upper part of the valley,

4. te 'faʔa PAUSE
3
 1 2
 1 0 1
 the valley
the valley,

5. te 'ʔaere raʔau PAUSE
6
 1 3 2
 2 0 1 1
 the thick.forest tree
the thick forest.

5.5 Conclusion

In this chapter, analysis findings were discussed relevant to the occasional application of two distinct metrical devices: syllabic counting meter and word stress counting meter; the former occurring much more frequently than the latter. In both meters, counts are regulated by an external pattern, wherein they may be observed to repeat, increment, or be organized into inverted structures. There is also a pattern type that allows for the alternation of any sequence of counts, of repeated patterns, or of incremental patterns; however not of inverted patterns.

Specific to syllabic counting meter, the colon serves as poetic line, and a loosely inverted structure is sometimes observed to act as a container for other patterns or unaffiliated counts. Specific to word stress counting meter, the poetic line is a complete list item when a passage represents a list; otherwise it is the colon. Its most frequently encountered pattern type is that of repetition.
There seem to be few limitations as to the possibilities for a pattern’s starting point or length. Constrained only by the limit of counts that can viably fit into a line, it appears that the oral poet may begin at any chosen count, and continue with that pattern as long as desired or practical. Different pattern types, when grouped together, seem to juxtapose freely, as well as alongside unpatterned counts.

As mentioned in the literature review, Hymes states that non-epic oral tradition is not constrained at the level of a metrical line, but commonly by a relation among lines (Hymes 1994:330). The Tahitian counting meters could perhaps be viewed as an example of this, where constraint is provided by regulation of syllable and word stress counts across lines. Meter has been employed, but it is not internal to the line as typical of European epic poetry. The meters’ somewhat sporadic application and freedom of arrangement similarly stand in contrast to the formality of Homeric hexameter, Slavic decasyllable, or even the thirteen morae per verse of Samoan solo poetry.

An example of syllabic counting meter was discovered in present-day rhetorical prose. Analysis of its persistence and stylistic distribution in modern Tahitian will be left for future study.

The next chapter will discuss analysis findings from the pre-1850 corpus that are relevant to parallelism of sound, syntax, and semantics.
6 Parallelism

6.1 Introduction

Parallelism of linguistic features is encountered throughout the corpus in a very free use of assonance, consonance, and repetition of part-of-speech patterns (i.e. syntactic frames) within which semantic parallelism often occurs as well. The examples to be discussed below span the texts and genres of the pre-1850 corpus.

6.2 Sound parallelism

The most commonly encountered application of sound parallelism is of integrated assonance and consonance within the same line or passage. This occurs throughout the poetry, but appears with greatest frequency in material of the ‘a’ai ("myth") genre, which comprises about 60% of corpus texts.

Use of simple assonance or simple consonance is also encountered, but is rarer. Also somewhat uncommon is the arrangement of sound patterns into an inverted structure; a sequence of patterns or overlapping patterns being typical. When less common types of sound parallelism occur, their distribution is fairly even across the genres.

That integrated assonance and consonance is more common to the ‘a’ai genre may be the result of incorporation of material from an earlier era. Another possibility is that the process of composition for an ‘a’ai poem was different than that of the generally shorter works of other genres. This matter will be explored further in chapter 7.

6.2.1 Rules of sound parallelism

For purposes of the current analysis, the following rules have been applied in regards to assonance and consonance:

1. In an assonant pattern represented as V-V-..., zero or one consonant may separate each vowel of the pattern, but no non-conforming vowel.
2. In a consonant pattern represented by $C-C-..., $ one or more vowels may separate each consonant of the pattern, but no non-conforming consonant, except for the glottal stop $/\text{ʔ}/$.\footnote{See rule 6 below concerning this exception.}

As mentioned in the literature review, Jakobson notes that poetry may make use of linguistic features differently than prose (Jakobson 1960:359-360). The following are four special rules of Tahitian sound parallelism motivated by requirements of the data.\footnote{A special rule regarding rhyme will be discussed in 6.2.2.1 below.}

3. Vowel length does not appear to be significant for Tahitian assonant patterns, and therefore $V$ and $V:\!$ are treated equally.

4. The constituent vowels of diphthongs are treated independently for the purposes of assonant pattern formation. For example, the vowels that form the diphthong in $\text{mai}$ (“hither”) may match with nearby occurrences of $/a/\!$ or $/i/\!$.

5. The pattern $a-e$ consistently matches with $a-i$, as does $a-o$ with $a-u$. Love notes that in Samoan rhyme, the patterns $a-e$ and $a-i$ are similarly equivalent (Love 1991:88). For the Tahitian material, it might be generalized that any $a- [+\text{front}]$ matches with any $a-[+\text{front}]$, and any $a-[+\text{back}]$ with any $a-[+\text{back}]$.

6. The glottal stop $/\text{ʔ}/$ seems to be invisible with regards to Tahitian consonance. Consonant patterns simply ignore it as they would vowels.

With these rules in mind, examples will be presented in the following sections that shall attempt to demonstrate the varied use of sound parallelism in the pre-1850 corpus.

### 6.2.2 Patterns of simple assonance

Below are several examples of simple assonance. In the passage in (6.1) below, we observe in all but the last line repetition of the pattern $a-i$ word-boundary:
(6.1) Extract from “Song of Vairao” (Henry 1928:84-85)\textsuperscript{65}

1. \(\text{ʔa peʔe mai e: PAUSE} \)
   \(\text{ai} \)
   as rise.up.in.air hither oh
   as they rise up in the air.

2. \(\text{e faʔai: ra PAUSE} \)
   \(\text{ai} \)
   IPFV\textsuperscript{66} fill.up there
   Fill things up.

3. \(\text{e taʔai PAUSE} \)
   \(\text{ai} \)
   IPFV travel
   Travel.

4. \(\text{te: taʔi mai ra} \)
   \(\text{a i ai} \)
   DUR whistle hither there
   Comes whistling

5. \(\text{te mataʔi} \)
   \(\text{a i} \)
   the wind
   the wind

6. \(\text{i toa-roa PAUSE} \)
   at Toa-roa
   at Toa-roa.

In (6.2) below, we note repetition across lines of assonant patterns \textit{a-u} (in italics) and \textit{u-a} (in bold). These patterns were perhaps selected to thematically echo their occurrence in the name \textit{Tahu’a-muai} and the word \textit{atua} (“god”). A pattern of word-final \textit{i} (underlined) is also frequent; inspired, perhaps, by the three instances of word-final \textit{i} in the names \textit{Tahu’a-muai} and \textit{‘Atari-heui}.

\textsuperscript{65} In this chapter, the first line of an example provides an IPA representation of each word, as well as indication of syntactic pause. The second line contains sound or part-of-speech pattern information. The third line provides a morpheme-by-morpheme gloss, and the fourth line an English translation.
\textsuperscript{66} See Appendix A for a list of grammatical abbreviations.
(6.2) Extract from "Attempt to raise the sky" (Henry 1928:405-407)

1. i te piha atua PAUSE
   a ua
   to the room god
to the room of the gods.

2. e tiʔi
  .IPFV fetch
to fetch

3. i-a tahuʔa-muai
   a u a uai
   DIROBJ-PROP Tahu‘a-muai

4. ?e
   and

5. ?e
   and

6. ?e
   And

7. ?a rave raua
   a ua
   INCEPT left 3.DU
when they took

8. i ta: raua tau toʔi PAUSE
   aua au i
   DIROBJ ALIEN.NEUT 3.DU PLF hatchet
their hatchets,

9. ?o tupu-auʔiuʔi
   u au i
   PROP Tupu-au‘iu‘i
Tupu-au‘iu‘i was
10. ta: tahuʔa-muai toʔi PAUSE
   a ұ a 谢邀
   ALIEN.NEUT Tahuʔa-muai hatchet
   Tahuʔa-muai’s hatchet,

11. ?e
   and
   and

12. ?o  tupu-anuanua
   ұ a 谢邀 ua ua
   PROP Tupu-anuanua
   Tupu-anuanua was

13. ta: ?atari-heui toʔi PAUSE
   ï ï ï
   ALIEN.NEUT ‘Atari-heui hatchet
   ‘Atari-heui’s hatchet,

In (6.3) below, we again see repetition across lines of the assonant patterns a-u (in italics) and u-a (in bold). This time, they perhaps match the vowels of the word atua (“god”). We also find a pattern of a-i (underlined), which perhaps is intended to echo the final two vowels of mataʔi (“wind”).

(6.3) Extract from “The deluge, Tahitian version” (Henry 1928:445-448)

1. naː oː
   by there
   In that manner

2. te  atua
   a ua
   the god
   the gods

3. te  manu
   a  u
   the bird
   birds
4. ?e
   and
   and

5. te manu~manu
   a u a u
   the insect
   insects

6. i haru
   a u
   PFV catch
   caught

7. i te raʔi
   a i
   to the sky
   into the sky

8. i ?ore ai PAUSE
   ai
   PFV perish AIPART
   that they may not perish.

9. e mataʔi rahī
   a i a i
   EXIST wind big
   There was a wind,

10. huatau PAUSE
    ua au
    Huatau.strong.north.wind
    a strong Huatau from the north.

11. e ua PAUSE
    ua
    EXIST rain
    There was rain,

12. ?e
    and
    and
13. e vai rahi PAUSE
    ai a i
EXIST water much
much water,

14. ?e
    and
    and

15. te mata?i tiriaha
    a i
the wind [no translation]
the [no translation] wind

16. ma te pu:ahihoiho PAUSE
    u a i
with the whirlwind
with a whirlwind.

For the first three lines of (6.4) below, either one or two patterns of assonance are contained within the colon. In line 1, the first pattern is a-u (in italics) and the second is a-i (in bold). In line 2, the first pattern is a-e (in italics) and the second is repetition of the phoneme a (in bold). The pattern in the line 3 is simple repetition of the phoneme o.

The patterns of lines 4 through 9 appear to span pairs of cola. In lines 4 and 5, a-u (in italics) and u-a (in bold) are repeated. These also happen to be the most common vowel patterns in the name of the god Ruahatu-tini-rau and, once again, in the word atua (“god”). The pattern of lines 6 and 7 is o-a, and the pattern of lines 8 and 9 is o-o.

In the previous chapter, it was demonstrated that syllabic counting meter is based upon a colon line. For the examples of sound parallelism presented thus far, continued use of colon lineation may have perhaps seemed presumptuous. However, the patterns of lines 1 through 3 below are found to be constrained to within colon boundaries, suggesting that the colon serves as line for sound parallelism as well.
1. e tautai manuia rahiai
   au a i a u a i
   EXIST fishing success great
   They were very successful at fishing.

2. hape a?e ra ra: raua
   a e a e a a a a
   mistake upwards there however 3.DU
   However, they made a mistake

3. i te ?apo?o feo
   o o o o
   at the hole coral
   at the hole in the coral

4. o ruahatu-tini-rau
   ua a u u a u
   INALIEN.WEAK Ruahatu-tini-rau
   of Ruahatu-tini-rau,

5. atua
   a u a
   god
god

6. o te moana-?urifa
   o a o a
   INALIEN.WEAK the Moana-‘urifa
   of the Moana-‘urifa.

7. e vahi mo?a roa naa-nan
   o a o a
   EXIST place sacred very ALIEN.STRONG-3.SG
   It was a very sacred place to him.

8. ro?o-hia-tu
   o o o
   to.be.found-PASS-thither
   He was found.

9. te: ta?oto–?oto mai rao o o o o
   DUR continually.sleeping hither there
   He was in the middle of sleeping
In (6.5) below, we once again encounter patterns $a\text{-}o/u$ and $u\text{-}a$. Their arrangement may be grouped as follows:

a  u-a, u-a, u-a  
b  a-u, a-o, a-u  
a’  u-a, u-a, u-a  

a-u  
u-a  

(6.5) Extract from “Poem in honor of Tetuna’e Nui King of Hitinui” (Cadousteau 1987:17-19)

1. te ariʔi feu-feu  
   the king shake.cloth  
   The king who shook  

2. i te ?ura pitara u a  
   DIROBJ the red belt.buckle the feathers of the red belt  

3. i mua ua  
   in front in front  

4. i te marae farepuʔa PAUSE u a  
   DIROBJ the platform.temple Farepuʔa of the platform temple at Farepuʔa.  

5. te ariʔi maeva-rau-hia au  
   the king welcome-various-PASS  
   The king who received various welcomes  

6. ?e  
   and  
   and  


7. na: tao
   ao
   PLF spear
   spears

8. e rau PAUSE
   au
   NUMB various
   of many kinds.

9. te ariʔi aʔi-aʔi atua ʔoe
   ua
   the king beauty god 2.SG
   You are the king of divine beauty

10. i hitinui PAUSE
    in Hitinui
    in Hitinui,

11. te ariʔi rere aŋua-nua
    ua ua
    the king fly rainbow
    the king who flies over the rainbow

12. o ʔa hitu tau tua
    au ua
    INALIEN.WEAK NUMB seven PLF level
    of the seven levels

### 6.2.2.1 Patterns of rhyme

Several instances of a-o/u and u-a in (6.5) above are colon final, so that the passage nearly rhymes. Although rare, rhyme and near-rhyme can be found in short passages of some texts, with an application sufficiently consistent to appear to have been intentional.

As was mentioned in the literature review, in other poetries of Polynesia, such as Tongan oral tradition and the Samoan solo, rhyme is constrained to vowels. As Ernest Collocott states concerning Tongan:

If the last two vowels are rhyming the interposition of a consonant does not destroy the rhyme. For instance ai is felt as a rhyme to ali ... (Collocott 1928:63 cited in Love 1991:83).
Tahitian rhyme, where it occurs, appears to conform to this generalization. Such assonant rhyme may be observed in the instances of colon-final o-a in lines 1 and 2 of (6.6) below, of colon-final u-a in lines 1, 2, 3, 4, and 5 of (6.7) below, and of colon-final a-a in lines 9 and 10 of (6.7).

Simpler rhyming of just a final vowel or diphthong may be observed in (6.6) below in the instances of colon-final e in lines 3 and 4, of colon-final u in lines 5, 6, 7, and 8, of colon-final a in lines 9 and 10, and, in (6.7) below, of colon-final ae in lines 7 and 8.

(6.6) Extract from “Lament about a woman” (Ahnne 1924:20-23)

1. e aitoʔofa PAUSE o a VOC Aitoofa oh Aitoofa,

2. e aroha mai o a IPFV pity hither pity

3. to: tane e INALIEN.NEUT.2.SG man your husband

4. ?a mate PAUSE e lest die lest he die.

5. ?ua tapairu u PFV young.lady.in.waiting It will become like a young delicate woman

6. te ?o:utu u the point.of.land the point of land
7. o tainuʔu PAUSE
   INALIEN.WEAK Tainu’u
   of Tainu’u.

8. e mataʔu PAUSE
   IPFV fear
   He will fear,

9. e riʔa–riʔa PAUSE
   a
   IPFV tremble
   will tremble,

10. e hauaitu-hia
    a
    IPFV faint-PASS
    will faint

(6.7) Extract from “The departure of the fish” (Henry 1928:437-439)

1. o te tupuna vahine
   INALIEN.WEAK the ancestor woman
   of the grandmother

2. ?o mavete-ʔai-tuna PAUSE
   u a
   PROP Mavete-‘ai-tuna
   Mavete-‘ai-tuna.

3. ?a uru ra
   u a
   INCEPT possess there
   When it was possessed,

4. te tuna
   u a
   the eel
   the eel,
Rhyme may not be as frequently applied in early Tahitian poetry as in some other Polynesian traditions. However, the fact that it is also restricted to vowels could suggest either a common origin or more recent influence. As noted in the literature review, John Charlot argues convincingly for both Polynesian common inheritance and later borrowing from Samoa in the case of Tahitian creation myths (Charl 1985: 177-178). If it can be established that there was inheritance and diffusion of content, it seems plausible for there to have also been inheritance and/or diffusion of some aspects of poetic style.  

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67 An interesting question is whether there may exist a typological correlation between assonant rhyme and CV languages.
6.2.3 Patterns of simple consonance

Below are several examples of simple consonance. Its use, and especially that of strict (i.e. word-initial) alliteration,\(^\text{68}\) is quite infrequent in the corpus. However, it appears to be evenly represented across the poetic genres when it does occur.

The passage in (6.8) below is from “The Lament of Taura-Atua”, which exhorts a return to the district of Papara. In its initial lines we find repetition of phonemes \(p\) and \(r\); the consonants of \(Papara\).

(6.8) Extract from “Lament of Taura-Atua” (Adams 1968: 37)

1. taura-atua
   \(r\)
   Taura-atua
   Taura-atua

2. te: noho mai ra
   \(r\)
   DUR live hither there
   is living

3. i to:-na ra pae~pae
   \(r\) \(p\) \(p\)
   in INALIEN.NEUT-3.SG there stone.platform
   at his stone platform

4. i te pae~pae roa PAUSE
   \(p\) \(p\) \(r\)
   in the stone.platform tall
   at Paepaeroa.

5. e \(?uriri\) iti au
   \(r\) \(r\)
   IPFV bird.\(Heteroscelus.incanus\) small 1.SG
   I am a small ‘\(uriri\) bird

6. e rere
   \(r\) \(r\)
   IPFV fly
   who flies

\(^{68}\) Use of alliteration will be discussed further in 6.2.3.1 below.
7. i te ruaroa PAUSE
   DIROBJ the Ruaroa
to Ruaroa.

8. e fenua papara
   EXIST land Papara
Papara is a land

9. i te ra?i ruma-ruma PAUSE
   at the sky somber
of sombre skies.

In (6.9) below, r is the most common consonant before a colon boundary. In half of its occurrences, it is preceded by p. The repetition of p and r here perhaps thematically refers to the name Pou-mari‘ori‘o.

(6.9) Extract from “Prayer for peace recited upon the Mata-hihae platform temple” (Emory 1965:459-464)

1. te-i te pori
   the-in the richness
It is in the richness

2. i-a taere PAUSE
   to-PROP Taere
of Taere.

3. te-i te pori
   the-in the richness
It is in the richness

4. i-a muhu-muhu PAUSE
   to-PROP Muhumuhu
of Muhumuhu.
5. ?ua poru
   PFV press
   Pressed was

6. i te ihu ono–ono PAUSE
   DIROBJ the nose insistent
   the insistent nose.

7. e vau–vau
   IPFV spread.out
   Things will be spread out

8. i te fare
   r
   at the house
   at the house

9. o pou-mariʔo–riʔo PAUSE
    INALIEN.WEAK Pou-mari’ori’o
    of Pou-mari’ori’o.

10. te tihapai
    the special.placement
    The special placement

11. i te marae
    r
    at the platform.temple
    is at the platform temple

12. o nuʔu-pure PAUSE
    INALIEN.WEAK Nu’u-pure
    of Nu’u-pure.

6.2.3.1 Patterns of alliteration

A rare example of strict alliteration can be found in occurrences of word-initial t in (6.10):
(6.10) Extract from “Tu-i-hiti and Hau-vanaa” (Henry 1928:468-470)

1. matamata-taua
   t
Matamata-taua
Matamata-taua

2. ?a tau?a
   
   INCEPT companion
   became companion

3. i-a tumu-nui
   
   to-PROP Tumu-nui
to Tumu-Nui

4. i tahiti toʔerau PAUSE
   
   in Tahiti north
in Northern Tahiti,

5. ?e
   
   and
   and

6. ?ei tamahine aʔe
   
   EXIST.SBJV daughter upwards
   for a daughter to them was

7. ?o hau-vanaʔa PAUSE
   
   PROP Hau-vanaʔa
Hau-van'a.

Still uncommon, but more frequent than strict alliteration, is the application of syllable-initial alliteration. In (6.11) below we note patterns of \( m\)-\( m \), \( r\)-\( r \), \( r\)-\( r\)-\( r \), \( t\)-\( t \), and \( t\)-\( t\)-\( t \):
(6.11) Extract from “Tu-pua-iti-i-te-rau-onini’s lament for Ma’iruru” (Henry 1928:591-592)

1. ?a tahi a: mau manu ri?i ri?a~ri?a PAUSE m m r r r
   NUMB one continually PL bird small disgusting some small disgusting birds.

2. ?are?a toa maua nei PAUSE r
   but savagery 2.DU.INCL here
   However as for our savagery,

3. ?o ta?-u tane hoa tera: roa t t r r
   EXIST ALIEN.NEUT-1.SG man friend that much
   it is my husband who is gone

4. te-i te tu:?i: poto t t t
   the-in the knock short
   in a brief instant

5. i ?o: a ra?i reva PAUSE r r
   at there ALIEN.WEAK sky space
   there to sky space.

6. te tua pure t t
   the many prayer
   Many prayers

7. no: rirerie ra PAUSE r r r r
   INALIEN.STRONG outraged there
   are for the outraged.

6.2.4 Patterns of integrated assonance, consonance, and parallel strings of phonemes

Integrated patterns of assonance, consonance, and parallel strings of phonemes are quite common, especially in texts of the ‘a’ai (“myth”) genre. In
the passage in (6.12) below, we observe three occurrences of colon-final \( a \) followed directly by three of colon-final \( n \).

(6.12) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. \( \bar{\text{ʔe}} \) \( \text{va:ve} \)\( ?a \)
   \( \text{EXIST.SBJV} \) \( \text{prop} \)
   \( \text{as props} \)

2. \( \text{i te tua} \)
   \( \text{a} \)
   \( \text{for the back} \)
   \( \text{for the back} \)

3. \( \text{o a:tea} \)
   \( \text{PAUSE} \)
   \( \text{a} \)
   \( \text{INALIEN.WEAK} \)
   \( \text{Atea of Atea,} \)

4. \( \bar{\text{ʔe}} \) \( \text{hia} \)
   \( \text{mono} \)
   \( \text{n} \)
   \( \text{EXIST.SBJV} \)
   \( \text{human.sacrifice} \)
   \( \text{substitute} \)
   \( \text{as substitute sacrificial victims} \)

5. \( \text{i te nanu} \)
   \( \text{n} \)
   \( \text{for the jealousy} \)
   \( \text{for the jealousy} \)

6. \( \text{o ta:ne} \)
   \( \text{PAUSE} \)
   \( \text{n} \)
   \( \text{INALIEN.WEAK} \)
   \( \text{Tane of Tane.} \)

Such integration often results in a greater density of sound patterns. In (6.13) below, we observe this in a \( \text{hu} \) pattern in lines 1 and 2 (in italics) that overlaps with a \( \text{u-u} \) pattern in lines 1, 2, and 3 (in bold). Both of these then overlap with a \( \text{ra} \) pattern in lines 1, 2, 3, and 6 (underlined), which itself overlaps with a \( \text{por} \) pattern in lines 4, 5, and 6 (in small caps).
(6.13) Extract from “Tane, the man-god” (Henry 1928:364-371)

1. ?o huhura PAUSE
   
   PROPHuhura
   Huhura,

2. ?o hua-nu?u-marae PAUSE
   
   PROPHua-nu'u-marae
   Hua-nu'u-marae,

3. ?o aruru-nu?u-rara PAUSE
   
   PROPARuru-nu'u-rara
   Aruru-nu'u-rara,

4. ?o poro-a-uta PAUSE
   
   PROPPoro-a-uta
   Poro-a-uta,

5. ?o poro-a-tai PAUSE
   
   PROPPoro-a-tai
   Poro-a-tai,

6. ?o porapora-i-rau-ata PAUSE
   
   PROPPorapora-i-rau-ata
   Porapora-i-rau-ata,

In (6.14) below, we find repetition of *ura* word-boundary constrained to line 1 (in italics), repetition of *ahi* word-boundary constrained to line 2 (underlined), a pattern of *ra* in all four cola (in bold), and in lines 3 and 4 several repetitions of the phoneme *a* (in small caps). Of perhaps thematic interest, in reference to the title provided for the transcription, *ura* means “burn” or “flame”, *ahi* means “fire”, *ra:* is an early Tahitian word for “sun”, and *ʔaːʔa:* has a meaning of “to be in intense combustion”.

274
(6.14) Extract from “The discovery of fire by friction” (Henry 1928:427-429)

1. ura roa-tu ra
    ura u ra
    burn very-thither there
    It burned intensely

2. te auahi rahi PAUSE
    ahi rahi
    the fire great
    the great fire.

3. mai te ?anapa uira ra
    A A A ra ra
    as the flash lightning there
    As a flash of lightning was

4. te marama~rama PAUSE
    A ra A ra A
    the light
    the light.

6.2.5 Arrangement of patterns

Patterns of sound parallelism will sometimes be applied sequentially in a passage of text, will sometimes overlap, and will sometimes be arranged into an inverted structure. Sequential and overlapping pattern structures are by far the most common.

6.2.5.1 Patterns arranged sequentially

Sequences of patterns are most commonly encountered in lists, where list items appear to be ordered for poetic effect. The arrangement of tree names in (6.15) below into a rhyming pattern are an example of this. Lines 1, 2, 3, and 4 end with the vowel $u$. Lines 5, 6, and 7 end in an $a-a(e)$ pattern. Lines 8, 9, and 10 end in colon-final $i$, and lines 11 and 13 in colon-final $he$. 

275
(6.15) Extract from “After the sky was raised” (Henry 1928:413-415)

1. ʔa pau u
   INCEPT used up
   Then occurred

2. te famau u
   the birth
   the birth of

3. te tamanu PAUSE u
   the tree. Calophylum inophylum
   the tamanu tree,

4. te tou PAUSE u
   the tree. Cordia subcordata
   the tou tree,

5. te ?amae PAUSE a ae
   the tree. Thespesia populnea
   the ‘amae tree,

6. te mara PAUSE a a
   the tree. Neonauclea forsteri
   the mara tree,

7. te ?atae PAUSE a ae
   the tree. Erythrina indica
   the ‘atae tree,

8. te vi: PAUSE i
   the mango tree
   the mango tree,

9. te tutui PAUSE i
   the candlenut tree
   the candlenut tree,
10. te toi PAUSE
    i
    the tree. *Alphitoniza.zizyphoides*
    the toi tree,

11. te ʔohe PAUSE
    he
    the bamboo
    bamboo,

12. ʔe
    and
    and

13. te anuhe PAUSE
    he
    the fern. *Gleichenia.dicotoma*
    the anuhe fern.

In (6.16) below, alternating between repetitions of the name of Ta’aroa, we note a sequence of five patterns: a pattern of h-r in lines 4 and 6, of a-i in lines 10 and 12, repetition of the word tu: (“stand”) in lines 14 and 16, a pattern of u-a-a in lines 18 and 20, and finally the pattern t-h-i word-boundary in lines 22 and 24.

(6.16) Extract from "Creation of the world" (Henry 1928:336-338)

1. teie ta: ta?aroa PAUSE
    this ALIEN.NEUT Ta’aroa
    These are the attributes of Ta’aroa:

2. ta?aroa nui PAUSE
    Ta’aroa great
    Great Ta’aroa,

3. parau mau PAUSE
    word true
    truth,
4. hūri fenua PAUSE hū r
    turn earth
    turner of the earth,

5. ta?aroa nui PAUSE

    Ta'aroa great
    great Ta'aroa,

6. fa?a-oti hara PAUSE hū r
    CAUS-end sin
    ender of sin

7. ?e
    and
    and

8. te ?ino PAUSE

    the evil
    evil,

9. ta?aroa nui PAUSE

    Ta'aroa great
    great Ta'aroa,

10. tumu tahi PAUSE a i
    foundation one
    sole foundation,

11. ta?aroa nui PAUSE

    Ta'aroa great
    great Ta'aroa,

12. hiu~hiu a?i~a?i PAUSE a i a i
    glory clear
    clear glory,
13. taʔaroa PAUSE
   Ta'aroa
   Ta'aroa,

14. ?upu tu: PAUSE
   tu:
   invocation standing
   standing invocation,

15. taʔaroa PAUSE
   Ta'aroa
   Ta'aroa,

16. ma tu: raʔi PAUSE
    tu:
    with standing sky
    standing in the sky,

17. taʔaroa PAUSE
    Ta'aroa
    Ta'aroa,

18. haʔa-purara PAUSE
    u a a
    CAUS-propagate
    Propagator,

19. taʔaroa PAUSE
    Ta'aroa
    Ta'aroa,

20. tu: ava~ava PAUSE
    u a a
    stand small.passage.in.reef
    who stands over a small passage in the reef,

21. taʔaroa PAUSE
    Ta'aroa
    Ta'aroa,
22. taʔahi tumu PAUSE
t hi
tread foundation
who treads on the foundation,

23. taʔaroa nui PAUSE
Taʔaroa great
great Taʔaroa,

24. tuhi mate PAUSE
t hi
curse death
whose curse is death.

In (6.17) below, we initially notice an a-u-a word-boundary pattern in lines 1, 3, and 4 that precedes the items of a list. In the list itself, we find a sequence of three patterns, each of which generally decreases in complexity as repetitions progress.

The pattern in lines 5, 6, 7, and 8 simplifies from t-p-o-p-o colon-boundary in line 5, to t-p-o colon-boundary in lines 6 and 7, to o colon-boundary in line 8. The pattern in lines 9, 10, 11, and 12 proceeds from a-r-u word-boundary in line 9, to a more complex a-r-u-a-r-u word-boundary in line 10, to ru word-boundary in line 11, and then to simply u word-boundary in line 12. The pattern in lines 13, 15, and 17 simplifies from u-i colon-boundary in lines 13 and 15, to i colon-boundary in line 17.

(6.17) Extract from “Exchange of sexes between Atea and Fa’ahotu and production of more gods” (Henry 1928:372-374)

1. e atua roa
   a ua
   EXIST god very
   A true god

2.ʔo taʔere PAUSE
   PROP Ta‘ere
   is Ta‘ere.
3. ?a rahu ra
   a u a
   INCEPT conjure there
   Conjure forth

4. i te tahu?a
   a u a
   PROP the artisan
   artisans

5. na: ta?ere-ma-ʔopo-ʔopo PAUSE
   t po po
   ALIEN.STRONG Ta'ere-ma-'opo'opo
   for Ta'ere-ma-'opo'opo:

6. ?o tu:ra?i-po: PAUSE
   t po
   PROP Tura'i-po
   Tura'i-po,

7. ?o ti?i-ti?i-po: PAUSE
   t po
   PROP Ti‘iti‘i-po
   Ti‘iti‘i-po,

8. ?o faro PAUSE
   o
   PROP Faro
   Faro,

9. ?o mata~mata-ʔarahu PAUSE
   a r u
   PROP Matamata-'arahu
   Matamata-'arahu,

10. ?o araru-vahine PAUSE
    araru
    PROP Araru-vahine
    Araru-vahine,

11. ?o pe:peru PAUSE
    ru
    PROP Peperu
    Peperu,
12. ?o feu PAUSE 
   PROP Feu 
   Feu,

13. ?o ?attari-heui PAUSE 
   ui 
   PROP ‘Atari-heui 
   ‘Atari-heui,

14. ?o tutono PAUSE 
   PROP Tutono 
   Tutono,

15. ?o tahu?a-muri PAUSE 
   ui i 
   PROP Tahu’a-muri 
   Tahu‘a-muri,

16. ?e 
   and 
   and

17. ?o mata?i~ta?i PAUSE 
   i 
   PROP Mata‘ita‘i 
   Mata‘ita‘i.

6.2.5.2 Patterns that overlap

In (6.18) below, we note some overlapping assonant patterns. In lines 1, 
3, and 5, we find a rhyming pattern of *e-a-e colon-boundary* (in italics). In 
lines 2 and 4 are the three patterns *a-i* (in bold), *u-u* (underlined), and a 
rhyming pattern of *u colon-boundary* (in small-caps), which also recurs in line 
7. Note that the final *u* of line 2 is shared by both proposed *u* patterns.
(6.18) Extract from “Prayer for peace recited on the Mata-hihae marae in the district of Te-ahu-upoo” (Emory 1965:459-464)

1. e marae
   e ae
   EXIST platform.temple
   The platform temple

2. ?o ra'i-tupu PAUSE
   ai uu
   PROP Ra‘i-tupu
   is Ra‘i-tupu.

3. te fare
   e ae
   the house
   The house

4. ?o ruru-aitu PAUSE
   uu ai uu
   PROP Ruru-aitu
   is Ruru-aitu.

5. e pae~pae
   e ae ae
   EXIST stone.platform
   The stone platform

6. ?o fa’atoa-

   PROP Fa‘atoa-
   is Fa‘atoa-

7. i-te-hau PAUSE
   U
   i-te-hau
   i-te-hau.

   In (6.19) below, we again observe four patterns that overlap. We find t-n
   (in italics) in lines 1, 3, 6, and 9, m-n (in bold) in lines 1, 5, and 8, o-o
   (underlined) in lines 3, 5, and 7, and the rhyming pattern of a-o/u colon-
   boundary (in small caps) in lines 1, 4 and 9.
1. ō tane-manu
   PROP Bird-Tane
   Bird-Tane were

2. te iʔoa PAUSE
   the name
   their names,

3. i tono-hia mai
   PFV send-PASS hither
   that were sent

4. i tor-na tau
   in period.of.time
   at that time

5. ōe mono
   EXIST.SBJV substitute
   as substitutes

6. i-a tane
   for Tane

7. i roto
   at inside
   within

8. i te moana
   in the ocean
   the ocean

9. o teie nei ao PAUSE
   INALIEN.WEAK this here world
   of this world.
6.2.5.3 Combined sequential and overlapping patterns

In some passages, patterns are both sequential and overlapping. For example, in lines 1 and 3 of (6.20) below, we find first a mata pattern (in italics), directly followed in lines 3 and 5 by a pattern of aro (in bold). An overlapping a-al(-a) pattern (underlined) occurs throughout the passage in lines 1, 3, 4, and 6, likely sharing both occurrences of a in the mata pattern, and, in line 3, the a of the aro pattern. Note that all three patterns are included in line 3, where we encounter the name of the god Ta’aroa.

(6.20) Extract from “Creation of man” (Henry 1928:402-403)

1. te mata
   mata
   the eye
   The eyes

2. o tu:
   INALIEN.WEAK Tu
   of Tu

3. ma ta?aroa PAUSE
   ma ta gro
   with Ta’aroa
   and Ta’aroa;

4. i nana:
   PFV look
   They looked

5. i raro
   aro
   DIROBJ down
   down

6. i te piha ta?ata PAUSE
   in the room person
   into the room of mankind.
The first half of (6.21) below, or lines 2 through 8, is filled with overlapping repetition of the consonant *t* (in bold) and the vowel pattern *a-i* (in italics). The two instances of *t* in line 9 and its single instance in line 10 are probably also part of this *t* pattern. Both *t* and *a-i* are constituent phonemes of the words *Tahiti* and ’aito (“warrior”), names of the latter the list serves to enumerate.

Beginning in line 9 we are introduced to other patterns. First comes *word-boundary ma* (underlined), which resumes in lines 12 and 13. Next we encounter in lines 9, 10, and 11 a pattern of *u-a* (in small caps). In lines 10 and 11 we find *word-boundary p* (in italics), and in lines 11 and 12 *aro colon-boundary* (in bold). Finally, in lines 13, 15, and 16, we note *word-boundary te* (in small caps).

(6.21) Extract from “The departure of the fish” (Henry 1928:437-439)

1. e fenua
   
   EXIST land
   
   It is a land,

2. ʔo tahiti ta i
   
   PROP Tahiti
   
   Tahiti,

3. no: te ʔaito ra PAUSE	 ait
   
   INALIEN.STRONG the warrior there
   
   of warriors.

4. ʔo vai-ta-faʔi PAUSE	 ait a i
   
   PROP Vai-ta-fa'i
   
   Vai-ta-fa'i,

5. ʔo tera-tai PAUSE	 tai
   
   PROP Tera-tai
   
   Tera-tai,
6. ?o tai-to?a PAUSE
   tai t
   PROP Tai-to’a
   Tai-to’a,

7. ?o tautai PAUSE
   t tai
   PROP Tautai
   Tautai,

8. ?o tai-nui-atea PAUSE
   tai t
   PROP Tai-nui-atea
   Tai-nui-atea,

9. ?o marua-to?a PAUSE
   ma UA t
   PROP Marua-to’a
   Marua-to’a,

10. ?o pau-fata PAUSE
    p U At
    PROP Pau-fata
    Pau-fata,

11. ?o peu-ru-?aro PAUSE
    p U Aro
    PROP Peu-ru-‘aro
    Peu-ru-‘aro,

12. ?o maro: PAUSE
    maro
    PROP Maro
    Maro,

13. ?o mavete PAUSE
    ma TE
    PROP Mavete
    Mavete,

14. ?o te-uri PAUSE
    TE
    PROP Te-uri
    Te-uri,
6.2.5.4 Inverted arrangement of patterns

Sound patterns are sometimes arranged into an inverted structure. This seems analogous to the inverted structures of metrical patterns described in chapter 5.

Occasionally, inversion is constrained to within the colon boundary. In line 1 of (6.22) below, we note the inverted pattern:

<table>
<thead>
<tr>
<th>a</th>
<th>a</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>a-e</td>
</tr>
<tr>
<td>c</td>
<td>a</td>
</tr>
<tr>
<td>b'</td>
<td>a-e</td>
</tr>
<tr>
<td>a'</td>
<td>a</td>
</tr>
</tbody>
</table>

In line 3 of (6.22), we detect two instances of *p-iri* (in bold) within two of *r-a* (in italics), in addition to a recurring *o* (underlined) that is embedded within the second occurrences of *p-iri* and *r-a*:

<table>
<thead>
<tr>
<th>a</th>
<th>r-a</th>
</tr>
</thead>
<tbody>
<tr>
<td>b</td>
<td>p-iri</td>
</tr>
<tr>
<td>b'</td>
<td>p-iri</td>
</tr>
<tr>
<td>a'</td>
<td>r-a</td>
</tr>
</tbody>
</table>

In line 5, we observe the pattern *a-o* matched by *o-a*. The same matched patterns recur in lines 7 and 8, where we note that three of those four vowels serve as well in a rhyming pattern *a-o colon-boundary.*
(6.22) Extract from “Creation of the world” (Henry 1928:336-338)

1. fa?a ea a?e r a
   a aea a e a
   stay upwards there
   He stayed,

2. ta'?aroa
   Ta'aroea
   Ta'aroa,

3. i te r a?i piri poiri roa PAUSE
   ra piri poiri roa
   in the sky almost.touching dark very
   in the confined very dark sky.

4. ?e
   and
   And

5. ?aore ?oia
   ao o a
   PFV.NEG 3.SG
   he did not

6. i ?ite e:
   PFV know that
   know that

7. e ao
   ao
   EXIST daylight
   there was daylight

8. to: vaho PAUSE
   o a o
   INALIEN.NEUT outside
   outside.

   Typically, however, inverted structures are found to cross line boundaries.
   Usually when this occurs, each instance of a pattern will remain within the
colon. A simple example of this appears in (6.23) below, where ta in line 1 matches ta in line 4, within which we find repetition of po: (“night”) in lines 2 and 3. The pattern may be grouped as follows:

a  ta
b  po:
b’ po:
a’ ta

(6.23) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. ?a  tau
   ta
   INCEPT  time.period
   as there became a season

2. te  po:  PAUSE
   po:
   the  night
   of night,

3. no:  te  po:  roa
   po:
   INALIEN.STRONG  the  night  long
   from the long night

4. ?ia  ta?o  PAUSE
   ta
   SITU  name
   to name.

In (6.24) below, the string pu in line 1 is matched in line 5. Embedded within this is the sequence ari-rar in lines 2 and 3. The pattern may be grouped as follows:

a  pu
b  ari-rar
b’ ari-rar
a’ pu
(6.24) Extract from “The districts of Tahiti Nui” (Henry 1928:70-71)

1. ʔoʔoʔo pu  PAUSE
    PROP  ‘Opu-totara
    ‘Opu-totara,

2. ʔo vari-a-raru:  PAUSE
    ari rar
    PROP  Vari-a-raru
    Vari-a-raru,

3. ʔoiaʔoʔoʔari-o-raro PAUSE
    ari rar
    3.SG  PROP  ‘Ari-o-raro
    who is ‘Ari-o-raro,

4. ʔe
    and
    and

5. ʔo pu-uru  PAUSE
    pu
    PROP  Pu-uru
    Pu-uru.

In some passages, an individual pattern will be found to cross line boundaries, as does the initial pattern of $r-r-r-r$ in lines 1 and 2 of (6.25) below. The inverted structure, composed of patterns of syllable-initial alliteration, may be grouped as follows:

- a  $r-r-r-r$
- b  t-t
- c  r-r
- d  t-t-t
- c’ r-r
- b’ t-t
- a’ r-r-r-r
(6.25) Extract from “Tu-pua-iti-i-te-rau-onini's lament for Ma'iruru” (Henry 1928:591-592)

1. ?a tahi a: mau manu ri?i ri?a~ri?a PAUSE
   NUMB one continually PL bird small disgusting
   some small disgusting birds.

2. ?are?a toa maua nei PAUSE
   r
   but savagery 2.DU.INCL here
   However as for our savagery,

3. ?o ta:-?u tame hoa tera: roa
   t t r r
   EXIST ALIEN.NEUT-1.SG man friend that much
   it is my husband who is gone

4. te-i te tu:?!i: poto
   t t t
   the-in the knock short
   in a brief instant

5. i ?o: a ra?!i reva PAUSE
   r r
   at there ALIEN.WEAK sky space
   there to sky space.

6. te tua pure
   t t
   the many prayer
   Many prayers

7. no: ririe ra PAUSE
   r r r r
   INALIEN.STRONG outraged there
   are for the outraged.

In (6.26) below, we observe a good example of inverted assonant structure. Two instances of ɔ-a in lines 3 and 5 are enclosed by three initial instances of u-a in lines 1 and 2, and matching instances of u-a in lines 6 and 7. These may be grouped as follows:
(6.26) Extract from “The Mare account of creation” (Emory 1938:53-58)

1. parahi atua tu ra
   ua u a
   reside god thither there
   There resided as a god

2. te varua
   ua
   the spirit
   the spirit

3. o ta?aroa PAUSE
   oa
   INALIEN.WEAK Ta’aroa.
   of Ta’aroa.

4. tera:
   that
   That is

5. te i?oa
   oa
   the name
   the name

6. o taua varua PAUSE
   ua ua
   INALIEN.WEAK that spirit
   of that spirit,

7. ?o te-haruru-papa PAUSE
   ua
   PROP Te-haruru-papa
   Te-haruru-papa.
In (6.27) below, we note in the first and last lines the pattern \textit{t-r-t-h-i-m-a-t colon-boundary} (in italics). In lines 3, 7, and 10 we find a pattern of \textbf{r-r colon-boundary} (in bold), within which are evenly placed two instances of \textit{a-e/i colon-boundary} (in small-caps) in lines 4 and 6, and again two others in lines 8 and 9.

We find additionally in line 2 what may be an echo of \textit{m-a-t} in line 1. We also encounter a \textit{u-u colon-boundary} pattern (underlined) in lines 3 and 5.

The inverted structure, after excluding both the \textit{m-a-t} echo and \textit{u-u colon-boundary} pattern, may be grouped as follows:

\begin{verbatim}
a  t-r-t-h-i-m-a-t  
b  r-r  
c  a-i  
d  a-i  
e  r-r  
d’ a-e  
c’ a-i  
b’ r-r  
a’ t-r-t-h-i-m-a-t
\end{verbatim}

(6.27) Extract from "Depiction of the atoreraa te moa ufa" (Henry 1928:312)

1. e turi tahi ma eta PAUSE 
   \textit{t r t h i m a t}  
   IPFV deaf singly with stubborn  
   Be stubbornly deaf.

2. e pito maite PAUSE 
   \textit{m a t}  
   IPFV link carefully  
   Carefully link yourselves together.

3. ?ei haruru  
   \textbf{ruru}  
   EXIST,SBJV rumbling  
   Be as the rumbling

4. o te tai PAUSE  
   \textbf{Al}  
   INALIEN.WEAK the sea  
   of the sea.
6.2.6 Sound parallelism in names and epithets

Assonance, and combined assonance and consonance, are also frequently encountered on a smaller scale in names and epithets; especially those of deities.
6.2.6.1 Simple assonance

In (6.28) below, we observe single repetition of the pattern *a-u-a word-boundary*, which comprises all of the vowels in the god’s name.

(6.28) The god *Taura-atua*

taura-atua
au a a ua
Taura-atua
Taura-atua

In (6.29) below, we find a single repetition of *u-a-u*, which comprises all but the name’s final vowel.69

(6.29) The god *Rua-tupua-nui*

rua-tupua-nui
ua u ua u
Rua-tupua-nui
Rua-tupua-nui

In (6.30) below, we see alternating patterns of *o-o* (in italics) and *a-a* (in bold), which are interrupted only by the *e* of *te* (“the”).

(6.30) The king *‘Oropa’a-o-te-moana*

ʔoropaʔa-o-te-moana

{o o a a o a a}
‘Oropa’a-o-te-moana
‘Oropa’a-o-te-moana

In (6.31) below, we note a thrice occurring pattern of *u-a* (in bold), preceded by a leading *u* (in italics), and trailed by four instances of *a* (underlined).

---

69 This same vowel sequence can alternatively be interpreted as an inverted pattern.
(6.31) Epithet for the god *Uru* ("Spiritual possessor")\(^{70}\)

uru-ahu-ahu-va?a-a-ta?aroa

*spiritual possessor-bail-outrigger canoes ALIEN WEAK Ta'aroa*

Spiritual-possessor-who-bails-out-the-outrigger-canoe-of-Ta'aroa

### 6.2.6.2 Inverted patterns of simple assonance

In (6.32) below, we find an inverted pattern which comprises all but the name’s final vowel:

| a  | a  |
| b  | u  |
| c  | a  |
| b’ | u  |
| a’ | a  |

(6.32) The god *Tahu'a-muai*

tahu?a-muai

* Tahu'a-muai
* Tahu'a-muai

In (6.33) below, we observe an inverted pattern if we ignore the *i* of the name’s initial diphthong:

| a  | a  |
| b  | u  |
| c  | u  |
| b’ | u  |
| a’ | a  |

---

\(^{70}\) Although no attempt has been undertaken thus far to translate component words of names, translations have been attempted for the epithets of this section in order to demonstrate their relationship to the original name.
(6.33) The canoe *Vai-tu-huhua*

`vai-tu-huhua:
  a u u ua
Vai-tu-huhua
Vai-tu-huhua`

In (6.34) below, we note an inverted pattern after excluding the vowel of the initial article, the second *u* of *purotu*, and the name of the god *Taʻaroa*:

```
a  a
b  o
c  u
d  i
cʻ u
bʻ o
aʻ a
```

(6.34) Epithet for the shark *Faʻarava-i-te-raʻi* (“Burnish the sky”)

```
te-maʻo-uri-purotu-a-taʻaroa
  a o u i u o a
the-shark-dark-handsome-ALIEN.WEAK-Taʻaroa
The-dark-handsome-shark-of-Taʻaroa
```

In (6.35) below, we encounter an inverted pattern that, similar to the preceding example, is comprised of vowels that precede the name of the god *Taʻaroa*:

```
a  a
b  a
c  u
d  a
e  u
dʻ a
cʻ u
bʻ a
aʻ a
```
(6.35) Epithet for the god Tane ("Man")

fanauʔaʔuna~ʔuna-a-taʔaroa
   a  au a u a a
newborn-glorious-ALIEN.WEAK-Taʔaroa
Glorious-newborn-of-Taʔaroa

In (6.36) below, we find an inverted pattern comprised of a sequence of vowels that trail those of the word atua ("god"): 

a  o
b  e-a-u
b’ e-a-u
a’ o

(6.36) Epithet for the god Tane ("Man")

atua-o-te-mau-mea-purotu
   o e au ea u o
god-INALIEN.WEAK-the-PL-thing-pretty
God-of-the-many-pretty-things

In (6.37) below, we observe a nearly inverted pattern comprised of all of the vowels of the epithet. The sole discrepancy is that the front vowel e of Huahine is paired up with the initial front vowel i of piri ("almost touching"). The pattern may be grouped as follows:

a  u
b  a
c  i
d  e
e  u
e’ u
d’ i
c’ i
b’ a
a’ u
(6.37) Epithet for the island of *Huahine*

huahine-nu?u-piri-fatu
ua i e u u i a u
Huahine-fleet-almost.touching-master
Huahine-of-the-fleet-that-is-very-close-to-the-master

### 6.2.6.3 Integrated assonance and consonance

In (6.38) below, we note an epithet that appends a full reduplication of the original name:

(6.38) Epithet for the god *Ro'o* ("Reputed")

roʔo-te-roʔo~roʔo
ro o ro o ro o
reputed-the-very.reputed
Reputed-the-very-reputed

In (6.39) below, we find overlapping patterns of *u-a* (in italics), and *word-boundary t* (in bold):

(6.39) The piece of coral *Pu'a-tu-tahi*

puʔa-tu:-tahi
  u a tu ta
Pu'a-tu-tahi
Pu'a-tu-tahi

In (6.40) below, we note a pattern of *word-boundary (m-)a-r* (in italics) followed by a *word-boundary* (in bold):

(6.40) The king *Marere-nui-marua-to'a*

ariʔi  marere-nui-marua-toʔa
ar  mar  mar a  a
king  Marere-nui-marua-to'a
King Marere-nui-marua-to'a
In (6.41) below, we note three instances of *a-u* (in italics) overlapping two instances of *h* (in bold), and four of *t* (underlined).

(6.41) Epithet for the god *Fatu-Moana* ("Lord of the Ocean")

\[
\text{fatu tahu-tahuri-mai-to\?a} \\
\text{\textit{atu} tahu tahu} \\
\text{l lord conjure-flip-hither-rock} \\
\text{Lord He-who-by-conjuring-flips-over-rocks}
\]

### 6.2.6.4 Concerning epithets

Some of the poetic names in the examples above are epithets. Unlike the stock epithets of Homeric poetry, however, which were used to form the end of a dactylic hexameter, their early Tahitian usage does not appear to have served a metrical function. However, Homeric epithets were sometimes poetic beyond their metrical utility, as seen the two following examples.

In (6.42) below, we note two instances of word-initial *o* (in italics) overlapping three of word-final *s* (in bold):

(6.42) Sound parallelism in the stock epithet *Swift-footed-Achilles* (University of Hull 2008)

\[
\text{\textit{πόδας} ωκός \text{\textit{Αχιλλεύς}}} \\
\text{podas okus akilleus} \\
\text{o s o s s} \\
\text{foot swift Achilles} \\
\text{Swift-footed Achilles}
\]

In (6.43) below, we observe three instances of word-initial *a(-n)* (underlined), and two of word-final *o-n* (in bold):

(6.43) Sound parallelism in the stock epithet *Agamemnon, lord of men* (University of Hull 2008)

\[
\text{\textit{άναξ} \textit{ανδρων} \text{\textit{Αγαμέμνων}}} \\
\text{anaks andron agamemnon} \\
\text{\textit{an} \textit{an} on a on} \\
\text{lord men Agamemnon} \\
\text{Agamemnon, lord of men}
\]
Perhaps early Tahitian epithets served a compositional role similar to some uses of stock epithet in oral epic traditions. This possibility will be investigated further in chapter 7, when presenting evidence favouring an oral-formulaic process of composition.

Having surveyed aspects of the corpus data relevant to sound parallelism, a discussion of syntactic and semantic parallelism will next be presented.

6.3 Syntactic and semantic parallelism

Another variety of parallelism is that of a repeating syntactic frame, where often all but one or two words of a part-of-speech pattern remain fixed across repetitions. In English, for example, in the series the dog, the tree, the box, the noun is found to vary, whereas the article the remains fixed. In the sequence I came, I saw, I conquered, the variable element is a verb, preceded by an unchanging pronoun I. The non-variable elements of early Tahitian syntactic frames are almost always found to repeat exactly.

A variable element in the early Tahitian material may represent most part-of-speech categories. In terms of frequency, however, noun or noun phrase is most common. The least common variable categories are those associated with function words.

The majority of syntactic frames represent poetic lists. Some others represent canonical parallelism which, as discussed in section 2.4.2.2.3 of the literature review, is a poetic style encountered in many oral poetries of the world. The use of canonical parallelism will be identified in several of the examples below.

Repeating syntactic frames have been considered poetic if they meet one or more of the following criteria:

1. The syntactic frame contains multiple part-of-speech slots, as may be observed in canonical parallelism.

2. The syntactic frame contains a part-of-speech slot where the variable elements in half or more instances either belong to the same semantic category, or demonstrate semantic progression.
3. The syntactic frame pattern is found adjacent to a pattern that satisfies 1 or 2.

The examples provided below will attempt to inventory and be representative of the variety of poetic syntactic frames that were discovered in the corpus.

6.3.1 Types of syntactic frame

This section will discuss and provide examples of three types of syntactic frame that were detected in the Tahitian data: those containing a single variable element, those containing multiple variable elements, which include all instances of canonical parallelism, and those that contain variable elements that repeat within the same frame.

6.3.1.1 Syntactic frames containing a single variable element

In the passage in (6.44) below, we note a listed sequence of events where, for the initial four instances of the syntactic frame, a verb associated with anger is the single variable element. The pattern is ʔa \textit{V.(anger)} colon-boundary \textit{tane colon-boundary} \textsuperscript{71}, and repeats five times.

(6.44) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

1. ʔa ʔufa
   ʔa \textit{V.anger} INCEPT enraged
   Then became enraged,

2. \textit{tane} PAUSE
   \textit{tane}
   Tane
   Tane.

\textsuperscript{71} For syntactic frame patterns, the fixed elements appear in their IPA form. Part-of-speech and semantic labels represent variable elements, and are displayed in bold.
3. then became angry,

4. Tane.

5. then spoke angrily,

6. Tane.

7. then became carried away with anger,

8. Tane.

9. then took,

10. Tane.
In (6.45) below, we find a syntactic frame where the initial noun phrase varies. The pattern is *NP.construction.material colon-boundary o te raʔi colon-boundary*, and repeats fourteen times.

(6.45) Extract from “Chant of the propping of the sky of Havai’i” (Emory 1938:58-59)

1. tahi hu
   *NP.construction.material*
   ridge.pole
   the ridge pole

2. o te raʔi PAUSE
   o te raʔi
   INALIEN.WEAK the sky
   of the sky,

3. pou roto
   *NP.construction.material*
   pillar
   inner
   the inner post

4. o te raʔi PAUSE
   o te raʔi
   INALIEN.WEAK the sky
   of the sky,

5. e apai
   (e) *NP.construction.material*
   EXIST wall.plate
   the wall plate

6. o te raʔi PAUSE
   o te raʔi
   INALIEN.WEAK the sky
   of the sky,

7. turu-turu
   *NP.construction.material*
   supporting.post
   the supporting post
8.          o te ra?i PAUSE
            o te ra?i
            INALIEN.WEAK the sky
            of the sky,

9.        aho tua
          NP.construction.material
          purlin rear
          the rear purlin

10.       o te ra?i PAUSE
           o te ra?i
           INALIEN.WEAK the sky
           of the sky,

11.       aho tara
          NP.construction.material
          purlin end
          the end purlin

12.       o te ra?i PAUSE
           o te ra?i
           INALIEN.WEAK the sky
           of the sky,

13.       tunau
           [unknown]
           [no translation]
           the [no translation]

14.       o te ra?i PAUSE
           o te ra?i
           INALIEN.WEAK the sky
           of the sky,

15.       toto?iore
          NP.construction.material
          inner.rafter.joiner
          the inner rafter joiner

16.       o te ra?i PAUSE
           o te ra?i
           INALIEN.WEAK the sky
           of the sky,
17. e ahua
   (e) NP.construction.material
   EXIST rafter.to.ridgepole.fastener
   the rafter to ridgepole fastener

18. o te raʔi PAUSE
    o te raʔi
    INALIEN.WEAK the sky
    of the sky,

19. rauoro NP.construction.material
    pandanus.leaf.roofing
    the pandanus leaf roofing

20. o te raʔi PAUSE
    o te raʔi
    INALIEN.WEAK the sky
    of the sky,

21. e ?aʔcho
    (e) NP.construction.material
    EXIST wall.reed
    the wall reeds

22. o te raʔi PAUSE
    o te raʔi
    INALIEN.WEAK the sky
    of the sky,

23. hauato NP.construction.material
    roof.making.tool
    the roof making tool

24. o te raʔi PAUSE
    o te raʔi
    INALIEN.WEAK the sky
    of the sky,

25. uviau NP.construction.material
    ridge.thatching
    the ridge thatching
26. o te raʔi PAUSE
   o te raʔi
   INALIEN.WEAK the sky
   of the sky,

27. taʔpoʔi
   NP.construction.material
   roof
   the roof

28. o te raʔi PAUSE
   o te raʔi
   INALIEN.WEAK the sky
   of the sky,

An example of a slightly more complex syntactic frame, where an initial noun phrase is once again the variable element, is seen in (6.46) below. We observe that the modifier is identical in the first and second noun phrases, as is the modified noun of the second and third. The general pattern is teie te

NP.gift colon-boundary na ʔoe colon-boundary, and repeats three times.

(6.46) Extract from “Lament about a woman” (Ahnne 1924:20-23)

1. teie te puːpaːʔura
   teie te NP.gift
   this the feather.bouquet red
   Here is a bouquet of red feathers.

2. na:ʔoe PAUSE
   na:ʔoe
   ALIEN.STRONG 2.SG
   for you.

3. teie te heiʔura
   teie te NP.gift
   this the necklace red
   Here is a red necklace
4. na: ʔoe PAUSE
   na: ʔoe
   ALIEN.STRONG 2.SG
   for you.

5. teie te hei poe matauʔi~uʔi
   teie te NP.gift
   this the necklace pearl beautiful
   Here is a beautiful pearl necklace

6. na: ʔoe PAUSE
   na: ʔoe
   ALIEN.STRONG 2.SG
   for you.

6.3.1.2 Syntactic frames containing multiple variable elements

   In (6.47) below, we encounter a simple example of canonical parallelism
   that contains two variable elements. The first is a verb associated with
   distribution, and the second a modifier relating to size. The syntactic frame
   pattern is (ʔa) V.distribution colon-boundary te one colon-boundary i ta~ʔu
   vaʔa MODIF.size colon-boundary, and repeats twice. The paired elements in
   the verb slot are somewhat synonymous with each other, whereas those of the
   modifier slot are antonymous. From the discussion of canonical parallelism in
   the literature review, such pairings should be considered unremarkable.
   Universally, paired elements are often synonymous. In some Quiché and
   Samoan poetry, they have also been found to exhibit semantic contrast (see

(6.47) Extract from “The Mare account of creation” (Emory 1938:53-58)

1. tu:vaʔu
   V.distribution
   chase.out
   Chase out

---

72 See sections 2.4.2.2.3.1 and 2.4.2.2.3.2.
2. te one
   te one
   the sand
   the sand

3. i taː-ʔu vaʔa iti PAUSE
   i taː-ʔu vaʔa MODIF.size
   at ALIEN.NEUT-1.SG outrigger small
   from my little canoe.

4. ?a hora~hora
   (ʔa) V.distribution INCEPT spread.out
   Spread out

5. te one
   te one
   the sand
   the sand

6. i taː-ʔu vaʔa nui PAUSE
   i taː-ʔu vaʔa MODIF.size
   at ALIEN.NEUT-1.SG outrigger big
   from my big canoe.

In the passage in (6.48) below, we find an example of canonical parallelism where the first variable element is a proper noun, and the second element a locative. The syntactic frame pattern is ?o te NPROP colon-boundary ?ei pou LOC colon-boundary, and repeats twice. Note that the paired elements in the locative slot are antonymous.

(6.48) Extract from “Chant of the propping of the sky of Havai‘i” (Emory 1938:58-59)

1. ?o te hotu-o-te-raʔi
   ?o NPROP
   EXIST the Hotu-o-te-ra‘i
   It was Hotu-o-te-ra‘i
2. ?ei pou mua PAUSE
   ?ei pou LOC
   EXIST.SBJV pillar front
   as the front pillar.

3. ?o ?anaia-i-te-ra?i
   ?o NPROP
   EXIST ‘Anaia-i-te-ra‘i
   It was ‘Anaia-i-te-ra‘i

4. ?ei pou muri PAUSE
   ?ei pou LOC
   EXIST.SBJV pillar rear
   as the rear pillar.

In (6.49) below, we find an example of canonical parallelism where the first variable element is a noun, and the second a verb. The syntactic frame pattern is `ʔa puta colon-boundary na:te N.body.part colon-boundary ??a V`, and repeats twice. Whereas both noun slot variables represent body parts, those of the verb slot do not appear to be semantically similar.

(6.49) Extract from “The Mare account of creation” (Henry 1928:306-307)

1. ?a puta
   ?a puta
   INCEPT pierce
   When you are stabbed

2. na: te mata PAUSE
   na: te N.body.part
   around the eye
   in the eye,

3. ?a ?iri?i PAUSE
   ?a V
   INCEPT extract
   pull it out.
4. ?a puta
   ?a puta
   INCEPT pierce
   When you are stabbed

5. na: te ?ouma PAUSE
   na: te N.body.part
   around the chest
   in the chest,

6. ?a ha?a-mahu PAUSE
   ?a V
   INCEPT CAUS-wear
   wear it.

In contrast to (6.49), the verbal variable element in (6.50) below precedes the noun. The syntactic frame pattern is V iho ra colon-boundary te N.body.part colon-boundary, and repeats three times.

(6.50) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. pu?u iho ra
   V iho ra
   hump then there
   Then formed a hump on

2. te tua PAUSE
   te N.body.part
   the back
   his back.

3. fera iho ra
   V iho ra
   blinking then there
   Then began to blink

4. te mata PAUSE
   te N.body.part
   the eye
   his eyes.
5. totoro iho ra
   V   iho ra
   worn.out then there
   Then became worn out

6. te ?a?au mi?i~mi?i PAUSE
   te      NP.body.part
   the intestine fatty
   his intestines.

In (6.51) below, we find an example where nouns constitute both variable elements of the syntactic frame. The pattern is ?a ti?a colon-boundary te

N.celestial.body colon-boundary ?a ua colon-boundary i te N.time.of.day

colon-boundary, and repeats twice. Note that the pairings for both variables are antonymous.

(6.51) Extract from “Tane’s voyage and struggle with Atea” (Henry 1928:455-458)

1. ?a   ti?a
   ?a   ti?a
   INCEPT stand
   When rises

2. te ?ava?e PAUSE
   te      N.celestial.body
   the moon
   the moon,

3. ?a   ua
   ?a   ua
   IMP rain
   let it rain

4. i   te po: PAUSE
   i   te      N.time.of.day
   at the night
   at night.
5. ʔa tiʔa
ʔa tiʔa
INCEPT stand
When rises

6. te ra:  PAUSE
the N.celestial.body
the sun
the sun,

7. ʔa ua
ʔa ua
IMP rain
let it rain

8. i te ao  PAUSE
i te N.time.of.day
at the daytime
during the day.

In (6.52) below, we encounter a fairly complex syntactic frame with two variable elements. The pattern is (e) puːpuː:MODIF colon-boundary te puːpuː:
colon-boundary i toːeːai colon-boundary te mata one colon-boundary o aːea
colon-boundary i-a N.celestial.body colon-boundary, and repeats four times.

(6.52) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. puːpuː: haʔari
puːpuː: MODIF
shell coconut
A coconut shell was

2. te puːpuː:
te puːpuː:
the shell
the shell

3. i toː ?eː ai
i toː ?eː ai
PFV pull separate AIPART
that drew out
4. te mata one
te mata one
the face sand
the sand face

5. o atea
o atea
INALIEN.WEAK Atea
of Atea

6. i-a ta?urua po?i-po?i PAUSE
i-a NP.celestial.body
to-PROP Venus morning
to Venus of the morning.

7. e pu:pu: tohe roa
(e) pu:pu: MODIF
EXIST shell turritella.shell long
A long turritella shell was

8. te pu:pu:
te pu:pu:
the shell
the shell

9. i to: ?e: ai
i to: ?e: ai
PFV pull separate AIPART
that drew out

10. te mata one
te mata one
the face sand
the sand face

11. o atea
o atea
INALIEN.WEAK Atea
of Atea

12. i-a ta?urua ahi-ahi PAUSE
i-a NP.celestial.body
to-PROP Venus evening
to Venus of the evening.
13. e pu:pu: tara–tara
   (e) pu:pu: MODIF
   EXIST shell prickly
   A prickly shell was

14. te pu:pu:
    te pu:pu:
    the shell
    the shell

15. i to: ?e: ai
    i to: ?e: ai
    PFV pull separate AIPART
    that drew out

16. te mata one
    te mata one
    the face sand
    the sand face

17. o atea
    o atea
    INALIEN.WEAK  Atea
    of Atea

18. i-a pipiri-ma: PAUSE
    i-a NP.celestial.body
    to-PROP two.stars.in.Scorpio
    to the two Pipiri-ma stars in Scorpio.

19. e pu:pu: fa?a-hiti
    (e) pu:pu: MODIF
    EXIST shell CAUS-edge
    A sharp edged shell was

20. te pu:pu:
    te pu:pu:
    the shell
    the shell
21. i to: ?e: ai
   PFV pull separate AIPART
that drew out

22. te mata one
te mata one
the face sand
the sand face

23. o atea
o atea
INALIEN.WEAK Atea
of Atea

24. i-a taʔero PAUSE
i-a NP.celestial.body
to-PROP Mercury
to Mercury.

In (6.53) below, we find an example of canonical parallelism containing three variable elements. The syntactic frame pattern is \( e \) \( VP.\text{movement} \) colon-boundary \( te \) \( N.\text{celestial.body} \) colon-boundary \( i \) \( tahiti nei \) colon-boundary \( e \) \( maŋri atu \) colon-boundary \( i \) \( N.\text{location} \) \( na \) colon-boundary, and repeats twice.

The paired elements in the verb slots are fairly synonymous. Those of the \( N.\text{celestial.body} \) slot are semantically contrastive. Those of the \( N.\text{location} \) slot are, within the context of the surrounding text, antonymous, as the rhetoric here attempts to compare the greatness of Tahiti with, in the poet’s opinion, the miserliness of Ra’iatea.

(6.53) Extract from “Heralding of the fish” (Henry 1928:433-436)

1. e hiti mai
   e VP.\text{movement}
   IPFV cross hither
   It crosses up above the horizon

2. te mahana
   te N.\text{celestial.body}
   the sun
   the sun
3. i tahiti nei PAUSE
   i tahiti nei
   in Tahiti here
   here in Tahiti,

4. e ma?iri atu
   e ma?iri atu
   IPFV fall thither
   it sets

5. i ra?iatea na: PAUSE
   i N.location na:
   at Ra?iatea PROX.2
   where you are at in Ra?iatea.

6. e pa?i?uma
   e VP.movement
   IPFV climb
   It climbs

7. te ?ava?e
   te N.celestial.body
   the moon
   the moon

8. i tahiti nei PAUSE
   i tahiti nei
   in Tahiti here
   here in Tahiti,

9. e ma?iri atu
   e ma?iri atu
   IPFV fall thither
   it sets

10. i raro na: PAUSE
    i N.location na:
    at below PROX.2
    down where you are.

In (6.54) below, we find another example of canonical parallelism containing three variable elements. The syntactic frame pattern is *e V colon-
boundary te N.body colon-boundary o taua NP.human ra colon-boundary, and repeats twice.

(6.54) Extract from “Rauti war song from Ra’iatea and Taha’a” (Henry 1928:308-309)

1. e tahe
e V
IPFV flow
It will flow

2. te hou
te N.body
the sweat
the sweat

3. o taua tama?iti ari?i ra PAUSE
o taua NP.human ra
INALIEN.WEAK those son king there
of those princes.

4. e pu?u
e V
IPFV bump
Bumped will be

5. te upo?o
te N.body
the head
the heads

6. o taua fare ?aito ra PAUSE
o taua NP.human ra
INALIEN.WEAK those house warrior there
of those housed warriors.

In (6.55) below, we encounter a syntactic frame with five variable elements. Its pattern is te/e tuna MODIF MODIF colon-boundary e VP.movement colon-boundary i te N.body.part colon-boundary o NPROP.deity colon-boundary, and repeats four times. Of interest is the association of the word aro (“presence”, or “face”) with Tane, and its antonym tua (“back”) with Atea.
The material in lines 14 through 16 does not adhere to the syntactic pattern. The insertion of parenthetical material seems to have been common in poetic syntactic frames. It is not known whether or not the audience considered such intrusions out of place.

(6.55) Extract from “Disorder dispelled” (Henry 1928:415-420)

1. e tuna tariʔa roroa
   e tuna MODIF MODIF
   EXIST eel ear long
   It is the long-eared eel

2. e tu:hura
   e VP.movement
   IPFV advance
   that advances

3. i te aro
   i te N.body.part
   to the presence
   to the presence

4. o tane PAUSE
   o NPROP.deity
   INALIEN.WEAK Tane
   of Tane.

5. e tuna hihi roroa
   e tuna MODIF MODIF
   EXIST eel whisker long
   It is the long-whiskered eel

6. e tu:hura
   e VP.movement
   IPFV advance
   that advances

7. i te tua
   i te N.body.part
   to the back
   to the back
8. o atea PAUSE
   o NPROP.deity
   INALIEN.WEAK Atea
   of Atea.

9. e tuna hihi po:poto
   e tuna MODIF MODIF
   EXIST eel whisker short
   It is the short-whiskered eel

10. e haere noa
    e VP.movement
    IPFV go continually
    that continually goes

11. i te aro
    i te N.body.part
    to the presence
    to the presence

12. o tane PAUSE
    o NPROP.deity
    INALIEN.WEAK Tane
    of Tane.

13. te tuna nui ?o:papata PAUSE
    te tuna MODIF MODIF
    the eel big spotted
    The big spotted eel,

14. te tuna
    [parenthetical]
    the eel
    the eel

15. e riʔo
    [parenthetical]
    EXIST reddish.high.valley.eel
    that is the reddish high valley eel

16. i te pu: ra PAUSE
    [parenthetical]
    in the pool there
    of the pools,
17. e tu:hura
e VP.movement
 IPFV advance
 it advances

18. i te tua
 i te N.body.part
 to the back
 to the back

19. o atea PAUSE
 o NPROP.deity
 INALIEN.WEAK Atea
 of Atea.

6.3.1.3 Syntactic frames containing variable elements that repeat

In some syntactic frames, a variable element may repeat. This is encountered in (6.56) below, where a variable noun phrase is found to repeat twice per each of the syntactic frame’s thirteen repetitions.\textsuperscript{73} The pattern is \textit{te tupu colon-boundary o te NP\_physical\_world\textsubscript{n} colon-boundary rara colon-boundary te NP\_physical\_world\textsubscript{n} colon-boundary}.

(6.56) Extract from “Chaotic period” (Henry 1928:340-344)

1. te tupu
te tupu
 the grow
 The growth

2. o te pō: PAUSE
 o te NP\_physical\_world\textsubscript{1}
 INALIEN.WEAK the night
 of the night,

3. rara
 rara
 increase
 increased was

\textsuperscript{73} Only the initial six repetitions of this syntactic frame have been included in the example.
4. te po: PAUSE
te te NP.physical.world$_1$
The night
the night.

5. te tupu

te tupu
the grow
The growth

6. o te mou?a PAUSE
o te NP.physical.world$_2$
INALIEN.WEAK the mountain
of the mountains,

7. rara
rara
increase
increased were

8. te mou?a PAUSE

te NP.physical.world$_2$
the mountain
the mountains.

9. te tupu

te tupu
the grow
The growth

10. o te vai PAUSE
o te NP.physical.world$_3$
INALIEN.WEAK the fresh.water
of fresh water,

11. rara
rara
increase
increased was

12. te vai PAUSE

te NP.physical.world$_3$
the fresh.water
fresh water.

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13. te tupu
   te tupu
   the grow
   The growth

14. o te moana PAUSE
   o te NP.physical.world4
   INALIEN.WEAK the ocean,
   of the ocean,

15. rara
    rara
    increase
    increased was

16. te moana PAUSE
    te NP.physical.world4
    the ocean
    the ocean.

17. te tupu
    te tupu
    the grow
    The growth

18. o te to?a PAUSE
    o te NP.physical.world5
    INALIEN.WEAK the rock
    of the rocks,

19. rara
    rara
    increase
    increased were

20. te to?a PAUSE
    te NP.physical.world5
    the rock
    the rocks.

21. te tupu
    te tupu
    the grow
    The growth
22. o te raʔi PAUSE
   o te NP.physical.world₆
  INALIEN.WEAK the sky
  of the sky,

23. rara rara
   increase increased was

24. te raʔi PAUSE
   te NP.physical.world₆
  the sky
  the sky.

In (6.57) below, we find a syntactic frame containing two variable elements, the first of which is found to repeat within the frame. The syntactic frame pattern is e N.religiousᵣ iti colon-boundary te-i i-a te-tumu colon-boundary e N.religiousᵣ MODIF.large colon-boundary te-i i-a tane colon-boundary, and repeats four times.⁷⁴

(6.57) Extract from “Tumu or Ta’aroa exalts Tane” (Henry 1928:398-399)

1. e marae iti
   e N.religious₁ iti
  EXIST platform.temple small
  A small platform temple

2. te-i i-a te-tumu PAUSE
   te-i i-a te-tumu
  the-at to-PROP Te-Tumu
  has Te Tumu.

3. e marae nui
   e N.religious₁ MODIF.large
  EXIST platform.temple large
  A large platform temple

⁷⁴ The comparisons between Te Tumu and Tane continue in the text, but their pattern becomes much looser than in the selection included in this example.
4. te-i i-a tane PAUSE
te-i i-a tane
the-at to-PROP Tane
has Tane.

5. e tahuʔa iti
e N.religious₂ iti
EXIST priest few
Few priests

6. te-i i-a te-tumu PAUSE
te-i i-a te-tumu
the-at to-PROP Te-Tumu
has Te Tumu.

7. e tahuʔa rahì
e N.religious₂ MODIF.large
EXIST priest many
Many priests

8. te-i i-a tane PAUSE
te-i i-a tane
the-at to-PROP Tane
has Tane.

9. e pahu iti
e N.religious₃ iti
EXIST drum small
A small drum

10. te-i i-a te-tumu PAUSE
te-i i-a te-tumu
the-at to-PROP Te-Tumu
has Te Tumu.

11. e pahu nui
e N.religious₃ MODIF.large
EXIST drum large
A large drum

12. te-i i-a tane PAUSE
te-i i-a tane
the-at to-PROP Tane
has Tane.
13. e fatarau iti
   e N.religious4 iti
   EXIST altar small
   A small altar

14. te-i te marae
    [parenthetical]
    the-at the platform.temple
    at the temple

15. te-i i-a te-tumu PAUSE
    te-i i-a te-tumu
    the-at to-PROP Te-Tumu
    has Te Tumu.

16. e fatarau nui
    e N.religious4 MODIF.large
    EXIST altar large
    A large altar

17. te-i i-a tane PAUSE
    te-i i-a tane
    the-at to-PROP Tane
    has Tane.

In (6.58) below, we encounter a syntactic frame where the variable element repeats three times within the frame. It concerns parallel entreaties made to godly addressees, which are separated by 14 lines that lie outside of the pattern. The pattern is (ʔo) taːʔu N.deityₙ colon-boundary e ʔate eː colon-boundary ʔo N.deityₙ colon-boundary ʔo N.deityₙ taʔata colon-boundary (e) haːmai colon-boundary e tinai colon-boundary, and repeats twice.

(6.58) Extract from “Cutting the sinews of the fish” (Henry 1928:439-443)

1. ʔo taːʔu atua
   ʔo taːʔu N.deity₁
   PROP ALIEN.NEUT-1.SG god
   Oh gods
2. e ʔite e: PAUSE
e ʔite e:
IPFV know oh
that I know,

3. ?o atua
?o N.deity$_1$
PROP god

gods

4. i te raʔi PAUSE
i te raʔi
in the sky
in the sky,

5. ?o atua taʔata PAUSE
?o N.deity$_1$ taʔata
PROP god man
demigods,

6. e ha: mai
e ha: mai
IPFV go hither
come

7. e tinai
e tinai
IPFV extinguish
and extinguish

[14 lines that do not match the syntactic pattern]

8. ta:-ʔu marama
ta:-ʔu N.deity$_2$
ALIEN.NEUT-1.SG moon
Oh moon

9. e ʔite e: PAUSE
e ʔite e:
IPFV know oh
that I know,
10. ?o marama
   ?o _N.deity_2
   PROP moon
   moon

11. i te ra?i PAUSE
   i te ra?i
   in the sky
   in the sky,

12. ?o marama ta?ata PAUSE
    ?o _N.deity_2 ta?ata
    PROP moon man
    human moon,

13. ha: mai
    ha: mai
    go hither
    come

14. e tinai PAUSE
    e tinai
    IPFV extinguish
    and extinguish.

Having provided examples of the various types of syntactic frame patterns, the discussion shall now proceed to their arrangement within a passage.

6.3.2 Arrangement of syntactic frames

Different syntactic frame patterns are often found adjacent to one another. Occasionally, when this occurs, they share some of their features.

In (6.59) below, we note two syntactic frame patterns which are dissimilar except for their final lines. The first syntactic frame occurs in lines 1 through 6. Its pattern is _toto colon-boundary i te tahua colon-boundary i-a mata tahua MODIF:length colon-boundary_, and repeats twice. The second is found in lines 7, 8, 9, and 11. Its pattern is _tahi pae colon-boundary i-a rupe a_
LOC colon-boundary, and also repeats twice. Common to both frames is that the last line of each begins with \textit{i-a} (“to-PROP”) followed by a three-word noun phrase. Of additional interest is that the variable elements occupying the modifier and locative slots are antonymous.

(6.59) Extract from “Drilling” (Henry 1928:300)

1. totoʔo
totoʔo
march
March

2. i te tahua PAUSE
i te tahua
to the meeting grounds
to the meeting grounds,

3. i-a mata tahua roa PAUSE
i-a mata tahua MODIF.length
to-PROP beginning meeting grounds long
to the long beginning meeting grounds.

4. totoʔo
totoʔo
march
March

5. i te tahua PAUSE
i te tahua
to the meeting grounds
to the meeting grounds,

6. i-a mata tahua poto PAUSE
i-a mata tahua MODIF.length
to-PROP beginning meeting grounds short
to the short beginning meeting grounds.

7. tahi pae PAUSE
tahi pae
one side
One side
8. i-a rupe a nuʔu PAUSE
   to-PROP pigeon. Ducula.aurora ALIEN.WEAK inland
   is for the inland pigeon,

9. tahi pae PAUSE
   one side
   the other side,

10. i tai PAUSE [parenthetical]
    to seaward
    seaward,

11. i-a rupe a tai PAUSE
    to-PROP pigeon. Ducula.aurora ALIEN.WEAK seaward
    is for the seaward pigeon.

We encounter a sequence of four distinct syntactic frame patterns in the passage in (6.60) below. The pattern in lines 1 through 15 is te N/Vn colon-boundary ʔa N/Vn colon-boundary te fenua colon-boundary, which repeats five times. The variable element represented by N/Vn acts as a noun in the first line of the frame, and as a verb in the subsequent line. It should be noted that the majority of Tahitian verbs can be cast into a nominal role, and vice versa (see Lazard and Peltzer 1991:3-5).

The syntactic frame pattern in lines 16 through 23 is ʔaore colon-boundary a:LOC colon-boundary, and repeats four times. The pattern in lines 24 through 29 is fanaʔe colon-boundary te tau colon-boundary o te N.time.of.day colon-boundary, and repeats twice. Finally, the syntactic frame pattern in lines 30 and 31 is huru MODIF.tempo colon-boundary, and also repeats twice.

These four syntactic frame patterns do not appear to have very much in common. Different part-of-speech categories represent their variable elements. Whereas the second and fourth syntactic frames are simple, the first and third
are somewhat more complex. The first, second, and third syntactic frames repeat a differing number of times.

There is a degree of semantic parallelism, however, between the first and second syntactic frames. The variable element ʔore (“nothing”) of lines 13 and 14 at the end of the first list segues into the word ʔaore (“PFV.NEG”) of lines 16, 18, 20, and 22 of the second.

It is of interest that the variable elements occupying the locative slots in lines 17 and 19 are antonymous, as are those in lines 21 and 23. The variable elements of the \textit{N.time.of.day} slots in lines 26 and 29 are similarly antonymous. However, the paired elements of the \textit{MODIF.tempo} slots in lines 30 and 31 seem to be fairly synonymous.

(6.60) Extract from “Chaotic period” (Henry 1928:340-344)

1. \texttt{te piri} \texttt{PAUSE} \texttt{te N/V}_1 \\
\texttt{the almost.touching} \\
\texttt{Closed in.}

2. \texttt{ʔa piri} \\
\texttt{ʔa N/V}_1 \\
\texttt{INCEPT almost.touching} \\
\texttt{Closed in was}

3. \texttt{te fenua} \texttt{PAUSE} \texttt{te fenua} \\
\texttt{the earth} \\
\texttt{the earth.}

4. \texttt{te mau} \texttt{PAUSE} \texttt{te N/V}_2 \\
\texttt{the held.fast} \\
\texttt{Held fast.}

5. \texttt{ʔa mau} \\
\texttt{ʔa N/V}_2 \\
\texttt{INCEPT held.fast} \\
\texttt{Held fast was}
6. te fenua PAUSE
te fenua
the earth
the earth.

7. te reva PAUSE
te N/V3
the atmosphere
The atmosphere.

8. ?a reva
?a N/V3
INCTP atmosphere
Atmosphere was

9. te fenua PAUSE
tefenua
the earth
the earth.

10. te ?imi PAUSE
te N/V4
the seek
Seeking.

11. ?a ?imi
?a N/V4
INCTP seek
There was seeking

12. te fenua PAUSE
tefenua
the land
for land.

13. te ?ore PAUSE
te N/V5
the nothing
Nothing..

14. ?a ?ore
?a N/V5
INCTP nothing
There was no
15. te fenua PAUSE
te fenua
the land
land.

16. ?aore
   ?aore
   PFV.NEG
   No

17. a:  uta PAUSE
   a:  LOC
   still inland
   inland was there yet.

18. ?aore
   ?aore
   PFV.NEG
   No

19. a:  tai PAUSE
   a:  LOC
   still seaward
   seaward was there yet.

20. ?aore
   ?aore
   PFV.NEG
   No

21. a:  ni?a PAUSE
   a:  LOC
   still above
   above was there yet.

22. ?aore
   ?aore
   PFV.NEG
   No
23. a: raro  PAUSE  
a:  LOC  
still  below  
below was there yet.

24. faːnaʔe  
faːnaʔe  
diminish  
Diminished

25. te  tau  
te  tau  
the  time.period  
the length

26. o  te  po:  PAUSE  
o  te  N.time.of.day  
INALIEN.WEAK  the  night  
of night.

27. faːnaʔe  
faːnaʔe  
diminish  
Diminished

28. te  tau  
te  tau  
the  time.period  
the length

29. o  te  ao:  PAUSE  
o  te  N.time.of.day  
INALIEN.WEAK  the  day  
of day.

30. huru  mau~mau  PAUSE  
huru  MODIF.tempo  
condition  sputtering  
Things sputtered along.

31. huru  maḥaḥa  PAUSE  
huru  MODIF.tempo  
condition  lagging  
Things were lagging.
There are two adjoining syntactic frame patterns in (6.61) below. The first, in lines 1 through 6, is \textit{faʔa-taʔa colon-boundary i-a rumia colon-boundary i te N.body.part colon-boundary}, and repeats twice. As in (6.55) above, we note that in lines 3 and 6 the \textit{N.body.part} slots have been filled with the antonymous pairing \textit{tua} (“back”) and \textit{aro} (“face”).

The first syntactic frame’s initial word, \textit{fa’a-ta’a} (“to separate”), is seen again in line 7, probably serving as a transition to the syntactic frame pattern that begins in line 8. This second pattern is \textit{i te pou MODIF.direction/movement colon-boundary}, and repeats five times.

We observe that the body part variable elements of the first syntactic frame pattern have been used to indicate a direction, as too have the three initial modifiers of the second pattern, which are locatives.

(6.61) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. faʔa-taʔa
   faʔa-taʔa
   CAUSE-separate
   Separate

2. i-a rumia
   i-a rumia
   DIROBJ-PROP Rumia
   Rumia

3. i te tua PAUSE
   i te N.body.part
   at the \textit{N.body.part}
in back.

4. faʔa-taʔa
   faʔa-taʔa
   CAUS-separate
   Separate

5. i-a rumia
   i-a rumia
   DIROBJ-PROP Rumia
   Rumia
6. i te aro PAUSE i te N.body.part at the face in front.

7. faʔa-taʔa [between syntactic frames] CAUS-separate Separate

8. i te pou mua PAUSE i te pou MODIF.direction/movement DIROBJ the pillar front, the front pillar,

9. i te pou roto PAUSE i te pou MODIF.direction/movement DIROBJ the pillar inside, the inner pillar,

10. i te pou muri PAUSE i te pou MODIF.direction/movement DIROBJ the pillar rear, the rear pillar,

11. i te pou tu: PAUSE i te pou MODIF.direction/movement DIROBJ the pillar stand, the pillar to stand by,

12. i te pou haḥaere PAUSE i te pou MODIF.direction/movement DIROBJ the pillar going, the pillar to leave by,

In the passage in (6.62) below, we find three adjoining syntactic frame patterns that all share an initial i-a (“to-PROP”). The pattern in lines 1 and 2 is i-a te puna tau N.body.part colon-boundary, that of lines 3 and 4 is i-a te ʔare i LOC.point.of.the.compass colon-boundary, and that of lines 5 and 6 is i-a MODIF poʔa colon-boundary. Each syntactic frame repeats twice.
(6.62) Extract from “Ru and Hina explore the earth” (Henry 1928:458)

1. i-a te puna tau tua PAUSE
   i-a te puna tau N.body.part at-PROP the fishing.spot reef.block back
   at the rear of the reef fishing spot,

2. i-a te puna tau aro PAUSE
   i-a te puna tau N.body.part at-PROP the fishing.spot reef.block face
   at the front of the reef fishing spot,

3. i-a te ?are i hiti PAUSE
   i-a te ?are i LOC.point.of.the.compass at-PROP the wave at east
   at the eastern waves,

4. i-a te ?are i to?a PAUSE
   i-a te ?are i LOC.point.of.the.compass at-PROP the wave at west
   at the western waves,

5. i-a tu: po?a PAUSE
   i-a MODIF po?a at-PROP even recess
   at the stable recess,

6. i-a ahu po?a PAUSE
   i-a MODIF po?a at-PROP burning recess
   at the burning recess,

6.3.2.1 Inverted arrangement of syntactic frames

In (6.63) below, we encounter a somewhat more complicated example of syntactic frame arrangement. The syntactic frame pattern in lines 1 through 4 is e ata e: colon-boundary e ata MODIF.motion colon-boundary, which repeats twice. This is followed in lines 5 through 14 by ?eiaha colon-boundary te ata MODIF (MODIF) colon-boundary, which repeats five times. Following this in lines 15 through 18 is the syntactic frame pattern o:atu (ra)
colon-boundary i te ata MODIF (MODIF) colon-boundary, which repeats twice. Next, in lines 19 through 22 we find the pattern te ata MODIF(.colour) colon-boundary, which repeats four times. Finally, the pattern from lines 15 through 18 recurs in lines 23 through 26, thus embedding the syntactic frame pattern of lines 19 through 22.

A single syntactic frame pattern embedded within another is, at a simple level, an inverted structure. However, syntactic frame inversion, either of the elements within a syntactic frame or of their repeated patterns, is much less common than the use of inverted structures in meter or sound parallelism.

(6.63) Extract from “Tane, the man-god” (Henry 1928:364-371)

1. e ata e: PAUSE
e ata e:
EXIST cloud oh
Oh the cloud,

2. e ata tiʔi-tiʔi PAUSE
   e ata MODIF.motion
   EXIST cloud continually.fetching
   it is a cloud that is spreading out.

3. e ata e: PAUSE
e ata e:
EXIST cloud oh
Oh the cloud,

4. e ata māreva PAUSE
   e ata MODIF.motion
   EXIST cloud shifting
   it is a cloud that shifts around.

5. ?eiaha
   ?eiaha
   SBJV.NEG
   Not

6. te ata hiʔa PAUSE
   te ata MODIF
   the cloud fall.over
   the cloud that is falling over.
7. ?eiaha
   ?eiaha
   SBJV.NEG
   Not

8. te ata tu: noa PAUSE
te ata MODIF MODIF
   the cloud stand continually
   the cloud that is always standing.

9. ?eiaha
   ?eiaha
   SBJV.NEG
   Not

10. te ata ta?a-ta?a PAUSE
    te ata MODIF
    the cloud loosely attached
    the wispy cloud.

11. ?eiaha
    ?eiaha
    SBJV.NEG
    Not

12. te ata fare PAUSE
    te ata MODIF
    the cloud house
    the house-like cloud.

13. ?eiaha
    ?eiaha
    SBJV.NEG
    Not

14. te ata pu:?a?a PAUSE
    te ata MODIF
    the cloud inflated
    the inflated cloud.

15. o: atu ra
    o: atu ra
    enter thither there
    Go beyond

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16. i te ata peʔe noa PAUSE
   i te ata MODIF MODIF
to the cloud rise.up.in.air continually
the drifting cloud.

17. o: atu
   o: atu
   enter thither
   Go beyond

18. i te ata ?oehau PAUSE
   i te ata MODIF
to the cloud disturb
the broken up cloud,

19. te ata ?ura PAUSE
   te ata MODIF.colour
   the cloud red
   the red cloud,

20. te ata reʔa-reʔa PAUSE
   te ata MODIF. colour
   the cloud yellow
   the yellow cloud,

21. te ata tea~tea PAUSE
   te ata MODIF.colour
   the cloud white
   the white cloud,

22. te ata taupe PAUSE
   te ata MODIF
   the cloud droop
   the drooping cloud.

23. o: atu
   o: atu
   enter thither
   Go beyond

24. i te ata vero~vero PAUSE
   i te ata MODIF
to the cloud stormy
the stormy cloud.
25. o: atu
   o: atu
   enter thither
   Go beyond

26. i te ata haʔa-viri-viri PAUSE
    i te at MODIF
    to the cloud CAUS-roll.up
    the furling cloud.

A short example of inverted arrangement of the variable elements within a syntactic frame is found in (6.64) below. The syntactic frame pattern is e
tamaʔi aʔe colon-boundary i te N.time.of.day_n colon-boundary e faite aʔe colon-boundary i te N.time.of.day_n colon-boundary, and repeats twice. In the second repetition, N.time.of.day_1 is the original N.time.of.day_2, and N.time.of.day_2 the original N.time.of.day_1.

(6.64) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

1. e tamaʔi aʔe
e tamaʔi aʔe
IPFV fight then
There will be fighting

2. i te poʔi-poʔi PAUSE
   i te N.time.of.day_1
   in the morning
   in the morning.

3. e faite aʔe
e faite aʔe
IPFV reconcile then
there will be reconciliation

4. i te ahi~ahi PAUSE
   i te N.time.of.day_2
   in the evening
   in the evening.
5. e tamaʔi aʔe
e tamaʔi aʔe
IPFV fight then
There will be fighting

6. i te ahi~ahi PAUSE
i te N.time.of.day₂
in the evening
in the evening,

7. e faite aʔe
e faite aʔe
IPFV reconcile then
there will be reconciliation

8. i te poʔi~poʔi PAUSE
i te N.time.of.day₁
in the morning
in the morning.

6.3.3 Semantic categories

Most variable elements of the syntactic frames thus far encountered have been semantically related. To indicate this, a label representing the common category has been appended to the part-of-speech information (e.g. N.body.part).

Although some semantic categories appear in syntactic frames more frequently than others, there do not seem to be any restrictions as to what the topic may be. For example, in (6.45) above, fourteen variable noun phrases represent construction materials. In (6.52), variable elements represent celestial bodies. In (6.56), we find thirteen noun phrases that relate to the physical world. In (6.57), the topic is religion.

In (6.65) below, the semantic category is constituent parts of a tree. The syntactic frame pattern is e pehaː colon-boundary te N.tree.part colon-boundary, and repeats six times.
(6.65) Extract from “The districts of Tahiti Nui” (Henry 1928:70-71)

1. e peːha:
   e peːha:
   IPFV duplicate
   that duplicates

2. te tumu PAUSE
   te N.tree.part
   the trunk
   its trunk,

3. e peːha:
   e peːha:
   IPFV duplicate
   that duplicates

4. te ?aːmaʔa PAUSE
   te N.tree.part
   the branch
   its branches,

5. e peːha:
   e peːha:
   IPFV duplicate
   that duplicates

6. te ?oːhiʔu PAUSE
   te N.tree.part
   the shoot
   its shoots,

7. e peːha:
   e peːha:
   IPFV duplicate
   that duplicates

8. te rau PAUSE
   te N.tree.part
   the leaf
   its leaves,
9. e pe:ha:
e pe:ha:
 IPFV duplicate
 that duplicates

10. te ?iri PAUSE
te N.tree.part
 the bark
 its bark,

11. e pe:ha:
e pe:ha:
 IPFV duplicate
 that duplicates

12. te maea PAUSE
te N.tree.part
 the sapwood
 its sapwood?

A semantic category may represent any taxonomic level, from the specific to the abstract. Regarding fluids, for example, the fairly narrow category in (6.66) below is attributes of rivers. In (6.67), we encounter the much more abstract category of matter exhibiting fluid dynamics.

The syntactic frame pattern in (6.66) is e NP.river.attribute colon-boundary o te vai e: colon-boundary, and repeats six times.

(6.66) Extract from “Ru and Hina explore the earth” (Henry 1928:458)

1. e  ~ honu~honu
   e NP.river.attribute
  EXIST depths
   Oh the depths

2. o te vai e: PAUSE
   o te vai e:
 INALIEN.WEAK the river oh
 of the rivers,
3. e toʔe-toʔe
e NP.river.attribute
EXIST cold
oh the coldness

4. o te vai e: PAUSE
o te vai e:
INALIEN.WEAK the river oh
of the rivers,

5. e ʔora riʔi
e NP.river.attribute
EXIST shrimp small
oh the small shrimp

6. o te vai e: PAUSE
o te vai e:
INALIEN.WEAK the river oh
of the rivers,

7. e ʔahaʔa
e NP.river.attribute
EXIST ʔaha’a.shrimp
oh the ʔaha’a shrimp

8. o te vai e: PAUSE
o te vai e:
INALIEN.WEAK the river oh
of the rivers,

9. e ʔonana
e NP.river.attribute
EXIST ‘onana.high.valley.shrimp
oh the ‘onana high valley shrimp

10. o te vai e: PAUSE
o te vai e:
INALIEN.WEAK the river oh
of the rivers,

11. e ipua
e NP.river.attribute
EXIST fullness
oh fullness
12. o te vai e: PAUSE
   o te vai e:
   INALIEN.WEAK the river oh
   of the rivers.

   The simple syntactic frame in (6.67) below is *te*

   **N.exhibiting.fluid.dynamics** *colon-boundary*, and repeats three times.

(6.67) Extract from “Creation of the world” (Henry 1928:336-338)

1. te-i roto
   [prior to syntactic frame]
   the-at inside
   Within

2. i-a taʔaroa
   [prior to syntactic frame]
   to-PROP Ta’aroa
   Ta’aroa were

3. te mau peu atoʔa PAUSE
   [prior to syntactic frame]
   the PL thing all
   all things:

4. te vero PAUSE
   te **N.exhibiting.fluid.dynamics**
   the storm
   storms,

5. te ua PAUSE
   te **N.exhibiting.fluid.dynamics**
   the rain
   rain,

6. te tai PAUSE
   te **N.exhibiting.fluid.dynamics**
   the sea
   the sea,

   In the corpus, the most frequently occurring semantic categories concern
   names of deities, physical world objects, parts of the body, words relating to
   direction, and numbers.
6.3.3.1 Parallelism of names of deities

Syntactic frames that serve to list names of deities are found in most genres. As has been noted, early Tahitian oral tradition was strongly connected to aspects of religious observance, often performed by the *tahu‘a* (‘priest’) class. Three examples of deity name lists are provided below.

The simple syntactic frame pattern for the list of deities in (6.68) below is *no*: *NPROP.deity* colon-boundary, which repeats nine times.

(6.68) Extract from “The Marie account of creation” (Emory 1938:53-58)

1. no: taʔaroa PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG Ta‘aroa,

2. no: ?oro PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG ‘Oro,

3. no: moe PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG Moe,

4. no: ruanuʔu PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG Ruanu‘u,

5. no: tu: PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG Tu,

6. no: toʔa-hiti PAUSE
   no: *NPROP.deity*
   INALIEN.STRONG To‘a-hiti,

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The syntactic frame pattern in (6.69) below is *e raʔo (tuʔu-a) colon-boundary na:* NPROP.deity colon-boundary, and repeats five times.

(6.69) Extract from “Canoe builders’ chant when setting rollers” (Henry 1928:180-181)

1. e raʔo tuʔu-a
   e raʔo tuʔu-a
   EXIST roller put-PASS
   There is a roller placed
2. na: roʔo-te-roʔo~roʔo PAUSE
   na: NPROP.deity
   ALIEN.STRONG Ro’o-te-ro’oro’o
   for Ro’o-te-ro’oro’o.
3. e raʔo
   e raʔo
   EXIST roller
   There is a roller
4. na: taʔaroa-metua PAUSE
   na: NPROP.deity
   ALIEN.STRONG Ta’aroa-metua
   for Ta’aroa-metua.
5. e raʔo
   e raʔo
   EXIST roller
   There is a roller

6. na: te-fatu-nuʔu PAUSE
   na: NPROP.deity
   ALIEN.STRONG Te-Fatu-nuꞌu
   for Te-Fatu-nuꞌu.

7. e raʔo
   e raʔo
   EXIST roller
   There is a roller

8. na: taʔere-ma-opo-o-po PAUSE
   na: NPROP.deity
   ALIEN.STRONG Ta'ere-ma-o-poopo
   for Ta’ere-ma-o-poo’opo.

9. e raʔo
   e raʔo
   EXIST roller
   There is a roller

10. na: toa-hiti-mata-nui PAUSE
    na: NPROP.deity
    ALIEN.STRONG Toa-hiti-mata-nui
    for Toa-hiti-mata-nui.

   The syntactic frame pattern in (6.70) below is ḫa tae colon-boundary

**NPROP.deity colon-boundary**, and repeats five times.

(6.70) Extract from “Priest’s address at the *tu’ura’a va’a uta hara*” (Henry 1928:321-322)

1. ḫa tae
   ḫa tae
   INCEPT arrive
   There arrives
2. tane PAUSE
   NPROP.deity
   Tane
   Tane.

3. ?a tae
   ?a tae
   INCEPT arrive
   There arrives

4. ta'i-te-ara-ara PAUSE
   NPROP.deity
   Ta'i-te-araara
   Ta'i-te-araara.

5. ?a tae
   ?a tae
   INCEPT arrive
   There arrives

6. te-fatu PAUSE
   NPROP.deity
   Te-fatu
   Te-fatu.

7. ?a tae
   ?a tae
   INCEPT arrive
   There arrives

8. Rua-nu'u PAUSE
   NPROP.deity
   Rua-nu'u
   Rua-nu'u.

9. ?a tae
   ?a tae
   INCEPT arrive
   There arrives

10. ta'aroa-nui-tahi-tumu PAUSE
    NPROP.deity
    Ta'aroa-nui-tahi-tumu
    Ta'aroa-nui-tahi-tumu.
6.3.3.2 Parallelism of physical world objects

Unsurprisingly, most syntactic frames found to list classes of physical world objects occur in myths relating to the creation. Three examples are provided below.

The syntactic frame pattern in (6.71) is ?aore colon-boundary

\textit{N.physical.world colon-boundary}, which repeats six times.

(6.71) Extract from “Creation of the world” (Henry 1928:336-338)

1. ?aore
   ?aore
   PFV.NEG
   There was no

2. raʔi PAUSE
   \textit{N.physical.world}
   sky
   sky.

3. ?aore
   ?aore
   PFV.NEG
   There was no

4. fenua PAUSE
   \textit{N.physical.world}
   land
   land.

5. ?aore
   ?aore
   PFV.NEG
   There was no

6. tai PAUSE
   \textit{N.physical.world}
   sea
   sea.
7. ?aore
   ?aore
   PFV.NEG
   There was no

8. marama          PAUSE
   N.physical.world
   moon
   moon.

9. ?aore
   ?aore
   PFV.NEG
   There was no

10. ra:          PAUSE
    N.physical.world
    sun
    sun.

11. ?aore
    ?aore
    PFV.NEG
    There were no

12. fetu:          PAUSE
    N.physical.world
    star
    stars.

A more complex syntactic frame pattern in (6.72) below is *e te*

*N.physical.world*, *e: colon-boundary* ʔà ne ʔè mai colon-boundary *e ʔore au*

*colon-boundary e ne ʔè atu colon-boundary e N.physical.world*, *colon-boundary no: te fenua colon-boundary*, which repeats twice.

(6.72) Extract from “The Mare account of creation” (Emory 1938:53-58)

1. ʔua parau iho-ra
   [prior to syntactic frame]
   PFV speak then-there
   Then said
2. ta?aroa PAUSE
   [prior to syntactic frame]
   Ta?aroa
   Ta?aroa,

3. e te tumu e: PAUSE
   e te N.physical.world e: VOC the foundation oh
   “Oh foundation,

4. ?a ne?e mai PAUSE
   ?a ne?e mai IMP crawl hither
crawl here.”

5. ?ua parau mai ra
   [parenthetical]
   PFV speak hither there
   Then said

6. te tumu PAUSE
   [parenthetical]
   the foundation
   the foundation,

7. e ?ore au
   e ?ore au IPFV NEG 1.SG
   “I will not

8. e ne?e atu PAUSE
   IPFV crawl thither
crawl over there,

9. e tumu vau
   e N.physical.world vau EXIST foundation 1.SG
   I am the foundation

10. no: te fenua PAUSE
    no: te fenua INALIEN.STRONG the land
    of the land.”
11. e te papa e: PAUSE
    e te N.physical.world$_2$ e:
    VOC the flat.rock oh
    “Oh flat rock,

12. ?a neʔe mai PAUSE
    ?a neʔe mai
    IMP crawl hither
    crawl here.”

13. e ?ore au
    e ?ore au
    IPFV NEG 1.SG
    “I will not

14. e neʔe atu PAUSE
    IPFV crawl thither
    crawl over there,

15. e papa vau
    e N.physical.world$_2$ vau
    EXIST flat.rock 1.SG
    I am the flat rock

16. no: te fenua PAUSE
    no: te fenua
    INALIEN.STRONG the land
    of the land.”

Two nearly identical syntactic frame patterns are encountered in the passage in (6.73) below. The first is e NP.rock colon-boundary ñe colon-boundary te NP.rock colon-boundary e tuʔati colon-boundary e maʔua colon-boundary e tauʔa colon-boundary ta: raua colon-boundary, which occurs three times beginning in lines 1, 20, and 27. The second is e NP.rock colon-boundary e NP.rock colon-boundary e tuʔati colon-boundary e maʔua colon-boundary e tauʔa colon-boundary ta: raua colon-boundary, which occurs five times beginning in lines 8, 14, 34, 40, and 46.
There is cliff rock.

There will join together.

They will hold fast.

There is an affinity.

There is regular rock.
9. e papa ?araea PAUSE
e NP.rock
EXIST flat.rock clay
There is clay.

10. e tu:?ati PAUSE
e tu:?ati
IPFV join
They will join together.

11. e matua PAUSE
e matua
IPFV fixed
They will hold fast.

12. e tau?a
e tau?a
EXIST companionship
There is an affinity

13. ta: ra:ua PAUSE
ta: ra:ua
ALIEN.NEUT 3.DU
between them.

14. e papa ?iri~?iri PAUSE
e NP.rock
EXIST flat.rock gravelly
There is gravel.

15. e papa ota~ota PAUSE
e NP.rock
EXIST flat.rock lumpy
There is lumpy rock.

16. e tu:?ati PAUSE
e tu:?ati
IPFV join
They will join together.

17. e matua PAUSE
e matua
IPFV fixed
They will hold fast.
18. e tau?a
e tau?a
EXIST companionship
There is an affinity

19. ta: ra:ua PAUSE
ta: ra:ua
ALIEN.NEUT 3.DU
between them.

20. e papa uri
e NP.rock
EXIST flat.rock dark
There is dark rock

21. ?e
?e
and
and

22. te papa tea PAUSE
te NP.rock
the flat.rock white
white rock.

23. e tu:?ati PAUSE
e tu:?ati
IPFV join
They will join together.

24. e matua PAUSE
e matua
IPFV fixed
They will hold fast.

25. e tau?a
e tau?a
EXIST companionship
There is an affinity

26. ta: ra:ua PAUSE
ta: ra:ua
ALIEN.NEUT 3.DU
between them.
27. e papa one
   e NP.rock
   EXIST flat.rock sand
   There is sand

28. ?e
   ?e
   and
   and

29. te papa repo PAUSE
te NP.rock
the flat.rock soil
soil.

30. e tu:ati PAUSE
e tu:ati
   IPFV join
   They will join together.

31. e matua PAUSE
e matua
   IPFV fixed
   They will hold fast.

32. e tau?a
   e tau?a
   EXIST companionship
   There is an affinity

33. ta: ra:ua PAUSE
ta: ra:ua
   ALIEN.NEUT 3.DU
   between them.

34. e papa tai PAUSE
e NP.rock
   EXIST flat.rock sea
   There is sea rock.

35. e papa vai PAUSE
e NP.rock
   EXIST flat.rock fresh.water
   There is river rock.
36. e tu?:ati PAUSE 
etu?:ati
IPFV join
They will join together.

37. e matua PAUSE 
etu?:ati
IPFV fixed
They will hold fast.

38. e tau?a 
etau?a
EXIST companionship
There is an affinity

39. ta: ra:ua PAUSE 
ta: ra:ua
ALIEN.NEUT 3.DU
between them.

40. e papa ?o:tu PAUSE 
epapa ri?o?a
EXIST flat.rock point.of.land
There is rock of the point.

41. e papa ri?o?a PAUSE 
epapa ri?o?a
EXIST flat.rock bay
There is rock of the bay.

42. e tu?:ati PAUSE 
etu?:ati
IPFV join
They will join together.

43. e matua PAUSE 
etu?:ati
IPFV fixed
They will hold fast.
There is an affinity between them.

There is rock of the shore.

There is rock of the reef.

They will join together.

They will hold fast.

There is an affinity between them.
6.3.3.3 Parallelism of parts of the body

Passages that list parts of the body are also mostly encountered in myths relating to the creation. An exception is can be found in (6.76), which is of the rauti (“battle address”) genre.

The syntactic frame pattern for the list in (6.74) below, previously encountered in (5.50) as an example of list ordering, is ʔaore colon-boundary (e) NP.body.part colon-boundary, and repeats sixteen times.

(6.74) Extract from “Tane, the man-god” (Henry 1928:364-371)

1. ʔaore
   ʔaore
   PFV.NEG
   There was no

2. (e) mata PAUSE
   NP.body.part
   EXIST
   face.

3. ʔaore
   ʔaore
   PFV.NEG
   There was no

4. (e) upoʔo PAUSE
   NP.body.part
   EXIST
   head.

5. ʔaore
   ʔaore
   PFV.NEG
   There was no

6. (e) ihu PAUSE
   NP.body.part
   EXIST
   nose.
7. ?aore
   ?aore
   PFV.NEG
   There were no

8. e tariʔa PAUSE
e NP.body.part
EXIST ear
ears.

9. ?aore
   ?aore
   PFV.NEG
   There was no

10. (e) vaha PAUSE
    NP.body.part
    EXIST mouth
    mouth.

11. ?aore
    ?aore
    PFV.NEG
    There was no

12. (e) ?aʔiː PAUSE
    NP.body.part
    EXIST neck
    neck.

13. ?aore
    ?aore
    PFV.NEG
    There was no

14. (e) tua PAUSE
    NP.body.part
    EXIST back
    back.

15. ?aore
    ?aore
    PFV.NEG
    There was no
16. (e) ?ouma PAUSE
   NP.body.part
   exist
   chest.

17. ?aore
    ?aore
    PFV.NEG
    There were no

18. (e) ?ao~?ao PAUSE
    NP.body.part
    exist
    rib

19. ?aore
    ?aore
    PFV.NEG
    There was no

20. (e) ?o:pu: PAUSE
    NP.body.part
    exist
    stomach.

21. ?aore
    ?aore
    PFV.NEG
    There was no

22. (e) pito PAUSE
    NP.body.part
    exist
    navel.

23. ?aore
    ?aore
    PFV.NEG
    There were no

24. (e) hu:ha: PAUSE
    NP.body.part
    exist
    thigh.
25. ?aore
   ?aore
   PFV.NEG
   There were no

26. (e) tohe PAUSE
(buttocks)
   NP.body.part
   EXIST buttocks.

27. ?aore
   ?aore
   PFV.NEG
   There were no

28. e turi PAUSE
(e) NP.body.part
   e EXIST knee
   knees.

29. ?aore
   ?aore
   PFV.NEG
   There were no

30. (e) ?avae PAUSE
(leg)
   NP.body.part
   EXIST legs.

31. ?aore
   ?aore
   PFV.NEG
   There were no

32. (e) tapua?e ?avae PAUSE
     NP.body.part
     EXIST sole foot
     soles of feet.

The syntactic frame pattern in (6.75) below is to-na N.body.part colon-
boundary ?ei NP.physical.world colon-boundary. This list represents a
catalogue of body parts of the god Ta‘aroa that became physical features of the world. Its first three repetitions are included in the example. In the text, there follow five additional and more loosely structured repetitions.

(6.75) Extract from “Another version of the creation” (Henry 1928:339-340)

1. rave atu-ra
   [prior to syntactic frame]
   take thither-there
   He then took

2. i to:-na tuamo?o
   to:-na N.body.part
   DIROBJ INALIEN.NEUT-3.SG spine
   his spine

3. ?ei panai mou?a PAUSE
   ?ei N.physical.world
   EXIST.SBJV range mountain
   for a mountain range,

4. to:-na ?ao~?ao
   to:-na N.body.part
   INALIEN.NEUT-3.SG rib
   his ribs

5. ?ei purou mou?a PAUSE
   ?ei N.physical.world
   EXIST.SBJV side mountain
   for mountain slopes,

6. to:-na manava
   to:-na N.body.part
   INALIEN.NEUT-3.SG belly
   his belly

7. ?ei patti?i ata maľreva-reva PAUSE
   ?ei N.physical.world
   EXIST.SBJV layer cloud shifting
   for a layer of shifting clouds,
The syntactic frame pattern in (6.76) below is \( \text{ʔ} N.\text{item.of.military.dress} \colon \text{boundary (te)} \) \(-i\) te \( N.\text{body.part} \colon \text{boundary} \), and repeats four times.

(6.76) Extract from “Rauti Tamai” (Chadourne 1922:68-71)

1. \( \text{ʔ} \) ei fau
\( \text{ʔ} \) ei \( N.\text{item.of.military.dress} \)
EXIST.SBJV helmet
May there be a helmet

2. te-i te upo?o PAUSE
te-i te \( N.\text{body.part} \)
the-at the head
on the head.

3. \( \text{ʔ} \) ei ru?u~ru?u
\( \text{ʔ} \) ei \( N.\text{item.of.military.dress} \)
EXIST.SBJV rope
May there be rope

4. te-i te tua PAUSE
te-i te \( N.\text{body.part} \)
the-at the back
on the back.

5. \( \text{ʔ} \) ei taumi
\( \text{ʔ} \) ei \( N.\text{item.of.military.dress} \)
EXIST.SBJV breast.plate
May there be a breast plate

6. te-i te aro PAUSE
te-i te \( N.\text{body.part} \)
the-at the chest
on the chest.

7. \( \text{ʔ} \) ei tatua
\( \text{ʔ} \) ei \( N.\text{item.of.military.dress} \)
EXIST.SBJV belt
May there be a belt
8. i te manava taia: PAUSE
   i te NP.body.part
   at the belly fearful
   over the fearful belly.

6.3.3.4 Parallelism relating to direction

   It is quite common for the variable elements of syntactic frames to
   represent direction. Most often these consist of series of contrasting pairs. The
   intent may be to demonstrate that all dimensions of a subject matter have been
   taken into account.

6.3.3.4.1 Parallelism of locatives

   The most frequently encountered directional category is the locative. Below are five examples.

   The syntactic frame pattern in (6.77) below is te atua colon-boundary i
   LOC colon-boundary, and repeats six times. Note the contrasting paired
   elements of ni’a (“above”) and raro (“below”), tai (“seaward”) and uta
   (“inland”), roto (“inside”) and vaho (“outside”). All gods, wherever their
   residence, have been included.

(6.77) Extract from “Warning by messengers of the pa‘i-atua service” (Henry
1928:158-159)

1. ?o te atua
   te atua
   EXIST the god
   It is the gods who are

2. i ni?a PAUSE
   i LOC
   at above
   above,

3. te atua
   te atua
   the god
   the gods
4. i raro PAUSE i LOC at below below,

5. te atua te atua the gods the gods

6. i tai PAUSE i LOC at seaward that are towards the sea,

7. te atua te atua the god the gods

8. i uta PAUSE i LOC at inland that are inland,

9. te atua te atua the god the gods

10. i roto PAUSE i LOC at inside inside,

11. te atua te atua the god the gods

12. i vaho PAUSE i LOC at outside outside,
The syntactic frame pattern in (6.78) below is *na: atua colon-boundary i LOC e: colon-boundary e haere mai colon-boundary*, and repeats four times.

This is similar to the passage in (6.77), except that here gods are being summoned.

(6.78) Extract from “Drilling” (Henry 1928:300)

1. na: atua
   na: atua
   PLF god
   Oh gods

2. i uta e: PAUSE
   i LOC e:
   at inland oh
   that are inland,

3. e haere mai PAUSE
   e haere mai
   IPFV go hither
   come here.

4. na: atua
   na: atua
   PLF god
   Oh gods

5. i tai e: PAUSE
   i LOC e:
   at seaward oh
   that are towards the sea,

6. e haere mai PAUSE
   e haere mai
   IPFV go hither
   come here.

7. na: atua
   na: atua
   PLF god
   Oh gods
The simple syntactic frame pattern in (6.79) below is ?ei to?o LOC colon-boundary, and repeats four times. The levers mentioned in the passage were used by the god Tane to separate the earth from the sky.

(6.79) Extract from “The raising of the sky of Rumia” (Henry 1928:409-413)

1. ?ei to?o mua PAUSE
   ?ei to?o LOC
   EXIST.SBJV lever front
   for a forward lever,

2. ?ei to?o muri PAUSE
   ?ei to?o LOC
   EXIST.SBJV lever behind
   for a rear lever,
In (6.80) below, note that the pattern segment ʔo vai colon-boundary te-i LOC naː eː colon-boundary repeats twice within the full syntactic frame pattern ʔo vai colon-boundary te-i LOC naː eː colon-boundary te-i LOC naː eː colon-boundary ʔaore colon-boundary reo colon-boundary i te parau-raʔa mai colon-boundary, which itself repeats twice.

(6.80) Extract from “Another version of the creation” (Henry 1928:339-340)

1. ʔo vai
   ʔo vai
   EXIST who
   Oh who is

2. te-i niʔa naː eː PAUSE
te-i LOC naː eː
the-at above PROX.2 oh
above out there?

3. ʔo vai
   ʔo vai
   EXIST who
   Oh who is

4. te-i raro naː eː PAUSE
te-i LOC naː eː
the-at below PROX.2 oh
below out there?
There was no voice.

that spoke back.

Oh who is towards the sea out there?

Oh who is inland out there?

There was no voice.
Contrasting locatives are sometimes incorporated into names, as we find in (6.81) below. The simple syntactic frame pattern is (ʔo) hina-tu:a-LOC colon-boundary, and repeats five times.

(6.81) Extract from “Exchange of sexes between Atea and Faahotu and production of more gods” (Henry 1928:372-374)

1. ʔo hina-tu:a-ni:a  PAUSE
   ʔo hina-tu:a-LOC
   PROP Hina-stand-ALIEN.WEAK-above
   Hina-who-stands-above,

2. ʔo hina-tu:a-raro  PAUSE
   ʔo hina-tu:a-LOC
   PROP Hina-stand-ALIEN.WEAK-below
   Hina-who-stands-below,

3. ʔo hina-tu:a-raʔi  PAUSE
   ʔo hina-tu:a-LOC
   PROP Hina-stand-ALIEN.WEAK-skyward
   Hina-who-stands-skyward,

4. ʔo hina-tu:a-uta  PAUSE
   ʔo hina-tu:a-LOC
   PROP Hina-stand-ALIEN.WEAK-inland
   Hina-who-stands-inland,

5. ʔo hina-tu:a-tai  PAUSE
   ʔo hina-tu:a-LOC
   PROP Hina-stand-ALIEN.WEAK-seaward
   Hina-who-stands-seaward,
6.3.3.4.2 Parallelism of points of the compass

Contrasting pairs of points of the compass seem to serve a similar role as contrasting pairs of locatives: to perhaps demonstrate that the full range of a subject matter has been covered. Below are two examples.

The simple syntactic frame pattern in (6.82) below is na:te LOC.point.of.the.compass (mai) colon-boundary, which occurs once for each of the four cardinal points.

(6.82) Extract from “Ru and Hina explore the earth” (Henry 1928:458)

1. na: te apatoʔa PAUSE
   na: te LOC.point.of.the.compass
   by the south southwards,

2. na: te apatoʔerau mai PAUSE
   na: te LOC.point.of.the.compass
   by the north hither northwards,

3. na: te hitiʔa PAUSE
   na: te LOC.point.of.the.compass
   by the east eastwards,

4. na: te toʔoʔa mai PAUSE
   na: te LOC.point.of.the.compass
   by the west hither westwards,

The syntactic frame pattern in (6.83) below is tahi ʔa:vei colon-boundary i (te) LOC.point.of.the.compass (ia) colon-boundary; one instance for each point of the compass.
(6.83) Extract from “Creation of the world” (Henry 1928:336-338)

1. tahiʔavei
tahiʔavei
one tentacle
one tentacle was

2. i apatoʔa ia PAUSE
    i LOC.point.of.the.compass ia
    at south it
    south,

3. tahiʔavei
tahiʔavei
one tentacle
one tentacle was

4. i apatoʔerau PAUSE
    i LOC.point.of.the.compass
    at north
    north,

5. tahiʔavei
tahiʔavei
one tentacle
one tentacle was

6. i te hitiʔa-o-te-ra: PAUSE
    i te LOC.point.of.the.compass
    at the east
    east,

7. ?e
    and
    and

8. tahiʔavei
tahiʔavei
one tentacle
one tentacle was
9. i toʔoʔa-o-te-ra: PAUSE
    i LOC.point.of.the.compass at west
    west.

6.3.3.5 Parallelism of numbers

It is not uncommon for a variable element to be numeric. A simple example is found in (6.84) below, where the syntactic frame pattern is ʔo raʔi tua ORD colon-boundary, and repeats eight times.

(6.84) Extract from “After the sky was raised” (Henry 1928:413-415)

1. ʔo raʔi tua iva PAUSE
   ʔo raʔi tua ORD
   PROP sky NUMB nine
   the ninth sky,

2. ʔo raʔi tua varu PAUSE
   ʔo raʔi tua ORD
   PROP sky NUMB eight
   the eighth sky,

3. ʔo raʔi tua hitu PAUSE
   ʔo raʔi tua ORD
   PROP sky NUMB seven
   the seventh sky,

4. ʔo raʔi tua ono PAUSE
   ʔo raʔi tua ORD
   PROP sky NUMB six
   the sixth sky,

5. ʔo raʔi tua rima PAUSE
   ʔo raʔi tua ORD
   PROP sky NUMB five
   the fifth sky,
6. ?o raʔi tua ha: PAUSE
   ?o raʔi tua ORD
   PROP sky NUMB four
   the fourth sky,

7. ?o raʔi tua toru PAUSE
   ?o raʔi tua ORD
   PROP sky NUMB three
   the third sky,

8. òe
   and
   and

9. ?o raʔi tua rua PAUSE
   ?o raʔi tua ORD
   PROP sky NUMB two
   the sky,

A more complex syntactic frame pattern is found in lines 1 to 45 of the passage in (6.85) below. It is faʔnau colon-boundary te ariʔa colon-boundary
ò aʔa maʔa: ORD$_n$ colon-boundary òa noho ia colon-boundary i te aʔa maʔa:
ORD$_{n+1}$ colon-boundary, and repeats nine times. In this syntactic frame,
ORD$_{n+1}$ is one greater than ORD$_n$, and both increment with each repetition of
the frame. The subsequent syntactic frame pattern in lines 46 through 57 is òa
CARD colon-boundary te aro colon-boundary o te aʔa colon-boundary, which
repeats four times.

(6.85) Extract from “Chaotic period” (Henry 1928:340-344)

1. faʔnau
   faʔnau
   born
   Then was born
2. te ariʔi
teh king
the king

3. ?o aʔa mata: mua
?o aʔa mata: ORD₁
PROP root beginning first
First Root,

4. ?a noho ia
?a noho ia
INCEPT stay 3.SG
who then stayed

5. i te aʔa mata: rua
i te aʔa mata: ORD₂
for the root beginning second
for Second Root.

6. famau
famau
born
Then was born

7. te ariʔi
teh king
the king

8. ?o aʔa mata: rua
?o aʔa mata: ORD₂
PROP root beginning second
Second Root,

9. ?a noho ia
?a noho ia
INCEPT stay 3.SG
who then stayed
10. i te a?a maata: toru PAUSE
   i te a?a maata: ORD₃
   for the root beginning third
   for Third Root.

11. faːnau
    faːnau
    born
    Then was born

12. te ariʔi
    te ariʔi
    the king
    the king

13. ?o a?a maata: toru PAUSE
    ?o a?a maata: ORD₃
    PROP root beginning third
    Third Root,

14. ?a noho ia
    ?a noho ia
    INCEPT stay 3.SG
    who then stayed

15. i te a?a maata: haː PAUSE
    i te a?a maata: ORD₄
    for the root beginning fourth
    for Fourth Root.

16. faːnau
    faːnau
    born
    Then was born

17. te ariʔi
    te ariʔi
    the king
    the king
18. ʔo aʔa māta: ha: PAUSE
ʔo aʔa māta: ORD₄
PROP root beginning fourth
Fourth Root,

19. ʔa noho ia
ʔa noho ia
INCEPT stay 3.SG
who then stayed

20. i te aʔa māta: rima PAUSE
i te aʔa māta: ORD₅
for the root beginning fifth
for Fifth Root.

21. fānau
fānau
born
Then was born

22. te ariʔi
te ariʔi
the king
the king

23. ʔo aʔa māta: rima PAUSE
ʔo aʔa māta: ORD₅
PROP root beginning fifth
Fifth Root,

24. ʔa noho ia
ʔa noho ia
INCEPT stay 3.SG
who then stayed

25. i te aʔa māta: ono PAUSE
i te aʔa māta: ORD₆
for the root beginning sixth
for Sixth Root.
26. faːnau  
   faːnau  
   born  
   Then was born

27. te  aɾiʔi  
   te  aɾiʔi  
   the  
   the king

28. ʔo  aʔa mātːaː  ono  PAUSE  
   ʔo  aʔa mātːaː  ORD₆  
   PROP  root  beginning  sixth  
   Sixth Root,

29. ʔa  noho  ia  
   ʔa  noho  ia  
   INCEPT  stay  3.SG  
   who then stayed

30. i  te  aʔa mātːaː  hitu  PAUSE  
   i  te  aʔa mātːaː  ORD₇  
   for the root beginning seventh  
   for Seventh Root.

31. faːnau  
   faːnau  
   born  
   Then was born

32. te  aɾiʔi  
   te  aɾiʔi  
   the  
   the king

33. ʔo  aʔa mātːaː  hitu  PAUSE  
   ʔo  aʔa mātːaː  ORD₇  
   PROP  root  beginning  seventh  
   Seventh Root,
34. ?a noho ia
   ?a noho ia
   INCEPT stay 3.SG
   who then stayed

35. i te aʔa mataː varu PAUSE
   i te aʔa mataː ORD₈
   for the root beginning eighth
   for Eighth Root.

36. fānau
   fānau
   born
   Then was born

37. te ariʔi
   te ariʔi
   the king
   the king

38. ?o aʔa mataː varu PAUSE
   ?o aʔa mataː ORD₈
   PROP root beginning eighth
   Eighth Root,

39. ?a noho ia
   ?a noho ia
   INCEPT stay 3.SG
   who then stayed

40. i te aʔa mataː iva PAUSE
   i te aʔa mataː ORD₉
   for the root beginning ninth
   for Ninth Root.

41. fānau
   fānau
   born
   Then was born
42. te ariʔi
te ariʔi
the king
the king

43. ?o aʔa māta: iva PAUSE
?o aʔa māta: ORD₉
PROP root beginning ninth
Ninth Root,

44. ?a noho ia
?a noho ia
INCEPT stay 3.SG
who then stayed

45. i te aʔa māta: tini PAUSE
i te aʔa māta: ORD₁₀
for the root beginning tenth
for Tenth Root.

46. ?a tini
?a CARD
INCEPT ten
Tens was

47. te aro
te aro
the presence
the presence

48. o te aʔa PAUSE
o te aʔa
INALIEN.WEAK the root
of the root.

49. ?a rau
?a CARD
INCEPT hundred
Hundreds was

50. te aro
te aro
the presence
the presence
51. o te a?a PAUSE
   o te a?a
   INALIEN.WEAK the root
   of the root.

52. ?a mano
   ?a CARD
   INCEPT thousand
   Thousands was

53. te aro
    te aro
    the presence
    the presence

54. o te a?a PAUSE
    o te a?a
    INALIEN.WEAK the root
    of the root.

55. ?a mano-tini
    ?a CARD
    INCEPT myriad
    Myriad was

56. te aro
    te aro
    the presence
    the presence

57. o te a?a PAUSE
    o te a?a
    INALIEN.WEAK the root
    of the root.

6.3.3.6 Semantic progression

On rare occasions, lists are ordered so that their variable elements exhibit a semantic progression. Below are two examples.

In the list in (6.86) below, the syntactic frame pattern is simply ʔuore
colon-boundary NP animate colon-boundary, and repeats seven times. The
initial four repetitions are found to group together semantically. Each subsequent variable element of these four represents a family role that, within the framework of early Tahitian society, may have represented a lesser degree of authority: metua tāne (“father”) > metua vahine (“mother”) > tuaʻana (“elder brother”) > tuahine (“sister”).

The fifth through seventh repetitions also group together, this time perhaps in decreasing order of mana (“dominance”), or possibly economic importance: taʻata (“person”) > puaʻa (“pig”; a valuable domestic animal) > ūrī (“dog”).

(6.86) Extract from “Creation of the world” (Henry 1928:336-338)

1. ?aore
   ?aore
   PFV.NEG
   There was no

2. metua tāne PAUSE
   NP.animate
   parent man
   father.

3. ?aore
   ?aore
   PFV.NEG
   There was no

4. metua vahine PAUSE
   NP.animate
   parent woman
   mother.

5. ?aore
   ?aore
   PFV.NEG
   There was no
6. tuaʔana  PAUSE NP.animate older.brother older brother.

7. ?aore  
?aore  
PFV.NEG  
There was no

8. tuahine  PAUSE NP.animate sister sister.

9. ?aore  
?aore  
PFV.NEG  
There were no

10. taʔata  PAUSE NP.animate person people.

11. ?aore  
?aore  
PFV.NEG  
There were no

12. puaʔa  PAUSE NP.animate pig pigs.

13. ?aore  
?aore  
PFV.NEG  
There were no

In (6.87) below, the syntactic frame pattern is *havaiʔi colon-boundary fa naï-au-raʔa N colon-boundary*, and repeats four times. Again, the sequence of variable elements is perhaps ordered by a decrease in importance: *fenua* (“land”) > *atua* (“god”) > *ariʔi* (“king”) > *taʔata* (“person”).

(6.87) Extract from “Chaotic period” (Henry 1928:340-344)

1. havaiʔi  PAUSE
   havaiʔi
   Hawaii
   Hawaii,

2. fa naï-au-raʔa  fenua  PAUSE
   fa naï-au-raʔa  N
   born-NMLZ  land
   birthplace of land,

3. havaiʔi  PAUSE
   havaiʔi
   Hawaii
   Hawaii,

4. fa naï-au-raʔa  atua  PAUSE
   fa naï-au-raʔa  N
   born-NMLZ  god
   birthplace of gods,

5. havaiʔi  PAUSE
   havaiʔi
   Hawaii
   Hawaii,

6. fa naï-au-raʔa  ariʔi  PAUSE
   fa naï-au-raʔa  N
   born-NMLZ  king
   birthplace of kings,
7. havaiʔi  PAUSE
    havaiʔi
    Hawaii
    Hawaii,

8. faːnau-raʔa  taʔata  PAUSE
    faːnau-raʔa  N
    born-NMLZ  person
    birthplace of people.

6.4 Conclusion

    The sound parallelism of the pre-1850 corpus manifests itself in the
    following types of pattern:

1. Simple assonance, of which assonant end-rhyme is somewhat rare.

2. Simple consonance, of which consonant end-rhyme is very rare.

3. Complex patterns that combine simpler patterns of assonance, consonance, and parallel strings of phonemes.

    Sound patterns may be strict or loose. They most often span lines, although they are sometimes constrained to within the line. Occasionally, sound patterns are arranged in an inverted structure, analogous to the types of inverted patterns that were noted for metrical count.

    Patterns constrained to names and epithets may function as recurring islands of sound parallelism. They generally contain patterns of pure assonance, or combined patterns of assonance and consonance. Their patterns may repeat in parallel, or be organized into an inverted structure.

    For the most part, the process by which phonemes of a sound pattern are selected is not apparent. However, for certain passages, they have been found to represent the constituent phonemes of thematically important words.

    Syntactic parallelism in the pre-1850 corpus nearly always consists of a repeating syntactic frame that contains one or more slots for semantic variables. A syntactic frame will often constitute an individual item of a poetic list. Some
syntactic frame usage represents canonical parallelism. The elements of a Tahitian syntactic frame, with the exception of its semantic variables, are almost always found to repeat exactly.

A syntactic frame’s variable elements, corresponding to a given part-of-speech, often belong to a single semantic category for which there does not seem to be any restriction. A semantic category may represent any taxonomic level, from the specific to the abstract. Some semantic categories recur with greater frequency than others. Lists of deities are somewhat common as are, specific to the creation myths, lists of physical world objects and parts of the body. The ordering of list items occasionally reflects a pattern of semantic progression.

Concerning canonical parallelism, although Tahitian paired elements often exhibit a degree of synonymy or antonymy, they do not observe a strict requirement of dyadic pairing, as has been observed in other traditions. An exception lies in sequences of antonymous pairs of locatives or points of the compass, where the intent may be to demonstrate that all dimensions of a subject matter have been taken into account.

There seems to be complete freedom regarding the possibilities of arrangement of syntactic frame patterns. They follow one another in an appositional style, similar to that noted earlier for patterns of counting meter and sound parallelism. It is common for sequences of such patterns to be grouped together in unbroken succession.

The next chapter will discuss aspects of the oral poetry that may be relevant to its manner of composition.
7 Aspects of the poetry relevant to manner of composition

7.1 Introduction

In the last two chapters, we discussed organizational aspects of the corpus relating to meter and parallelism. Some of those aspects, such as recurring poetic epithets, may be evidence of an oral-formulaic process of composition-in-performance. Ruth Finnegan, however, has claimed that the majority of oral poetry in Oceania is composed and memorized prior to performance (Finnegan 1988:90-91), including much of Maori, Tongan, and other poetry from Polynesia.

In this chapter, we will discuss aspects of the early Tahitian poetry that may shed light as to whether some or all of it was composed prior to performance and memorized by skilled reciters, or composed in performance by poets who had acquired an oral-formulaic linguistic capacity; keeping in mind that neither generalization may prove to be completely adequate. While other compositional possibilities, such as improvisation, may exist, the traits of memorized composition-prior-to-performance and of oral-formulaic composition-in-performance have been the best documented in the literature.

The evidence discovered appears to be relevant to the compositional characteristics listed below:

*Regarding memorized composition-prior-to-performance:*

1. Content is generally non-traditional.
2. Reciter and composer may be different people.
3. Story structure is not restricted to paratactic development.
4. There is a very high degree of fixity of text. Recitations are identical to the original composition, or nearly so.
5. Discrepancies between recitations resulting from memory error may appear prose-like, as the reciter, in a tradition dependent upon memorization, will not necessarily have developed a capacity to render corrections poetic.
6. Regarding any traditional content that may have been memorized, poetry is less likely to satisfy Peabody’s tests for oral-epic composition.

Regarding oral-formulaic composition-in-performance:

1. Content is generally traditional.

2. Reciter and composer are the same person.

3. Stories are built up linearly, in a paratactic manner.

4. Fixity of text is not required. Multiple recitations may be similar, but are almost never verbatim or nearly verbatim.

5. Different versions of the same material demonstrate poetic organization throughout.

6. For traditional content, poetry may satisfy some or all of Peabody’s tests for oral-epic composition.

7.2 Concerning traditional and non-traditional content

Traditional content builds up within a society over generations and, as discussed in section 2.3.4 of the literature review, the Oral Formulaic Theory only purports to apply to such material (see Lord 1987:327). Lord’s concept of oral traditional poetry is that it is “fundamentally diachronic, as an evolutionary process that continues to develop while still preserving that which is important to the people who transmit it” (Foley 1988:40). In their retelling of oral tradition, succeeding generations are thus able to create myth out of history.

Traditional content belongs to all members of a society, and attempts to gain its authority through the oblation of source. The traditional myth is “a message that, properly speaking, is coming from nowhere” (Lévi-Strauss 1969:18 cited in DuBois 1986:330).

By contrast, non-traditional content is datable; often contemporary. Its authorship may be attributable to one or more specific individuals. Its ownership may be bestowed, or otherwise passed along as property.

Corpus poems comprised of non-traditional content should not be expected to conform to the Oral Formulaic Theory’s predictions. Such poems
are more likely to have been composed prior to performance and memorized, be the result of improvisation (see Lord 1987:328), or derive from some other process. Lord characterizes memorized verse as being “occasional poetry composed on a recent or contemporary incident or event” (Lord 1987:316), or to be the result of improvisation, which he describes as “individual, spur of the moment, non-traditional” (see Lord 1987:335-337).

It would not normally be expected that traditional content, for its part, undergo memorization. Such poetry would be the anticipated product of either an oral-formulaic process of composition-in-performance, or of some other process of composition that does not rely upon memorization.

A manual review of the pre-1850 corpus reveals that for the anau (“lamentation”), faʻateni (“praise”), faʻatarā (“praise with challenge”), and rauti (“battle address”) genres, content is generally contemporary, and not traditional. Oral poetry of the paripari (“description”) and religious genres contains both traditional and non-traditional content, depending on the text. Nearly all content of ʻaʻai (“myth”) genre texts appears to be traditional.

7.3 Relationship of reciter to composer

As mentioned in the literature review, Lord states that memorized oral poems are composed:

… without writing, but not by extempore improvisation. They are worked out by the poet carefully in his head, but never written down by him, or presumably by anyone else. The finished poem is learned from the poet by a memorizer, who can, and does, in his turn pass it on to other memorizers, and in this way the poem is preserved and disseminated … (Lord 1987:316)

Ruth Finnegan remarks that such a division of labour for memorized poetry is common to many traditions. For example, in medieval Europe, a troubadour was the composer, and a joglar the reciter of his compositions (Finnegan 1976:158). This contrasts with the oral-formulaic model where,
according to Lord, “singing, performing, composition are facets of the same act” (Lord 1960:13).

In some traditions, including many of those of Polynesia, memorized poems retain an affiliation with their composer and may even be regarded as property. Finnegans observes that throughout Polynesia, poems are commonly given and received as gifts (Finnegan 1988:103-104).

No composer attribution or ownership information is included with the pre-1850 transcriptions, although it may be that such details were simply left undocumented by European transcribers. There is only, on occasion, limited information concerning some of the reciters.

The fact that a corpus text is sometimes multiply credited for recitation would seem to imply either multiple instances of memorization of a poem composed prior to performance, or multiple instances of composition-in-performance of the same material. More will be discussed concerning reciters, and discrepancies between their recitations, in 7.5 below.

7.4 Manner of story development

With perhaps one exception, none of the pre-1850 texts is epic in length.\(^{75}\) However, a review of the corpus reveals that, true to an oral epic style, the traditional story of each `a `ai (“myth”) genre text is built up linearly, in a paratactic manner.\(^{76}\) As mentioned in the literature review, Walter Ong characterizes this type of developmental style as “additive rather than being organized by subordination” (Ong 1982:37). Concerning non-epic traditional texts of the Maori, Agathe Thornton similarly observes that “statement follows on statement, in ‘stringing-along’ utterances” (Thornton 1985:173).

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\(^{75}\) The possible exception is the 9,265 word `a `ai (“myth”) genre text Te parau a Honoura (“The tale of Honoura”) (see Henry 1895:256-291).

\(^{76}\) Note, for example, the additive style of both creation story passages in (7.7) below.
7.5 Fixity of text

For small poems comprised of either traditional or non-traditional content, information concerning textual fixity is perhaps uninformative. Lord notes that it is only obvious to expect greater fixity the smaller the work, irrespective of its genre (Lord 1981a:459-460).

For longer poems of non-traditional content characterized by multiple recitations that are verbatim, a process of composition-prior-to-performance and memorization would seem likely. If multiple recitations of the same poem are nearly verbatim, and any difference between them is suggestive of memorization error, such as slipping into prose, then a process of memorization would also appear to be indicated.

Concerning poetry comprised of traditional content, however, it may be that for versions representative of an oral-formulaic process, degree of fixity will depend upon the experience level of the oral poet. Different oral-formulaic versions of the same traditional material are generally expected to be similar to one another, but not necessarily to exhibit the very high degree of fixity of poems that have been memorized.

Although Peabody’s test for consistency of song predicts that different oral-formulaic versions should demonstrate close repetition of the entire composition (Peabody 1975:4), Lord observes that whereas formulaic phrases of a tradition may appear similar, there is a nevertheless a degree of variation (Lord 1960:36), and that an oral poet will often have a repertoire of formulae distinct from other poets of the same tradition (Lord 1960:53). Nigel Phillips notes that the master West Sumatran sijobang poet Munin possessed an oral-formulaic competency that allowed him to “vary expression” and to recombine “the same vocabulary in various patterns”. By contrast, his apprentice depended “more on memory and repetition” (Phillips 1981:168; my emphasis).

It would appear therefore possible that versions of a poem normally representative of composition-in-performance may, in their retelling, be indistinguishable from memorized poetry if they were the product of a novice oral-formulaic poet. For such recitations, memorization would simply

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77 This consistency of song test will be discussed further in 7.6.5 below.
represent an artefact of that oral poet’s novice status; a fact which may be difficult to discern. Unfortunately, no information concerning oral-formulaic expertise is available in regards to any of the corpus’ 19th century reciters.

When analyzing multiple versions of similar traditional content, it may consequently be prudent to only consider composition-in-performance a possibility if:

1. The versions do not exhibit verbatim or near verbatim fixity.
2. Differences between the versions are not suggestive of memorization error, such as slipping into prose.

We will next seek to discover, within a larger review of the topic, aspects of the Tahitian material that pertain to textual fixity. Any findings will be interpreted at the end of this section according to the assumptions just presented.

### 7.5.1 Textual fixity in other Polynesian traditions

Elsewhere in Polynesia, a high value appears to be placed on textual fixity. As mentioned in the literature review, Finnegan notes that “the idea and practice of exact memorization ... [seems] to be a feature of at least a number of Pacific cultures (perhaps most notably in Polynesia)” (Finnegan 1988:103-104). She asserts that the majority of prior-to-performance compositions are supernaturally inspired, and so “must be preserved and repeated faithfully by the performers” (Finnegan 1988:99). In addition to supernatural motivation, fixity of text may arise from “the emphasis in many aspects of Oceanic culture on the concept of memorization and correctness” (Finnegan 1988:102).

In line with Finnegan’s observations, Mervyn McLean remarks that among the Maori, “memory lapses are still regarded as a sign of death or disaster and some young people say they would sooner not try to learn songs than run the risk of not performing them correctly” (McLean 1964:34-35).

Apirana Ngata states, relating to his own education as a Maori:
A fundamental feature of recitation or singing in Maori is that there must be no hitch of any kind. So a leader must not only know his matter, but must also remember it in all its phases. A fault was an aitua, a presage of ill-fate, even of death. (Ngata 2004:xxxv)

For textual fixity to be achieved, a reciter must possess a capacity for memorization; and there would seem to be no shortage of accounts of great feats in this regard in Polynesia. For example, Ernest Collocott records an instance in Tonga where a poet chanted a 101 line poem to a poet friend. The latter thanked him, and then immediately recited it back in its entirety (Collocott 1928:81 cited in Finnegan 1988:103-104). Luomala remarks that such occurrences are in evidence throughout Polynesia (Luomala 1955:43).

Concerning the capacity for memorization in Maori oral tradition, Ngata states:

I learnt one outstanding feature in the education of a Maori, that he must know a thing in one lesson: in two lessons, if his teacher is indulgent. To learn a song in one lesson, words, air and all its graces seemed an impossible feat. But it was demonstrated in many cases within one’s knowledge. There were illiterate elders among my relatives in the sense that they read with great difficulty and could barely sign their names to paper. But they could memorize genealogies, land boundaries and strange songs with ease. (Ngata 2004:xxxv)

### 7.5.2 Information from transcriptions relevant to textual fixity

No source information whatsoever is provided for over half of the corpus texts. However, for many Henry (1928) texts of the ‘a ‘ai (“myth”) genre where some information is available, Orsmond credits more than one reciter. For example, it is stated that “Tane, the man-god” was recited in 1823 by both Vara and Ara-Mou’a (high priest of Ra’iatea), and later in 1840 by Mahine (chief of Mai’ao, and son of King Mato of Ra’iatea) (Henry 1928:364).

A review of recitation information for the 23 multi-credited ‘a ‘ai texts tells us little. We find that there were ten texts recited by two different individuals, eight texts recited by three, six texts recited by four, and a text is
attributed to three reciters as well as “and generally from priests on Tahiti and Mo’orea” (Henry 1928:426).

However, Henry almost never describes the degree to which multiple recitations are similar. A unique exception is found in a footnote to the “Creation of the world” text which states, “Dictated in 1822 by Paora’i, a counselor of Porapora. Afterwards Vai’au, a high priest of Porapora, *recited nearly the same chant*” (Henry 1928:336; my emphasis).

So we are aware of two recitations of a single text that are described as “nearly the same”, and therefore not verbatim. It should be emphasized that it is never explicitly stated in Henry that any two recitations are, in fact, verbatim.

7.5.3 Variation between two recitations of a lament

Two versions of the same complete poem will now be compared in order to examine their variation. Unfortunately, it is the only complete poem of the corpus for which more than one recitation is available.

The poem is a lament that, typical of its genre, is comprised of non-traditional material. Therefore, it would not be the expected product of a process of oral-formulaic composition-in-performance. Both recitations of its roughly 450 words were transcribed by Orsmond in Ra’iatea, and were presented for publication by W.D. Alexander in 1893 and by E. Ahnne in 1924. After ignoring differences that might be attributable to transcription error, there remain just four small variations between the versions.

The first is found in (7.1) below. The order of lines 4 and 5 of the Ahnne text is switched in lines 9 and 10 of the Alexander. Additionally, the first *e* (“EXIST”) at the beginning of line 5 may match *eː* (“oh”) at the end of line 8. The passage’s meaning is essentially the same in lines 3 through 5 and 8 through 10, just differently ordered. Neither version would appear to demonstrate a greater degree of poetic organization in terms of meter or parallelism.
(7.1) First difference between two recitations of “E pehe tai vahine” (Ahnne 1924:20-23 and Alexander 1893:55-59)

**Ahnne (1924:20-23):**

1. te huru
   the condition
   is the condition

2. o moanaraʔi
   INALIEN.WEAK Moanaraʻi
   of Moanaraʻi

3. i teie nei PAUSE
   at this here
   now.

4. toː-na ʔino~ʔino PAUSE
   INALIEN.NEUT-3.SG sadness
   His sadness,

5. e PAUSE e ata nui haʔa-marua raʔi PAUSE
   EXIST EXIST cloud great CAUS-soft sky
   it is, it is a great cloud that dulls the sky.

**Alexander (1893:55-57):**

6. te huru
   the condition
   is the condition

7. o moanaraʔi
   INALIEN.WEAK Moanaraʻi
   of Moanaraʻi

8. i teie nei e: PAUSE
   at this here oh
   now, oh.

---

78 In this chapter, the first line of an example provides an IPA representation of each word, as well as indication of syntactic pause. The second to last line provides a morpheme-by-morpheme gloss, and the last line an English translation. Many examples will contain additional lines providing non-elaborated syllable count, word stress count, and sound pattern information, as pertinent. Their formatting will be similar to that of the examples in chapters 5 and 6.
9. e ata nui ha?a-maru: ra))?i PAUSE 
    EXIST cloud great CAUS-soft sky
    It is a great cloud that dulls the sky,

10. to-:na ?ino~?ino PAUSE 
    INALIEN NEUT 3.SG sadness
    his sadness is.

The second variation is found below in (7.2). We note that the content of lines 9, 10, and 11 only appears in the second passage. With its additional lines, the Alexander passage demonstrates more elaborate poetic organization in terms of both syllabic counting meter and sound parallelism. The syllable counts of the Ahnne passage may be grouped as:

```
7
6
7
5,6,7
```

Whereas, with its additional three lines, the counts of the Alexander passage may be grouped as:

```
7
6
a 7
b 6
c 5
d 7
c' 5
b' 6
a' 7
```

The leading 7 and 6 counts possibly serve to introduce the inverted pattern.

As for sound parallelism, both versions have an assonant end-rhyme pattern of *a-a colon-boundary* in lines 4, 6, 13, and 15, a consonant end-rhyme pattern of *h-r colon-boundary* (in italics) in lines 4, 5, 13, and 14, and the end-rhyme pattern *i colon-boundary* (in small caps), occurring just twice in lines 2
and 3 of Ahnne, but five times in lines 8, 9, 10, 11, and 12 of Alexander. At least two other sound patterns emerge only after inclusion of the extra three lines in Alexander: an assonant pattern of a-i (in bold) and a consonant pattern of h-n (underlined) in lines 9, 10, and 12.

The more elaborate patterns of both meter and sound parallelism of the Alexander version seem to imply that the Ahnne version suffers from a three line deficit; possibly as the result of memorization error.

(7.2) Second difference between two recitations of “E pehe tai vahine” (Ahnne 1924:20-23 and Alexander 1893:55-59)\(^79\)

Ahnne (1924:20-23):

\[\sigma_{ne}\]

Text

1. aue: ho?i au nei e: PAUSE
   7 2 2 1 1 1 oh still 1.SG here oh Woe is me! Oh!

2. aue: ho?i au nei PAUSE
   6 2 2 1 1 oh still 1.SG here Woe is me!

3. ta:-?u vahine iti
   7 2 3 2 1 ALIEN.NEUT-1.SG wife dear My dear wife

4. purotu hara PAUSE
   5 3 2 1 hara pretty sinful and pretty and sinful,

\(^79\) Note the enjambment of lines 3 and 4, 5 and 6, 12 and 13, and 14 and 15. For each colon, a string of four modifiers has been split up. As mentioned in chapter 5, enjambment frequently occurs if an NP colon contains several modifiers.
5. ta:-ʔu hoa here
6  \( h \, r \)
    ALIEN.NEUT-1.SG companion love
    my beloved companion

6. faʔa-toa manava PAUSE
7
    CAUS-encourage belly
    who caused my nerve to strengthen.

Alexander (1893:55-59):

\( \sigma \ne \) Text

7. aue: hoʔi au nei e: PAUSE
6  2  2 1 1 1
    oh still 1.SG here oh
    Woe is me! Oh!

8. aue: hoʔi au nei PAUSE
6  2  2 1 1 1
    oh still 1.SG here
    Woe is me!

9. ta:-ʔu vahine iti PAUSE
7  2  3 2
    ahin 1
    ALIEN.NEUT-1.SG wife dear
    My dear wife,

10. ta:-ʔu hani~hani
6  2  4
    hani 1
    ALIEN.NEUT-1.SG caress
    my caressed one

11. i haere ?e: nei PAUSE
5  1  2 1 1 1
    PFV go away here
    who has now gone astray,
12. ta:-ʔu vahine iti
   7 2 3 2
   ALIEN.NEUT-1.SG wife dear
   My dear wife

13. purotu hara PAUSE
   5 3 2
   hara pretty sinful
   and pretty and sinful,

14. ta:-ʔu hoa here
   6 2 2 2
   h r
   ALIEN.NEUT-1.SG companion love
   my beloved companion

15. fa?a-toa manava PAUSE
   7 4 3
   a a
   CAUS-encourage belly
   who caused my nerve to strengthen,

The third variation appears in (7.3) below. It consists merely of a reduplication of ‘ino (“bad”) in line 2 to ‘ino ~ ‘ino (“upset”) in line 5. This results in a slightly stronger syllabic counting pattern in the Alexander passage of:

7,7,7

as compared to that of the Ahnne passage:

7
5
7
(7.3) Third difference between two recitations of “E pehe tai vahine” (Ahnne 1924:20-23 and Alexander 1893:55-59)

Ahnne (1924:20-23):

σ_{ne} Text

<table>
<thead>
<tr>
<th></th>
<th>aha</th>
<th>ta:-?oe</th>
<th>hara</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EXIST what</td>
<td>ALIEN.NEUT-2.SG</td>
<td>sin</td>
</tr>
<tr>
<td></td>
<td>What is the sin that to you</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. i ?ino noa-i

<table>
<thead>
<tr>
<th></th>
<th>?ino~ʔino noa-i</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PFV</td>
</tr>
<tr>
<td></td>
<td>is still bad for you</td>
</tr>
</tbody>
</table>

3. e: ta:-ʔu vahine e: PAUSE

<table>
<thead>
<tr>
<th></th>
<th>vahine</th>
<th>e: PAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>oh</td>
<td>ALIEN.NEUT-1.SG</td>
</tr>
<tr>
<td></td>
<td>oh my wife?</td>
<td></td>
</tr>
</tbody>
</table>

Alexander (1893:55-59):

σ_{ne} Text

<table>
<thead>
<tr>
<th></th>
<th>aha</th>
<th>ta:-?oe</th>
<th>hara</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EXIST what</td>
<td>ALIEN.NEUT-2.SG</td>
<td>sin</td>
</tr>
<tr>
<td></td>
<td>What is the sin that to you</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. i ?ino~ʔino noa-i

<table>
<thead>
<tr>
<th></th>
<th>?ino~ʔino noa-i</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>PFV</td>
</tr>
<tr>
<td></td>
<td>is still upsetting you</td>
</tr>
</tbody>
</table>

6. e: ta:-ʔu vahine e: PAUSE

<table>
<thead>
<tr>
<th></th>
<th>vahine</th>
<th>e: PAUSE</th>
</tr>
</thead>
<tbody>
<tr>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>oh</td>
<td>ALIEN.NEUT-1.SG</td>
</tr>
<tr>
<td></td>
<td>oh my wife?</td>
<td></td>
</tr>
</tbody>
</table>

The fourth variation is found in (7.4) below. The syllable counts for the Ahnne passage are:
The syllable counts of the Alexander passage may be grouped as:

9,9
3,3,3

The Alexander version’s pattern of meter is partially achieved through repetition in line 9 of *i roto* (“within”). This apparent redundancy may represent an act of nonessential repetition, such as John Miletich proposes is characteristic of oral poems (Miletich 1981:189). Its use here may be to fulfil a requirement of meter.

If the counts of the last three cola are combined, then its metrical pattern may be re-interpreted as:

9,9,9

Were it assumed that the lament was composed prior to performance and memorized, then the Ahnne version of this passage would seem to represent a lapse into prose. Such, however, would imply that the repetition of *i roto* in the Alexander version was intentional on the part of the original composer. However, Miletich’s generalization concerning nonessential repetition is not intended to apply to composition-prior-to-performance.

Perhaps the repetition of *i roto* in the Alexander version results from an application of composition-in-performance; albeit of non-traditional content. The poet/reciter may have attempted to improve upon the memorized poem’s poetic qualities. If so, then the reduplication of *ino* in line 5 of the passage in (7.3) may likewise have been metrically motivated.

A further possibility, that both versions of the lament were composed entirely in performance, would seem unlikely, as the lament’s content is non-
traditional, its recitations are near verbatim, and the three missing lines of the Ahnne version in (7.2) above seem indicative of memorization error.

(7.4) Fourth difference between two recitations of “E pehe tai vahine” (Ahnne 1924:20-23 and Alexander 1893:55-59)

Ahnne (1924:20-23):

\[ \sigma_{ne} \text{ Text} \]

1. e vero tatautoru
   \[ 7 \]
   \[ 1 \ 2 \ 4 \]
   \[ \text{EXIST storm incessant} \]
   It is an incessant storm,

2. to:-ʔu riri
   \[ 4 \]
   \[ 2 \]
   \[ \text{INALIEN.STRONG-1.SG anger} \]
   my anger,

3. i te ?otu?i~tu?i-ra?a
   \[ 9 \]
   \[ 1 \ 1 \ 7 \]
   \[ \text{at the beating.repeatedly-NMLZ} \]
   that is continually beating

4. i roto
   \[ 3 \]
   \[ 1 \ 2 \]
   \[ \text{at within} \]
   within

5. i-a-ʔu nei PAUSE
   \[ 3 \]
   \[ 2 \]
   \[ \text{to-PROP-1.SG here} \]
   me.

Alexander (1893:55-59):

\[ \sigma_{ne} \text{ Text} \]

6. e vero tatautoru riri
   \[ 9 \]
   \[ 1 \ 2 \ 4 \]
   \[ \text{EXIST storm incessant anger} \]
   It is an incessant angry storm
Having examined all of the variations between the two recitations of the non-traditional “E pehe tai vahine” lament, we will next review differences between passages of some corpus texts that have been found to contain similar traditional material.

### 7.5.4 Variation between similar passages from different traditional texts

In addition to the two versions of the complete lament just reviewed, there are a few other places in the corpus where very similar material occurs in more than one text. Typically, this material is traditional, and of the ‘a‘ai (“myth”) genre. Three such passages will now be discussed.

The first appears in (7.5) below, where we find nearly the same material from “Chaotic period” (Henry 1928:340-344) and “Chant of the propping of the sky of Havai‘i” (Emory 1938:58-59). The Henry passage is about 50% longer than the Emory. In both, material is fit into a series of patterns of syntactic and semantic parallelism. Metrical organization is evident, although its use in the Emory passage seems more elaborate.
In the Henry passage, there appears to have been no attempt at syllabic counting organization. Its patterns are no different than what might be expected from a prose passage of similar length:

```
5
3
4
4
5
4
7
4
4
6
6
10
9
9

a 6
b 5
a’ 6
b’ 5
8

a 5
b 4
a’ 5
b’ 4

3
6
5
```

However, the Henry passage does seem to exhibit a certain degree of word stress counting meter. These patterns may be grouped as follows:

```
2
5
5
6

2,2
```
In the Emory passage, there is fairly good coordination of some syllabic counting patterns:
4,4,4,4,4,4
2
3
5
8,8
3,3,3,3,3
2
3
and of patterns of word stress:
5,5
2,2,2
4,4
2,2
3
(7.5) Similar content in an extract from “Chaotic period” (Henry 1928:340-344) and “Chant of the propping of the sky of Havai‘i” (Emory 1938:58-59)

*Henry (1928:340-344):*

<table>
<thead>
<tr>
<th>σne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1. ˈtiʔa ˈaʔe ra</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>2 2 1</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>1 1 0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>stand then there</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Then stood</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. ʔo ˈhoto-</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>1 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROP Hoti-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hoti-</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. i-te-ˈraʔi</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i-te-raʔi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>i-te-raʔi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4. ˈʔei ‘pou ‘mua PAUSE</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1 1 2</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1 1 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EXIST.SBJV pillar front</td>
</tr>
<tr>
<td></td>
<td></td>
<td>as front pillar,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5. ʔo ,ana-ˈfeo</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1 4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- 0 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>PROP Ana-feo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ana-feo</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6. ˈʔei ‘pou ‘muri PAUSE</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>1 1 2</td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>1 1 1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>EXIST.SBJV pillar rear</td>
</tr>
<tr>
<td></td>
<td></td>
<td>as rear pillar,</td>
</tr>
</tbody>
</table>
7. **tiʔamaʔaʔaʔaroa**

   - **Tiʔama-taʔaroa**
   - **Tiʔama-taʔaroa**

8. **ʔei pou 'roto**

   - **EXIST.SBJV pillar within as inner pillar;**

9. **i 'pou-hia-i**

   - **PFV pillar-PASS-AIPART they were made into pillars;**

10. **te 'pou 'tiʔa-raʔa**

    - **the pillar stand-NMLZ the pillar for standing,**

11. **te 'pou 'noho-raʔa**

    - **the pillar sit-NMLZ the pillar for sitting,**

12. **te 'pou faʔaʔiʔere~ʔere-raʔa**

    - **the pillar CAUS-black-NMLZ the pillar for blackening,**

13. **te 'pou ,ʔo;ʔero~ʔero-raʔa**

    - **the pillar debate-NMLZ the pillar for debating,**
14. te 'pou, va; na- 'na-a-ra-a PAUSE
   9 1 1 7
   4 0 1 2
   the pillar orate-NMLZ
   the pillar for oration,

15. ?e
   0 1(0)
   0 0
   and
   and

16. te 'pou 'haere-ra-a PAUSE
   6 1 1 4
   2 0 1 1
   the pillar go-NMLZ
   the pillar for leaving.

17. ?a fa?a- 'roa
   5 1 4
   - 0 2
   INCEPT CAUS-long
   There was extension

18. i te 'tumu- 'nui PAUSE
   6 1 1 4
   3 0 0 2
   DIROBJ the Tumu-nui
   of Tumu-nui.

19. ?a fa?a- 'roa
   5 1 4
   - 0 2
   INCEPT CAUS-long
   There was extension

20. i te 'papa-, raha- 'raha PAUSE
   8 1 1 6
   4 0 0 3
   DIROBJ the Papa-raharaha
   of Papa-raharaha.
21. | ?a   | faʔa-ˈroa  
    | 5    | 1 4  
    | -    | 0 2  
    | INCEPT | CAUS-long  
      | There was extension

22. | i    | te  | 'piha  | PAUSE  
    | 4    | 1 1 2  
    | 2    | 0 0 1  
    | DIROBJ | the  | room  
      | of the room.

23. | ?a   | faʔa-ˈroa  
    | 5    | 1 4  
    | -    | 0 2  
    | INCEPT | CAUS-long  
      | There was extension

24. | i    | te  | ʔopi  
    | 4    | 1 1 2  
    | -    | 0 0 1  
    | DIROBJ | the  | fold  
      | of the fold

25. | a    | ˈraʔi  | PAUSE  
    | 3    | 1 2  
    | -    | 0 1  
    | ALIEN.WEAK | sky  
      | of the sky

26. | i    | te  | 'pou  | fe'nuap  
    | 6    | 1 1 3  
    | -    | 0 1 1  
    | at the pillar land  
      | at the pillars of land

27. 'no: | ha'vaiʔi  | PAUSE  
    | 5    | 1 4  
    | 8    | 1 1  
    | INALIEN.STRONG | Hawaiʻi  
      | of Hawaiʻi.
Emory (1938:58-59):

<table>
<thead>
<tr>
<th>σne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>28. ʔo te 'hotu-</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1 2</td>
</tr>
<tr>
<td>-</td>
<td>0</td>
<td>0 1</td>
</tr>
<tr>
<td>PROP</td>
<td>the Hotu-</td>
<td></td>
</tr>
<tr>
<td></td>
<td>29. o-te-'raʔi</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>-</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>o-te-ra‘i</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o-te-ra‘i</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>30. ṭʔei 'pou 'mua PAUSE</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1 2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1 1</td>
</tr>
<tr>
<td>EXIST.SBJV pillar front</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as front pillar.</td>
<td></td>
<td></td>
</tr>
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<td>31. ʔo ʔa'naia-</td>
<td></td>
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<tr>
<td>4</td>
<td>1</td>
<td>3</td>
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<tr>
<td>-</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>PROP 'Anaia-</td>
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<tr>
<td>'Anaia-</td>
<td></td>
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<td></td>
<td>32. i-te-'raʔi</td>
<td></td>
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<tr>
<td>4</td>
<td>4</td>
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<tr>
<td>-</td>
<td>1</td>
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<tr>
<td>i-te-ra‘i</td>
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<tr>
<td>i-te-ra‘i</td>
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<tr>
<td></td>
<td>33. ṭʔei 'pou 'muri PAUSE</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>1 2</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>1 1</td>
</tr>
<tr>
<td>EXIST.SBJV pillar rear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>as rear pillar.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
34. 'pou 'a:
   2 1 1
   2 1 1
pillar continually
Establish more pillars:

35. te 'pou 'tu: PAUSE
   3 1 1 1
   2 0 1 1
the pillar stand
the pillar for standing.

36. i te 'pou 'noho PAUSE
   5 1 1 1 2
   2 0 0 1 1
DIROBJ the pillar sit
the pillar for sitting,

37. i te 'pou 'rero~'rero PAUSE
   8 1 1 1 5
   4 0 0 1 2
DIROBJ the pillar debate
the pillar for debating,

38. i te 'pou 'na~'naa~pa PAUSE
   8 1 1 1 5
   4 0 0 1 2
DIROBJ the pillar orate
the pillar for oration.

39. e 'fa?a
   3 1 2
   - 0 1
IPFV work on
Work on

40. te 'tumu PAUSE
   3 1 2
   2 0 1
the foundation
the foundation.
As stated above, in regards to comparing versions of similar traditional content, it may be best to only consider oral-formulaic composition a possibility if:

1. The versions do not exhibit verbatim or near verbatim fixity.

2. Differences between the versions are not suggestive of memorization error, such as slipping into prose.

The degree of fixity between the Henry and Emory passages of (7.5) above seems appropriate for parallel versions of oral-formulaically generated traditional content, and in neither version is there any indication of
memorization error. It therefore should be possible that both resulted from a process of composition-in-performance.

The second comparison of similar passages appears in (7.6) below. We note in lines 15 through 22 and lines 28 through 35 a saying by the demi-god Tane to two different audiences. There are introductions to both; the first over twice as long as the second.

We note in the first introduction to Tane’s saying an inverted assonant pattern in lines 1 through 3:

```
a  i
b  e
c  a
d  o
d’ o
c’ a
b’ e
a’ i
```

This is followed in lines 7 through 10 by another inverted assonant pattern:

```
a  e
b  i
c  o-a
d  a-o
d’ a-o
c’ o-a
b’ i
a’ e
```

This is followed in each of lines 11 through 14 by the consonant pattern t-t(t-t). In contrast to the first passage’s introduction, which incorporates the poetic patterns just described, the five short introductory lines of the second passage seem prose-like.

Concerning the subsequent portion of each passage which consists of Tane’s saying, in both versions we find syntactic parallelism, inverted semantic parallelism, syllabic counting meter, and word stress counting meter. While
both versions of Tane's saying are nearly identical, the alternating syllabic
counting pattern of the first is slightly more consistent. It may be grouped as:

\[
\begin{align*}
&a & 6,6 \\
b & 5,6 \\
a' & 6,6 \\
b' & 5,6
\end{align*}
\]

The looser pattern of the second passage may be grouped as:

\[
\begin{align*}
&a & 6,6 \\
b & 4,6 \\
a' & 6,6 \\
b' & 5,6
\end{align*}
\]

where \(b\) and \(b'\) counts do not exactly correspond.

The word stress counting pattern for both versions of Tane’s saying is:

\[
2,2,2,2,2,2,2
\]

(7.6) Similar content in extracts from “Strife and reconciliation between heaven
and earth” (Henry 1928:353-354), and “Tane's voyage and struggle with Atea”
(Henry 1928: 455-458)


*Introduction*

\[
\begin{array}{c|c|c|c|c}
\sigma_{ne} & \text{Stress} & \text{Text} \\
\hline
1 & 'mai & te & 'ta?o \\
4 & 1 & 1 & 2 \\
2 & 1 & 0 & 1 \\
& i & e & a & o \\
& as & the & say & As then said \\
\end{array}
\]
2. o 'tane

3. 1 2
   1 0 1
   o a e
INALIEN.WEAK Tane
Tane

3. i te-'tumu PAUSE

4. 1 3
   1 0 1
   i
to Te-tumu
to Te-Tumu,

4. i-a ta'ere PAUSE

4. 1 3
   1 0 1
   to-PROP Ta'ere
to Ta'ere,

5. ?e
   0 1(0)
   0 0
   and
   and

6. i-a ro'o-te-ro'ro'o PAUSE

7. 1 6
   2 0 2
   to-PROP Ro'o-te-roro'o
to Ro'o-te-roro'o,

7. ?e
   0 1(0)
   0 0
   e
   and
   and

8. i 'to-na ra 'hoa

6 1 2
   1 2
   2 0 1
   0 1
   i o a a oa
to INALIEN.NEUT-3.SG there friend
to his friend
9. ?o ho'ani PAUSE

4 1 3
1 0 1
0 o a i
PROP Hoani
Hoani,

10. ?e
0 i(0)
0 0
e and
and

11. i te ta'?ata PAUSE

5 1 1 3
1 0 0 1
t t t
to the person
to mankind,

12. ?o 'tau a ta'ma?i

7 1 2 3
2 0 1 1
t t t
EXIST that conflict
"That conflict

13. 'no: ?a'tou 'nei

4 1 2 1
4 1 1 1
t t
INALIEN.STRONG 1.PL.INCL here
that we have

14. i te tae'a?e PAUSE

5 1 1 3
1 0 0 1
t t
to the cousin
towards kinfolk,
### Tane's saying

<table>
<thead>
<tr>
<th>Stress</th>
<th>Text</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>15.</td>
<td>e ta'ma?i 'a?e</td>
<td>IPFV battle then if you then battle</td>
</tr>
<tr>
<td>6</td>
<td>1 3 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 1 1</td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>i te po?i~po?i PAUSE</td>
<td>in the morning,</td>
</tr>
<tr>
<td>6</td>
<td>1 1 4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 0 2</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>e 'faite 'a?e</td>
<td>IPFV reconcile then reconcile</td>
</tr>
<tr>
<td>5</td>
<td>1 2 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 1 1</td>
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</tr>
<tr>
<td>18.</td>
<td>i te 'ahi~'ahi PAUSE</td>
<td>in the evening,</td>
</tr>
<tr>
<td>6</td>
<td>1 1 4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 1 2</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>e ta'ma?i 'a?e</td>
<td>IPFV battle then if you then battle</td>
</tr>
<tr>
<td>6</td>
<td>1 3 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 1 1</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>i te 'ahi~'ahi PAUSE</td>
<td>in the evening,</td>
</tr>
<tr>
<td>6</td>
<td>1 1 4</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 0 2</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>e 'faite 'a?e</td>
<td>IPFV reconcile then reconcile</td>
</tr>
<tr>
<td>5</td>
<td>1 2 2</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>0 1 1</td>
<td></td>
</tr>
</tbody>
</table>
22. ite poʔi~poʔi PAUSE
   6
   1 1 4
   2 0 0 2
   in the morning in the morning”.

Henry (1928:455-458):

Introduction

σne Stress Text

<p>| | | | | | |</p>
<table>
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<tr>
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</tr>
</tbody>
</table>

23. ote 'taʔo
   4
   1 1 2
   1 0 0 1
   EXIST the say
   It was said

24. teie
   2
   1
   this
   this

25. a 'tane PAUSE
   3
   1 2
   1 0 1
   ALIEN.WEAK Tane
   by Tane,

26. a 'naʔo 'atu 'ai
   6
   1 2 2 1
   3 0 1 1 1
   INCEPT say thither AIPART
   as he was talking

27. i-a 'atea PAUSE
   4
   1 3
   1 0 1
   to-PROP Atea
to Atea,
**Tane's saying**

<table>
<thead>
<tr>
<th>σ_ne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
</tr>
<tr>
<td>28.</td>
<td>e  ta'ma?i  'a?e</td>
<td>6   1  3  2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   0  1  1</td>
</tr>
<tr>
<td></td>
<td>IPFV battle then</td>
<td>&quot;If you then battle</td>
</tr>
<tr>
<td>29.</td>
<td>i  te 'po?i~'po?i PAUSE</td>
<td>6   1  1  4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   0  0  2</td>
</tr>
<tr>
<td></td>
<td>in the morning</td>
<td>in the morning,</td>
</tr>
<tr>
<td>30.</td>
<td>'?ia 'hau 'a?e</td>
<td>4   1  1  2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   1  1  1</td>
</tr>
<tr>
<td></td>
<td>SBJV peace then</td>
<td>may you make peace</td>
</tr>
<tr>
<td>31.</td>
<td>i  te 'ahi~'ahi PAUSE</td>
<td>6   1  1  4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   0  0  2</td>
</tr>
<tr>
<td></td>
<td>in the evening</td>
<td>in the evening,</td>
</tr>
<tr>
<td>32.</td>
<td>e  ta'ma?i  'a?e</td>
<td>6   1  3  2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   0  1  1</td>
</tr>
<tr>
<td></td>
<td>IPFV battle then</td>
<td>if you then battle</td>
</tr>
<tr>
<td>33.</td>
<td>i  te 'ahi~'ahi PAUSE</td>
<td>6   1  1  4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   0  0  2</td>
</tr>
<tr>
<td></td>
<td>in the evening</td>
<td>in the evening,</td>
</tr>
<tr>
<td>34.</td>
<td>'?ia 'faite 'a?e</td>
<td>5   1  2  2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2   1  1  1</td>
</tr>
<tr>
<td></td>
<td>SBJV reconcile then</td>
<td>may you reconcile</td>
</tr>
</tbody>
</table>
It may be that the second passage's brief, prose-like introduction is indicative of memorization error. Somewhat problematic for such an interpretation is that composition-prior-to-performance and memorization are not normally associated with poems of traditional content.

The third comparison of similar passages is found in (7.7) below. The passages are extracted from two Ta‘aroa-themed versions of the creation, and in both may be observed syntactic, semantic, and sound parallelism, as well as good examples of word stress counting meter. Twenty lines of intervening material from the first passage that do not match any in the second, and that represent distinct poetic structures, have been removed between lines 23 and 24 (10 lines), and lines 37 and 38 (10 lines), in order to facilitate direct comparison of the shared material. It should be noted that the remaining lines of the two texts do not easily compare.

In a stanza comprising the initial eleven lines of the first passage, we find sound and semantic parallelism between the two segments that consist of lines 1 through 6 and lines 7 through 11. The last line of each begins with ʻa: (ʻas”) followed by a word that is intensified either by reduplication or the adverb noa (ʻcontinually”). The line ends with the end-rhyme pattern a-i colon-boundary.

In addition to parallelism of those segments’ final lines, the segments demonstrate a degree of inverted matching. The last word of the first segment, mai (“hither; like”) is repeated as the first word of the second segment. In the first segment, a line consisting of i roto (“within”) precedes a line containing the word paʻa (“shell”). In the second segment this order is reversed. The syllable count of the last two lines of the first segment and the first two lines of the second forms an inverted pattern: 3-6-6-3.
After the first passage’s initial stanza, of perhaps greatest interest is the word stress counting pattern in lines 12 through 37, where we note semantic and metrical organization in the itemization of things not yet present in the universe:

Six list items relating to the physical world:

2,2,2,2,2,2

Seven list items relating to people or animals:

3,3,3,3
2,2
3

In the lines that begin the second passage, we encounter two patterns of inverted assonance that overlap. The first, slightly looser, pattern is found in lines 76 through 78:

a  i-o-o
b  a
 c o-o
d  a
e  a
d’ a
c’ o
b’ a
a’ i-o-o

The second pattern that partially overlaps with the first, beginning at d of the first inverted pattern, is found in lines 77 through 79:

a  a-a-a
b  o-a
c  i
d  o
d’ o
c’ i
b’ o-a
a’ a-a-a
In the second passage, semantic and word stress counting organization of things not yet present in the universe is as follows, found in lines 87 through 109:

Four items relating to the physical world:
2,2,2,2

A parenthetical comment:
5

Four items relating to people or animals:
2,2,2,2

A list item that encompasses all living things:
1,3

A couplet of rhyming and semantically related physical world items, tai (“sea water”) and vai (“fresh water”), which perhaps act as a coda for the list:
2,2

The second passage ends, in lines 139 through 143, with the following inverted word stress counting pattern:

a  2
b  3
c  4
b’ 3
a’ 2
Similar content in extracts from "Creation of the world" (Henry 1928:336-338), and "Another version of the creation" (Henry 1928: 339-340)

Henry (1928:336-338):

\[\sigma_ne\] Stress Text

1. i \(\text{'parahi}\)
   4
   1 3
   1 0 1
   PFV sit
   He sat

2. \(\text{,ta?a-'roa}\)
   4
   2
   Ta'aroa
   Ta'aroa

3. i \(\text{'roto}\)
   3
   1 2
   1 0 1
   at within inside

4. i \(\text{'to:-na}\) \(\text{'pa?a} PAUSE\)
   5
   2
   0 1 1
   at INALIEN.NEUT-3.SG shell his shell,

5. \(\text{'mai te 'po:}\)
   3
   2
   1 0 1
   like the night it was as a night

6. \(\text{'a: ,?iu~?iu 'mai} PAUSE\)
   6
   4
   1 2 1
   ai
   as deep hither that lasted for ages.
7. 'mai te hu'oro ra
   6
   1 1 3 1
   2 1 0 1
   like the egg there
   Like an egg was

8. te 'pa?a a
   3 1 2
   1 0 1
   the shell
   the shell

9. i 'roto
   3 1 2
   1 0 1
   at within
   within

10. i te 'a?are
    5 1 1 3
    1 0 0 1
    at the expanse of heaven
    the expanse of heaven

11. 'a: 'ohu 'noa 'ai PAUSE
    6 1 2 2 1
    4 1 1 1 1
    ai
    as rotate continually AIPART
    as it continually rotated.

12. 'a?ore
    2
    2
    - 1
    PFV.NEG
    There was no

13. 'ra?i PAUSE
    2 2
    2 1
    sky
    sky.
There was no land.

There was no sea.

There was no moon.
21. 'ra: PAUSE
   1
   2
   1
   sun
   sun.

22. 'ʔaore
   2
   -
   1
   PFV.NEG
   There were no

23. 'fetu PAUSE
   2
   2
   2
   1
   star
   stars.

... 

24. 'ʔaore
   2
   -
   1
   PFV.NEG
   There were no

25. me'tua 'ta:ne PAUSE
   5
   3
   2
   3
   1
   parent
   man
   fathers.

26. 'ʔaore
   2
   -
   1
   PFV.NEG
   There were no

27. me'tua va'hine PAUSE
   6
   3
   3
   3
   1
   parent
   woman
   mothers.
There were no older siblings.

There were no older siblings.

There were no sisters.

There were no human beings.

There were no human beings.
35. 'pua?a  PAUSE
   3
   2  1
   pig
   pigs.

36. 'ʔaore
   2
   -  1
   PFV.NEG
   There were no

37. 'ʔu:'ri:  PAUSE
   2
   3  1
   dog
   dogs.

...  

38. 'a  'tae  ra
   3
   1  1  1
   1  0  1  0
   INCEPT  arrive  there
   When it came

39. i  te  'ho?e  'tau  PAUSE
   5
   2  1  1  2  1
   0  0  1  1
   at  the  one  time.period
   to  a  certain  period  of  time,

40. 'ua  pa'te:  'iho  ra  PAUSE
   6
   2  1  2  2  1
   0  1  1  0
   PFV  strike  then  there
   he  struck  it

41. 'e
   0
   0
   0
   and
   and
42. ʔa'maha PAUSE
3
1
crack
it cracked,

43. ʔhuru ʔu:puta ro: ʔa?e ra PAUSE
9
2 3 1 2 1
4 1 1 1 0
condition opening ant then there
the opening becoming as one for ants.

44. ʔua u'nuhi ʔmai ra
6
1 3 1 1
2 0 1 1 0
PFV slip hither there
He slipped,

45. Ta?a-ˈroa
4
2
2
Ta'aroa
Ta'aroa,

46. i ˈvaho PAUSE
3
1 2
1 0 1
at outside
outside,

47. ˈti?a ˈatu ra PAUSE
5
2 2 1
2 1 1 0
stand thither there
stood

48. i ˈni?a ˈiho
5
1 2 2
2 0 1 1
at above adjacent
upon
49. i 'to:-na ra 'pa?a PAUSE
   6 1 2 1 2
   2 0 1 0 1
   at INALIEN.NEUT-3.SG there shell
   his shell.

50. 'hi?o 'iho ra 'e: PAUSE
   6 2 2 1 1
   3 1 1 0 1
   see then there that
   He saw then that

51. ?o 'oia a'na?e ra PAUSE
   7 1 2 3 1
   2 0 1 1 0
   EXIST 3.SG only there
   there was only him.

52. 'o?aore
   2 1 1
   PFV.NEG
   There was no

53. e _muhu~'muhu-ra?a PAUSE
   7 1 6
   2 0 2
   EXIST murmur-NMLZ
   murmur of sound.

54. e 'po: a'na?e ra
   6 1 1 3 1
   2 0 1 1 0
   EXIST night only there
   There was only night

55. 'to: 'vaho PAUSE
   3 1 2
   2 1 1
   INALIEN.NEUT outside
   outside.
He then called out,

Who

is there above”?

There was no

voice.

Who

is there below”?
There was no voice.

"Who is there seaward"?

There was no voice.
70. te-i 'uta 'na: 'e: PAUSE
   5  
   4  

    the-at inland PROX.2 oh is there inland"?"

71. 'ʔaore
   2  
   1  

    PFV.NEG
    There was no

72. 'reo PAUSE
   2  
   1  

    voice
    voice.

73. 'te: 'pi:,na?i~'na?i 'noa 'mai ra
   10  
   6  

    DUR echo continually hither there
    It was continually echoing,

74. 'to:-na 'iho 'reo PAUSE
   6  
   3  

    INALIEN.NEUT own voice
    his own voice.

75. ,ti:'ra: 'atu 'ai PAUSE
   5  
   4  

    no.more thither AIPART
    That was all.
Henry (1928:339-340):

<table>
<thead>
<tr>
<th>σne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>76.</td>
<td>i</td>
<td>'noho 'maoro</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>i</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>PFV</td>
<td>dwell</td>
<td>long</td>
</tr>
<tr>
<td>He</td>
<td>dwelt</td>
<td>long</td>
</tr>
<tr>
<td>77.</td>
<td>'na:</td>
<td>ūta?a-'roa</td>
</tr>
<tr>
<td>5</td>
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<td>4</td>
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<td>1</td>
<td>2</td>
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<tr>
<td>a</td>
<td>a</td>
<td>a a o</td>
</tr>
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<td>ALIEN.STRONG</td>
<td>Ta‘aroa</td>
<td></td>
</tr>
<tr>
<td>Ta‘aroa,</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

78. i 'roto

3

1

2

1

0

i

o

at

within

79. i 'to:-na ra 'pa?a PAUSE

6

1

2

1

2

1

0

i

o

a

a

at

INALIEN.NEUT -3.SG there shell

his shell;

80. 'mai te hu'oro 'mau ia

7

1

1

3

1

1

1

like

the
egg

true

ANAPH

truly like an egg was

81. te ūmene-'mene PAUSE

5

1

4

2

0

2

the round

its roundness.
82. \( e \)
    0
    1(0)
    0
    0
    and
    And

83. \( \text{\'te: t\text{"a};mino~minor\text{ra}} \)
    7
    1 5 1
    4
    1 2 0
    DUR turn there
    it was turning

84. \( \text{i \'roto} \)
    3
    1 2
    1 0 1
    at within
    within

85. \( i \text{ te \"\text{\'aere} \)
    5
    1 1 3
    1 0 0 1
    at the expanse of heaven,
    the expanse of heaven,

86. \( \text{\'mai te \'po: t\text{"ini~\text{"ini} \'mai \text{'a}: PAUSE} \)
    9
    1 1 1 4 1 1
    6
    1 0 1 2 1 1
    like the night uncountable like continually
    which was as an un-ending night.

87. \( \text{\'\text{\'aore} \)
    2
    2
    -
    1
    PFV.NEG
    There was no

88. \( \text{\'ra: PAUSE} \)
    1
    1
    2
    sun
    sun.
There was no moon.

There was no land.

There were no mountains.

All was in continual commotion.
There were no human beings.

There were no pigs.

There were no chickens.
103. ?u'ri: PAUSE
2  2
   1
dog
dogs.

104. 'ʔaore
2  2
 -  1
   PFV.NEG
   There were no

105. 'peu ʔora~ora PAUSE
6  2  4
  4  1  2
   thing  living
   living things.

106. 'ʔaore
2  2
 -  1
   PFV.NEG
   There was no

107. 'tai PAUSE
1  1
  2  1
     ai
     sea.water
     sea water.

108. 'ʔaore
2  2
 -  1
   PFV.NEG
   There was no

109. 'vai PAUSE
1  1
  2  1
     ai
     fresh.water
     fresh water.
110. ?ia    'tae    ra
3          1 1 1
1          0 1 0
 SITU    arrive    there
     When it came

111. i     te      'hoʔe     'tau          PAUSE
5         1 1 2 1
2         0 0 1 1
     at    the    one    time,period
to a certain period of time,

112. 'te:    'pata~'pata    ra
6         1 4 1
3         1 2 0
 DUR    tap.repeatedly    there
     He tapped repeatedly,

113. 'taʔa~'roa
4         4
2         2
 Ta’aroa
 Ta’aroa,

114. i      'to:-na          ra      'paʔa
6         1 2 1 2
2         0 1 0 1
     at    INALIEN.NEUT -3.SG    there    shell
     on his shell

115. i       'roto
3         1 2
1         0 1
     at       within
within

116. i      'to:-na        'noho-raʔa    'piri
9         1 2 4 2
3         0 1 1 1
     at    INALIEN.3.SG    dwell-NMLZ    almost.touching
     his confined dwelling,
Then it cracked.

Then it shattered.

He slipped out.

He stood for a while

at above adjacent on top of

at the shell.
124. ?e
0 1(0)
0 0
and
And

125. ?ua 'pi?i 'atu ra PAUSE
6 1 2 2 1
2 0 1 1 1
PFV call thither there
he called out,

126. ?o 'vai
2 1 1
- 0 1
PROP who
“Who

127. te-i 'ni?a 'na: 'e: PAUSE
5 1 2 1 1
4 0 1 1 1
the-at above PROX.2 oh
is there above”?

128. ?o 'vai
2 1 1
- 0 1
PROP who
“Who

129. te-i 'raro 'na: 'e: PAUSE
5 1 2 1 1
4 0 1 1 1
the-at below PROX.2 oh
is there below”?

130. 'aore
2 2
1 1
PFV.NEG
There was no
131. 'reo  PAUSE
2
1
voice
voice

132. i  te  pa'rau-ra?a  'mai
7
1  1  4  1
2  0  0  1  1
DIROBJ  the  speak-NMLZ  hither
speaking back.

133. 'o  'vai
2
1  1
-  0  1
PROP  who
“Who

134. te-i  'tai  'na:  'e:  PAUSE
4
1  1  1  1
4  0  1  1  1
the-at  seaward  PROX.2  oh
is there seaward”?

135. 'o  'vai
2
1  1
-  0  1
PROP  who
“Who

136. te-i  'uta  'na:  'e:  PAUSE
5
1  2  1  1
4  0  1  1  1
the-at  inland  PROX.2  oh
is there inland”?

137. 'aore
2
1
PFV.NEG
There was no
The two passages just compared differ slightly in the traditional material they include, and somewhat significantly in their poetic organization. However, both are strong examples of early oral poetry. Similar to passages of (7.5) above, their degree of fixity appears to be appropriate for what might be expected of parallel versions of oral-formulaically generated traditional content. Moreover, neither contains evidence of a faulty memorized retelling of a single
correct standard. It seems quite plausible that both may be representative of some style of composition-in-performance.

7.5.5 Review of information relating to fixity of text

Across a wide range of Polynesian oral poetry, there have been many descriptions of memorization and verbatim recitation. It would not be unexpected, therefore, for non-traditional Tahitian oral poetry to have been similarly composed prior to performance, and subsequently memorized.

Little information accompanies Orsmond transcriptions regarding the degree to which recitations of multi-credited texts demonstrate fixity. Although, from the source material, two recitations of one particular text are described as not being verbatim, it is never explicitly stated that any recitations are, in fact, identical.

The lament discussed in 7.5.3, “E pehe tai vahine”, is of a genre that does not incorporate traditional material. It seems quite plausible that the differences between its recitations noted in (7.2), (7.3), and (7.4) are the result of faulty memorization on the part of the Ahnne version poet. If true, that may imply that the lament was composed prior to performance and memorized. Somewhat problematic is the non-essential repetition of i roto of line 9 of (7.4), which is normally suggestive of a process of composition-in-performance of traditional material.

It is conceivable that some of the lament’s inventoried differences are the result of oral-formulaic flourish by the Alexander version poet. Somewhat problematic is that the lament’s content is non-traditional, and therefore such composition-in-performance would not have been anticipated.

The three passages compared in section 7.5.4 are of the ‘a ‘ai (“myth”) genre, and consist of traditional material. The passages compared in (7.5) and (7.7) may represent a process of composition-in-performance. However, the second version’s introduction to Tane’s saying in (7.6) is prose-like; perhaps indicative of memorization error.
Having examined information pertinent to textual fixity, we will next attempt to determine the degree to which corpus data incorporating traditional content conform to the predictions of Peabody’s tests for oral epic composition, which were discussed above in the literature review.

7.6 Peabody’s tests for oral epic composition

Berkeley Peabody proposes five tests for determining whether or not a poem fits into the oral epic genre. The tests derive from a study of Greek epics, and represent a somewhat strong claim by proponents of the Oral Formulaic Theory that it is possible to identify such compositional signatures.

Even though the traditional oral poems of the pre-1850 corpus are not epic in length, nor do they employ fixed meter, if they were to satisfy most of these tests, then it might be argued that their manner of composition is in some ways representative of an oral-formulaic process. The five tests are for consistency of phoneme, formula, enjambment, theme, and song. Evidence concerning the degree to which each of these tests is satisfied by the Tahitian material will be presented below.

7.6.1 Consistency of phoneme

Consistency of phoneme refers to the “rhyme, alliteration, assonance”, and other types of “redundancy in the use of sounds” that are typical of oral styles (Peabody 1975:3). The Tahitian use of sound parallelism that was discussed in chapter 6, and which was found to be especially ubiquitous in traditional content of ‘a ‘ai (“myth”) genre texts, would seem to satisfy the requirements of this test; at least in regards to the ‘a ‘ai genre.

7.6.2 Consistency of formula

Consistency of formula refers to repetition of phrases and morphemic clusters (Peabody 1975:3). Its primary role for the oral epic seems to be to assist in requirements of meter. As mentioned in the literature review, Milman
Parry coined the term *thrift*, which he defines as “the degree in which [a system of formulae] is free of phrases which, having the same metrical value and expressing the same idea, could replace one another” (Parry 1971:276). Foley remarks, “Within the same formula type one finds a wide selection of phrases for different gods and heroes, but very few instances of more than a single formula of the same metrical definition for a single character”. The practicality that underlies thrift, then, is that a single metrical solution for any given point in the performance saves the oral poet from needing to make a choice (Foley 1988:24-25).

However, Dell Hymes makes note of some uses of formulae among Native Americans of the Pacific Northwest which appear unrelated to any motivation described by Peabody:

Prayers and exhortations at ceremonies may be full of [formulae], not to meet formal constraint, but to invoke tradition. Narratives employ them at major junctures, such as openings and closings, and there are classes of words to be expected as markers. (Hymes 1994:330)

In the Tahitian material, formulae seems to be restricted to poetic names and epithets, which were discussed above in chapter 6. Nowhere does their use appear motivated by a need to fulfil metrical count. However, they do exhibit strong patterns of sound parallelism, possibly analogous to those of some Greek stock epithets. They may have served the early Tahitian poet as ready-made islands of poetry, able to assist the compositional process when called upon as mini poems within a poem.

It is also possible that these names and epithets were rendered poetic simply as a means of honouring, or signalling the importance of, the gods, islands, and other named entities to which they give reference; a motivation quite removed from that of facilitating composition-in-performance. Given the very limited use of formulae in the Tahitian material, it is not evident that this test has been fully satisfied.

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80 See, for example, (6.37) and (6.41).
81 See, for example, (6.42) and (6.43).
7.6.3 Consistency of enjambment

This test should perhaps rather be described as consistency of enjambment sparsity. It claims that in an oral text, enjambment will be infrequent. If it occurs, it will often be syntactically unessential (Peabody 1975:4).

Lord remarks that of the 2,400 lines of a Yugoslav epic, “44.5 per cent showed no enjambment, and 40.6 per cent showed unperiodic enjambment (this is, the sense was complete at the end of the line, but the sentence continues). Only 14.9 per cent involved necessary enjambement”. Parry, Lord notes, refers to the sparseness of enjambment as “an adding style” (Lord 1960:54), such as was discussed above in 7.4.

From a review of the corpus, it appears that Tahitian counting meter requires necessary enjambment even less frequently than the Yugoslav epic’s 14.9%. Enjambment consistently occurs when several trailing modifiers of an NP split off to form their own line, 82 but rarely otherwise.

It is difficult to arrive at a percentage of Tahitian enjambment frequency. As the application of meter in the corpus is somewhat sporadic, it is sometimes unclear as to whether many of the shorter patterns represent poetic intent. However for longer patterns, where such intent would appear to be sufficiently demonstrated, the frequency of necessary enjambment is generally less than 10%.

It should also be mentioned that in comparing frequencies of necessary enjambment, the requirement would perhaps naturally be greater for European fixed meter epics. The Tahitian meters’ organizational freedom of pattern structure should significantly reduce its necessity. Where feasible, modifying the counting pattern would serve to preclude its imposition.

In a strict sense, therefore, this test, developed out of a study of European epics, is perhaps not applicable to the corpus data. However, if the Tahitian material were evaluated on its own terms, then a much more generalized test of consistency of metrical line, for those lines where a counting meter seems to have been applied, appears to have been satisfied. Except for the role of enjambment just mentioned in the case of several trailing NP modifiers,

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82 See, for example, lines 22 and 23 of (5.32).
Tahitian counting meters are very consistent in their adherence to the metrical line.

### 7.6.4 Consistency of theme

Thematic consistency refers to “lexical clumps” that appear in different passages within and across the oral texts of a tradition (Peabody 1975:4). Concerning the manner by which such recurring situations may be discovered, Lord remarks, “the method is the same used for formula analysis; but the units are larger and exact word-for-word correspondence is not necessary” (Lord 1960:145).

Just such a theme, fairly common in corpus texts of the ‘a ʻai (“myth”) genre, concerns interaction between a messenger and a king or god. In a typical passage, one or a group of messengers travels to the location of one or a group of kings or gods. 83 The messenger is welcomed by the king or god and asked if an errand has brought him, which is responded to in the affirmative. The king or god then directs the messenger to state his errand.

From a review of seven passages in five texts, lexical and semantic elements common to some or all are listed, in their sequence of occurrence, in table 7.1:

**Table 7.1. Elements of the theme Interaction between messenger and king or god, from a review of seven passages**

<table>
<thead>
<tr>
<th>Element</th>
<th>Passages containing this element</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The word ʻaʻerere (“messenger”)</td>
<td>7 of 7</td>
</tr>
<tr>
<td>2. Followed by the name of the messenger</td>
<td>6 of 7</td>
</tr>
<tr>
<td>3. The location of the king or god whither the messenger has travelled</td>
<td>5 of 7</td>
</tr>
<tr>
<td>4. The words <em>i te aro o</em> (“to the presence of”) followed by the name of the king or god</td>
<td>4 of 7</td>
</tr>
</tbody>
</table>

83 For simplicity, the parties in this theme will be referred to hereafter in the singular.
5. The king or god says manava ("welcome")

6. Name of the messenger welcomed

7. Messenger queried on whether he has ʔa tahiti ("an errand") or ʔa tahiti nui ("a great errand")

8. King or god adds i tae mai ai ("for which you have arrived")

9. Name or location of king or god

10. Messenger states that he has a tere nui ("great errand")

11. Messenger adds i tae mai ai ("for which I have arrived")

12. Name or location of king or god

13. The king or god directs: ʔahiri ("present it")

Presented in (7.8), (7.9), (7.10), and (7.11) below are four of the seven passages reviewed. They are generally typical of the ten occurrences of this theme that were discovered in the corpus.

The passage in (7.8) contains elements 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, and 13. With only element 4 missing, it seems quite complete. Full information concerning messenger names, the deity’s location, and that an errand is the visit’s motivation is first presented, and then repeated.

(7.8) Extract from “Exchange of sexes between Atea and Faahotu and production of more gods” (Henry 1928:372-374)

1. rere atu ra
   fly thither there
   They did fly over there

2. na: ʔa:rere PAUSE
   PL messenger
   the messengers.
3. ?o ti?a-o-uri
   PROP Ti’a-o-uri
   Ti’a-o-uri

4. ?e
   and
   and

5. ?o ti?a-o-atea PAUSE
   PROP Ti’a-o-atea
   Ti’a-o-atea,

6. ?e: tae roa atu ra
   and arrive completely thither there
   and they arrived all the way there

7. i te vai ora
   to the fresh-water living
   to the living waters

8. o tane PAUSE
   INALIEN.WEAK Tane
   of Tane.

9. mamanava ?orua PAUSE
   welcome 2.DU
   “Welcome to you,

10. ?o ti?a-o-uri
    PROP Ti’a-o-uri
    Ti’a-o-uri

11. ?e
    and
    and

12. ?o ti?a-o-atea PAUSE
    PROP Ti’a-o-atea
    Ti’a-o-atea.
13. ?a tahi tere
   NUMB one errand
   Is there a errand

14. i tae mai ai ?o:rua
    PFV arrive hither AIPART 2.DU
    for which you have arrived

15. i te vai ?ai vaha
    at the fresh-water eat mouth
    at the mouth-eating waters

16. o tane nei PAUSE
    INALIEN.WEAK Tane here
    of Tane”?

17. e tere nui PAUSE
    EXIST errand great
    “It is a great errand,

18. e tere tapiho?o
    EXIST errand exchange
    it is an errand of exchange

19. to: ma:ua
    INALIEN.NEUT 1.DU.EXCL
    that we have,

20. i tae mai ai
    PFV arrive hither AIPART
    for which we have arrived

21. i-a tane nei PAUSE
    to-PROP Tane here
    to here where you are Tane”.

22. ?ahiri PAUSE
    present.it
    “Present it”.

The passage in (7.9) below is also fairly verbose, containing elements 1, 2, 4, 5, 6, 7, 8, 10, 11, 12, and 13; all but elements 3 and 9.
(7.9) Extract from “Attempt to raise the sky” (Henry 1928:405-407)

1. fano atu ra
   travel thither there
   He travelled,

2. te ʔarere
   the messenger
   the messenger

3. ʔo horo-fanaʔe
   PROP Horo-fana’e
   Horo-Fana’e,

4. i te aro
   to the presence
   to the presence

5. o te tumu-nui
   INALIEN.WEAK the Tumu-nui
   of Tumu-nui

6. ʔe
   and
   and

7. o rua-tupua-nui PAUSE
   INALIEN.WEAK Rua-tupua-nui
   of Rua-tupua-nui.

8. e manava ta: raua PAUSE
   EXIST welcome ALIEN.NEUT 3.DU
   They welcomed him.

9. tena: ʔoe
   DEM.PROX.2 2.SG
   “Is that you

10. horo-fanaʔe PAUSE
    Horo-fana’e
    Horo-fana’e”? 

11. teie au PAUSE
    this 1.SG
    “It is I”. 

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12. ?a tahi tere nui
   NUMB one errand great
   “Is it a great errand

13. ta: ?oe
   ALIEN.NEUT 2.SG
   of yours

14. i tae mai ai PAUSE
    PFV arrive hither AIPART
    for which you have arrived”?

15. e tere nui
    EXIST errand great
    “It is a great errand

16. to:-?u
    INALIEN.NEUT-1.SG
    of mine

17. i tae mai ai
    PFV arrive hither AIPART
    for which I have arrived

18. i te aro
    at the presence
    at the presence

19. o te tumu-nui
    INALIEN.WEAK the Tumu-nui
    of Tumu-nui

20. ?e
    and
    and

21. o rua-tupua-nui nei PAUSE
    INALIEN.WEAK Rua-tupua-nui here
    of Rua-tupua-nui”.

22. ?ahiri PAUSE
    present
    “Present
The passage in (7.10) contains elements 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10; with latter elements 11, 12, and 13 missing. Starting out somewhat verbosely, it has a feeling of being cut short.

(7.10) Extract from “Cutting the sinews of the fish” (Henry 1928:439-443)

1. te ṭarere
   the messenger
   The messenger

2. ?o ta-fa?i PAUSE
   PROP Ta-fa‘i
   Ta-fa‘i,

3. ?e
   and
   and

4. te tau?a a?e
   the bosom.friend only
   his only bosom friend

5. ?o ?ohu-na PAUSE
   PROP ‘Ohu-na
   ‘Ohu-na,

6. ?a rere raua
   INCEPT fly 3.DU
   they flew

7. i to?a
   to south
   southward

8. i tupuai
   to Tupuai
   to Tupuai
9. i te aro
to the presence
to the presence

10. o te ari'i marere-nui-marua-to'a PAUSE
INALIEN.WEAK the king Marere-nui-marua-to'a
of King Marere-nui-marua-to'a.

11. ?a ?ite mai
INCEPT see hither
When he saw them,

12. marere-nui PAUSE
Marere-nui
Marere-nui,

13. ??ua ta?o mai ra PAUSE
PFV say hither there
he said,

14. mamava ??oruaua PAUSE
welcome 2.DU
“Welcome to you,

15. vai-ta-fa'i
Vai-ta-fa'i
Vai-ta-fa'i

16. ?e
and
and

17. ??ohu-na PAUSE
‘Ohu-na
‘Ohu-na”.

18. ??a tahi tere nui
NUMB one errand great
“Is it a great errand

19. i tae mai ai
PFV arrive hither AIPART
for which you have arrived
20. i toʔa
to south
southward

21. i tupuai nei PAUSE
in Tupuai here
here in Tupuai”?

22. e tere nui ia PAUSE
EXIST errand great ANAPH
“It is a great errand”.

The passage in (7.11) contains elements 1, 2, 3, 5, 7, 10, and 13. This
may represent an abbreviated version of the theme, as six of the total of thirteen
possible elements are lacking.

(7.11) Extract from “Tane, the man-god” (Henry 1928:84-85)

1. ?a hoʔi
INCEPT return
When they did return

2. na: ?arere PAUSE
PL messenger
the messengers,

3. ?o tiʔa-o-uri
PROP Ti’a-o-uri
Ti’a-o-uri

4. ?e
and
and

5. ?o tiʔa-o-atea PAUSE
PROP Ti’a-o-atea
Ti’a-o-atea,

6. i vai-tu:-po:
to Vai-tu-po
to Vai-tu-po
7. i-a ta?a-roa ra PAUSE
   to-PROP Ta’aroa there
   over to where Ta’aroa was,

8. mamava mai ra
   welcome hither there
   he did welcome them,

9. ta?a-roa PAUSE
   Ta'aroa
   Ta’aroa.

10. ?a tahi a: tere PAUSE
    NUMB one still errand
    “Is there still another errand”?

11. ?e: PAUSE
    yes
    “Yes,

12. ?a tahi a: tere nui
    NUMB one still errand great
    there is still another great errand

13. to: ma:ua PAUSE
    INALIEN.NEUT 1.DU.EXCL
    that we have”.

14. ?ahiri PAUSE
    present.it
    “Present it”.

The presence in multiple texts of this *Interaction between messenger and king or god* theme suggests that, to some degree, Peabody’s thematic consistency test has been satisfied. However, it is the only recurring theme thus far detected in the pre-1850 corpus.
7.6.5 Consistency of song

Consistency of song refers to the consistency of an oral text in its retelling. According to Peabody, there should be close repetition of the entire composition (Peabody 1975:4). Creed observes that of the five consistency tests, this last one most clearly demonstrates the diachronic depth of an oral tradition (Creed 1981:205).

The only corpus text for which two recitations exist is the “E pehe tai vahine” lament, discussed above in 7.5.3. However, in regards to this test, it should probably be excluded from consideration as it does not incorporate traditional content. As has been mentioned, the Oral Formulaic Theory, and by extension all of Peabody’s tests, only purport to apply to traditional material (see Lord 1987:327).

The three passages compared in section 7.5.4 above represent shared traditional content. Were this test simply constrained to the content of those passages, it would seem to have been satisfied. The complete oral poems from which the passages derive, however, differ so substantially as to be identified by Henry as separate texts. Lacking multiple recitations for any text of traditional content, there would not seem to be enough information to reach a determination regarding this test.

7.6.6 Review of information relating to Peabody’s tests

It would seem that the Tahitian material generally satisfies Peabody’s consistency of phoneme test. It may partially satisfy the consistency of formula test, but only if the poetic names and epithets had a role in facilitating a process of composition-in-performance. Without further evidence, this would be difficult to establish.

The early oral poetry makes use of counting meters regulated by freely organized external patterns. Such may lessen the requirement for enjambment vis-à-vis the fixed meter lines of European oral epics. On its own terms, however, the Tahitian material seems to satisfy a generalized notion of consistency of metrical line.
The *Interaction between messenger and king or god* theme appears to fully satisfy the notion of consistency of theme. Problematic in regards to this test, however, is that it is the only recurring theme thus far discovered in the corpus.

Without multiple recitations of poems of traditional content, it would seem that no determination can be made regarding the consistency of song test.

### 7.7 Conclusion

In this chapter, we have discussed aspects of the early poetry that may be relevant as to whether some or all of it was composed prior to performance and memorized by skilled reciters, or composed in performance by poets who had acquired an oral-formulaic linguistic capacity. The admittedly sparse evidence will be summarized below.

Evidence justifying the possibility of composition-prior-to-performance:

1. Whereas the Oral Formulaic Theory purports to only apply to traditional material (see Lord 1987:327), most *anau* (“lamentation”), *fa ʻuteni* (“praise”), *fa ʻatara* (“praise with challenge”) and *rauti* (“battle address”) genre texts do not incorporate traditional content. Therefore, corpus poetry of these genres is more likely to have been the product of another process; possibly of composition-prior-to-performance and memorization.

2. The importance of textual fixity has been documented for many Polynesian traditions, where oral poetry is often composed prior to performance, and later memorized by skilled reciters.

Evidence suggestive of composition-prior-to-performance:

1. The two versions of the non-traditional “E pehe tai vahine” lament are nearly verbatim, which is suggestive of memorization.

2. Concerning variations between the two versions of the lament, the three apparently missing lines from the Ahnne version of (7.2) and the absence of metrical organization in the Ahnne version of (7.4) may be indicative of memorization error. Slightly problematic is that the non-essentially recurring, and therefore potentially oral-formulaic, *i roto* from the Alexander version of (7.4) would be somewhat unexpected of a poem not composed in performance.
3. The prose-like introduction to Tane’s saying in the first passage of (7.6) seems consistent with memorization error. Problematic is that the content of that passage is traditional, and so a process of composition involving memorization would not have been expected.

Evidence justifying the possibility of composition-in-performance:

1. The material incorporated into *paripari* (“description”) and religious genre poetry is mostly traditional. The content of ‘a ‘ai (“myth”) genre poems appears to be entirely traditional. Although traditional content is not in and of itself indicative of composition-in-performance, it is generally considered a prerequisite.

2. Details of authorship and ownership are not provided for any transcription of the corpus. Although it may be that such information was simply left undocumented by European transcribers, its absence leaves open the possibility of composition-in-performance.

3. While we are aware of two recitations of a single text that are described as “nearly the same”, it is never explicitly stated in Henry that any two recitations are, in fact, verbatim. This leaves open the possibility that multiple versions of texts were within a range of fixity appropriate for composition-in-performance.

4. It is perhaps no coincidence that recurrences of formulae and theme, limited though they may be, occur only in the corpus’ traditional material. As previously mentioned, the Oral Formulaic Theory only purports to apply to traditional content (see Lord 1987:327).

5. In regards to ‘a ‘ai (“myth”) genre traditional content, no Peabody test for oral-formulaic composition was discovered to have failed. The consistency of phoneme test appears to have succeeded, and it seems likely that the consistency of formula, enjambment, and theme tests partially succeeded. There is insufficient data regarding the consistency of song test.

6. The very loose fit between early Tahitian poetry incorporating traditional content and Peabody's rules may be due in part to conceivably greater metrical challenges inherent to fixed meter poetry, and to text length:

a. As noted in the literature review, the primary function of formulae in the European oral epic is to inject pre-determined metrical counts that satisfy the requirements of a fixed line. Perhaps the freedom of counting pattern organization enjoyed by a Tahitian poet lessens a formula's metrical utility; thereby reducing it to a less essential role.
b. The Tahitian texts, with perhaps one exception\textsuperscript{84} are not epic in length. Perhaps there is a relationship between short length and paucity of recurring themes.

Evidence suggestive of composition-in-performance:

1. Each of the ‘a ‘ai (“myth”) genre stories is built up in an additive, paratactic manner. Such is also the construction style of the oral-formulaic epic.

2. The passages of (7.5) and (7.7) above incorporate nearly the same traditional content, and demonstrate several characteristics that would be expected of an oral-formulaic process:

   a. They are not verbatim, or nearly so. Rather, their degree of fixity seems appropriate for a process of composition-in-performance.

   b. Versions demonstrate different patterns of meter and parallelism, but are consistently poetic throughout; especially the compared passages of (7.7).

   c. There is no indication of memorization error.

3. Evidence that is external to the corpus material is the discovery of patterns of syllabic counting meter in the rhetoric of a modern-day blogger, which was discussed above in chapter 5. If such represents a linguistic poetic capacity, as appears likely, then it would seem reasonable to infer inheritance from the early era. Greater study of modern Tahitian poetry and poetic language use would be needed in order to advance this proposal further.

From the sparse evidence reviewed, it seems likely that both memorization and composition-in-performance played roles in the early compositional process, perhaps along lines of non-traditional and traditional content. A scenario that might fit all of the evidence is that poems of non-traditional content were composed prior to performance and memorized, and some of their reciters were poets capable of composing in performance. Some of these might have added occasional poetic flourish, which could explain the non-essential \textit{i roto} of the Alexander version of (7.4). Poetry incorporating traditional content may typically have been a product of a uniquely Tahitian style of composition-in-performance, except when delivered by novice oral poets. Some of these

\textsuperscript{84} As has been mentioned, the possible exception is the 9,265 word ‘a ‘ai (“myth”) genre text \textit{Te parau a Honoura} (“The tale of Honoura”) (see Henry 1895:256-291).
may have relied upon memorization, which could explain the apparent lapse into prose in regards to the introduction portion of the first passage in (7.6).

However, it would seem that any proposed scenario must remain conjecture, unless sufficient additional information from the early era comes to light, or unless the early manner of composition might be reconstructed from further study of both the poetries of neighbouring Polynesia, and modern poetic compositional practice.

The next chapter will attempt to summarize and on occasion interpret findings presented thus far in the chapters on meter, parallelism, and the current chapter.
8 Summary and interpretation of analysis results

8.1 Introduction

In this chapter, an attempt will be made to summarize information presented for the most part in the chapters on meter, parallelism, and aspects of the poetry relevant to manner of composition. Some of the information will be interpreted with reference to pertinent material from the literature review. We will first discuss evidence relevant to the poetry's manner and tempo of delivery.

8.2 Manner and tempo of delivery

Elsewhere in Polynesia, some oral genres are sung, while others are spoken or chanted. As mentioned in the literature review, the Samoan solo is an example of spoken delivery, where Jacob Love states that the poet Fa’animo’s “pitches wandered for a phrase or two, and eventually settled on a pitch-area a little below the midpoint of her speaking-voice” (Love 1991:56).

It is likely that much of the Tahitian material was chanted or spoken as well. From source information provided in Henry (1928), texts are occasionally labelled as “chants”, but never “songs”, and their manner of delivery as “recited”, but never “sung”.

Metrical patterns also suggest a spoken or chanted delivery. Both counting meters depend upon the formation of diphthongs and glides. Such are found in normal speech, but generally not in contemporary Tahitian singing or elaborated speech, where each vowel is maintained as its own syllable. A generalization for diphthong formation is simply that if two short adjacent vowels are able to form a diphthong,⁸⁵ they will. Therefore, the vowels of the word mau (“PLUR”) represent two syllables in singing or elaborated speech, but combine to form a diphthong in normal tempo speech.⁸⁶

Concerning glide formation in non-elaborated speech, the rule is that when a high vowel that is morpheme-initial or preceded by a morpheme-initial

---

⁸⁵ Per Bickmore’s definition of the Tahitian diphthong (see Bickmore 1995:414).
⁸⁶ See, for example, the syllable count of mau in line 4 of (5.28).
glottal stop is directly followed by non-back vowel, it becomes realized as a glide at the phonetic level. For example, /ʔia/ (“SBJV”) is realized as [ʔiə] but not *[ʔi.a],87 and /ue~ue/ (“to shake”) as ['we~we] but not *[u.e~u.e]. This glide formation rule does not seem to apply, however, to content words where the phonetic form would be reduced to a single mora. For example, /ua/ (“rain”) is realized as [ˈu.a] but not *[wa], and /ui/ (“to question”) as [ˈu.i] but not *[wi].

It is perhaps of interest that Jack Fischer has made a somewhat similar observation regarding East Carolinian moraic meter. He notes that “the syllabic value of intervocalic or initial prevocalic short i or u may, if required, be omitted, treating them as semivowels” (see Fischer 1959:49).

So it would appear that the tempo at which most early oral poetry was delivered was that of normal speech. Had it been delivered at the slower tempo employed by elaborated speech and song, diphthongs would be expected to expand universally to two syllables, high vowels would never become glides, and many of the observed patterns of counting meter would crumble.

Of the genres still extant, fa’ateni (“praise”), fa’ataro (“praise with challenge”), and ‘a’ai (“myth”) oral poetry is spoken. However, poetry of the paripari (“description”) genre is generally sung as lyrics to himene tarava (“traditional singing”) (Langues Polynésiennes 2004). This practice of singing paripari texts dates to at least 1929, as suggested from a transcription of lyrics of a himene tarava that was delivered at that year’s national festival (see Stillman 1991:521, 524). It is possible that the four paripari of the pre-1850 corpus were also sung, however it would be difficult to arrive at a determination given the small amount of data these texts represent.

In summary, it seems likely that most of the texts of the pre-1850 corpus were either spoken or chanted in normal tempo speech. However, texts of the paripari (“description”) genre may have been sung.

We will next review evidence relevant to the poetic line.

---

87 See, for example, the syllable count of ʔa in line 1 of (5.30).
8.2 The poetic line

The colon functions as the metrical line for syllabic counting meter\textsuperscript{88} and, except in the case of lists, for word stress counting meter.\textsuperscript{89} For lists, this line is the full list item.\textsuperscript{90} The colon also functions as the poetic line for patterns of sound parallelism.\textsuperscript{91}

The poetic colon can be defined as a simple syntactic phrase, with the following exceptions:

1. A trailing personal pronoun remains attached to its preceding colon.\textsuperscript{92}
2. It appears that enjambment will often occur when two or more modifiers trail the noun of an NP.\textsuperscript{93}
3. The conjunction ‘e (‘and’) separating multiple list items belongs to neither the preceding nor following colon, and bears no metrical count.\textsuperscript{94}

For both types of counting meter, this colon description permits the greatest number of patterns, and notably those that are longer and more complex. Evidence that the colon also functions as the line for sound parallelism is that:

1. Occasionally, patterns are restricted to within colon boundaries.\textsuperscript{95}
2. The only assonant and consonant instances of end-rhyme thus far detected depend upon the colon line.\textsuperscript{96}

As mentioned in the literature review, the colon has been found to serve a role in other poetic traditions of the world as well (see Lotz 1960:140-143), such as in the solo poetry of nearby Samoa. Love observes that most solo lines consist of a pair of cola, whose juncture the poet signals by a “prolongation of a

\textsuperscript{88} See, for example, (5.26).
\textsuperscript{89} See, for example, (5.49).
\textsuperscript{90} See, for example, (5.45).
\textsuperscript{91} See, for example, (6.13).
\textsuperscript{92} See, for example, (5.3) and (5.4).
\textsuperscript{93} See, for example, lines 22 and 23 of (5.32).
\textsuperscript{94} See, for example, line 5 of (5.21) and line 14 of (5.32).
\textsuperscript{95} See, for example, lines 1 through 4 of (6.4).
\textsuperscript{96} See, for example, (6.7).
vowel to three or four times its normal length” (Love 1991:57). In Samoan canonical parallelism, each colon represents one side of a pair of complementary syntactic frames, with the intent of establishing a pleasing perception of balance (Love 1991:68-69).

With the colon established as the poetic line, we will next review information relevant to the two Tahitian counting meters.

8.3 Meter

Two types of meter were detected in the pre-1850 corpus: syllabic counting meter, and the much less frequent word stress counting meter. In syllabic counting meter, each non-elaborated syllable of a line receives a single count. In word stress counting meter, each occurrence of word stress, 97 be it primary, secondary, or tertiary, receives a single count. For both of these meters, line count is regulated by an external pattern.

A somewhat sporadic use of one or both meters is encountered in most texts. There are no instances in the pre-1850 corpus where a metrical pattern governs all of a text’s lines. Word stress counting patterns are generally found to co-occur with patterns of syllable count, 98 perhaps out of a desire to enhance metrical effect. As mentioned above, the patterns of both counting meters depend upon the formation of diphthongs and glides, suggestive of a non-elaborated delivery.

For both counting meters, counts are regulated by an external pattern, wherein they may be observed to repeat, 99 increment, 100 or be organized into inverted structures. 101 There is also a pattern type that allows for the alternation of any sequence of counts; 102 however not of inverted patterns.

Specific to syllabic counting meter, the colon is always the metrical line, and a loosely inverted structure is sometimes observed to act as a container for

97 As predicted by Bickmore’s stress algorithm (see Bickmore 1995).
98 See, for example, (5.49).
99 See, for example, (5.22).
100 See, for example, (5.23).
101 See, for example, (5.27).
102 See, for example, (5.29).
other patterns or unaffiliated counts. Specific to word stress counting meter, the metrical line is a complete list item when a passage represents a list, otherwise it is the colon. Its most frequently encountered pattern type is that of repetition.

There are few limitations as to the possibilities for a metrical pattern’s organization. Constrained only by the limit of counts that can viably fit into a line, it appears that the oral poet can begin a pattern at any chosen count, and continue with that pattern as long as desired. Different pattern types, when grouped together, seem to juxtapose freely, as well as alongside unpatterned counts. Such complete freedom of pattern organization and juxtaposition may be one of the hallmarks of early Tahitian oral poetry.

Several topics relevant to various aspects of the counting meters will next be presented.

### 8.3.1 Syllabic counting meter in Tahitian and Ancient Hebrew poetry

According to Nigel Fabb and Morris Halle, the only other application of syllabic counting meter yet documented is found in “a small minority of Old Testament poetry” (Fabb and Halle 2008:268, 271, 283). At first glance, the Ancient Hebrew implementation is not dissimilar to its use in Tahitian poetry. For example, the counting patterns of the 24th Psalm consist of a complex inverted pattern followed by two of repeated count (from Fabb and Halle 2008:277):

```
a 8
b 6
c 8
d 8
e 7
f 8
```

103 See, for example, (5.32).
104 See, for example, (5.45).
105 See, for example, (5.49).
106 See, for example, (5.45).
107 See, for example, (5.30).
108 See, for example, (5.31).
We observed a similarly complex inverted pattern in (5.26) above:

\[
\begin{array}{cccccccc}
g & 9 \\
f' & 8 \\
e' & 7 \\
d' & 8 \\
c' & 8 \\
b' & 6 \\
a' & 8 \\
\end{array}
\]

8,8,8

7,7,7

And in (5.30) above, we noted an inverted pattern followed by two of repeated count:

\[
\begin{array}{cccccccc}
a & 5 \\
b & 3 \\
c & 3 \\
d & 4 \\
e & 4 \\
f & 4 \\
g & 5 \\
f' & 4 \\
e' & 4 \\
d' & 4 \\
c' & 3 \\
b' & 3 \\
a' & 5 \\
\end{array}
\]

But there is a visual component to the inverted patterns of several of the psalms. When rotated to the left, a picture emerges. In the case of the 24th
Psalm, it is of a fence surrounding Mount Zion; the subject of the poem (see Fabb and Halle 2008:277):

No visual motivation would be anticipated in regards to Tahitian syllabic counting patterns, as its early society had no system of writing. The traditions also differ in that whereas integration of a visual component in the Hebrew material strongly suggests composition-prior-to-performance, its use is ubiquitous in the pre-1850 Tahitian texts; found both in passages likely to have been composed prior to performance, as well as those plausibly composed in performance. A further distinction is that all of the psalm’s lines are governed by the metrical pattern, whereas the application of syllabic counting meter in the Tahitian material is somewhat sporadic.

8.3.2 Possible influences for Tahitian syllabic counting meter

Syllabic counting meter seems to have principally served the Ancient Hebrew poet as a visual art medium. According to Fabb and Halle, “these psalms are pattern or picture poems where the graphic shape generated by the line lengths pictures an object that is related to the subject matter of the psalm’” (Fabb and Halle 2008:277). Without such motivation, what influences may underlie its use in Tahitian poetry?

109 Due to the relative scarcity of word stress counting meter in the pre-1850 corpus, no speculation as to its influences shall be attempted.
8.3.2.1 Natural occurrence in prose

One possibility is suggested by Love’s remarks, mentioned in the literature review, concerning the random occurrence of rhyme in Samoan prose. He surveyed the rhyming rates of the following Samoan non-poetic genres, where he substituted end of clause for poetic verse boundary:

Rhyming rates of some Samoan non-poetic genres:

Prose written by a native: 40%
Prose written by a foreigner: 43%
Prose written by committees: 47%
Speech in conversation: 51%
Speech in narration: 54%
(Love 1991:94)

By contrast, the rhyming rate for Samoan solo poetry is just 83%. So rhyme, on average, randomly occurs in Samoan prose 57% as often as in solo poetry. However, according to Love, “Sāmoans assert they feel no rhyme in nonpoetical discourse” (Love 1991:95).

A comparison might be made with the degree to which colon lines representing non-poetic and poetic Tahitian material are found to participate in potential patterns of syllabic counting meter; a subject which was discussed above in chapter 5. Some information from tables 5.1 and 5.2 has been summarized in table 8.1 below:

Table 8.1. Syllabic counting pattern frequencies for some examples of prose, and for the oral poetic genres of the pre-1850 corpus

Non-poetic genres, broken down by text:

*Texts of early 19th century written prose*

Pomare II (1817a): 29%
Pomare II (1825): 20%

*Texts of early 19th century speech*

Burau and Miro (1836): 24%
Cadoustau (1987): 21%
Texts of modern written prose

TKNui (2003a): 23%
Yon Yuc (1997): 17%

A text of modern written prose translated from French

Te ma’i aho pau (2003): 12%

Poetic genres of the pre-1850 corpus:

‘a ‘ai (“myth”): 32%
anau (“lamentation”): 31%
fa ‘atara (“praise with challenge”): 30%
fa ‘ateni (“praise”): 22%
paripari (“description”): 29%
rauti (“battle address”): 37%
religious address: 30%

Somewhat similar to the Samoan data, the average ratio of prose to poetic patterns of Tahitian syllable count is 69%. For Samoan rhyme that ratio was 57%. It is conceivable that for both Tahitian and Samoan poet and audience, there is recognition at some level of a natural occurrence of meter and parallelism in language. In English, such an understanding becomes patent in observations such as, “Hey, that rhymes!”

Some types of poetic organization might consequently result from a tradition’s extension of structures that are natural to prose; perhaps syllabic counting meter in the case of Tahitian poetry, or a heavy use of end-rhyme for the Samoan solo. If so, this would seem to support to the notion, discussed in 2.2.3 above, that poetry is linked to a language’s prose structure.

8.3.2.2 Drum beat patterns

Another possible motivation behind the development of syllabic counting meter is drum beat accompaniment. There is a similarity between some standard beat patterns performed on the modern to’ere (“slit drum”) and patterns of syllable count.
A *toʻere* beat can be either single (a higher pitched *ti*, if tapped at the drum’s extremity; a lower pitched *to*, if at its centre), or double (*tiri, toro*). In the examples below, pauses between beats have served to divide a complete pattern into lines.

ʻArerangi Tongia describes the *pua rata* beat pattern as follows:

(8.1) *Pua rata* beat pattern for the *toʻere* (Tongia 2010:1-2)

<table>
<thead>
<tr>
<th>Beats per line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>1. <em>to to to toro to</em></td>
</tr>
<tr>
<td></td>
<td>1 2 1</td>
</tr>
<tr>
<td>6</td>
<td>2. <em>ti ti tiri tiri</em></td>
</tr>
<tr>
<td></td>
<td>1 1 2 2</td>
</tr>
<tr>
<td>6</td>
<td>3. <em>to to to toro to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 2 1</td>
</tr>
<tr>
<td>6</td>
<td>4. <em>ti ti tiri tiri</em></td>
</tr>
<tr>
<td></td>
<td>1 1 2 2</td>
</tr>
<tr>
<td>4</td>
<td>5. <em>ti to to to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1</td>
</tr>
<tr>
<td>4</td>
<td>6. <em>ti to to to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1</td>
</tr>
<tr>
<td>9</td>
<td>7. <em>ti to to to toro toro to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1 2 2 1</td>
</tr>
<tr>
<td>4</td>
<td>8. <em>ti to to to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1</td>
</tr>
<tr>
<td>4</td>
<td>9. <em>ti to to to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1</td>
</tr>
<tr>
<td>9</td>
<td>10. <em>ti to to to toro toro to</em></td>
</tr>
<tr>
<td></td>
<td>1 1 1 1 2 2 1</td>
</tr>
</tbody>
</table>

476
And he describes the hope beat pattern as follows:

(8.2) *Hope* beat pattern for the *to’ere* (Tongia 2010:1)

```
<table>
<thead>
<tr>
<th>Beats per line</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>to ti ti</td>
</tr>
<tr>
<td>6</td>
<td>toro to to ti ti</td>
</tr>
<tr>
<td>8</td>
<td>to to toro toro to to</td>
</tr>
<tr>
<td>6</td>
<td>toro toro toro</td>
</tr>
<tr>
<td>3</td>
<td>toro to</td>
</tr>
</tbody>
</table>
```

The beat tally of the *pua rata* pattern may be grouped as follows:

```
6,6,6,6
a  4,4
b  9
a’ 4,4
b’ 9
```

which is similar to some repeating and alternating syllabic counting patterns discussed in chapter 5.\(^{110}\) The hope has an inverted pattern, and may be grouped as:

```
a  3
b  6
c  8
b’ 6
a’ 3
```

\(^{110}\) See, for example, (5.47).
which is likewise similar to many of the inverted patterns discussed in chapter 5.111

However, aside from these superficial similarities, there seems to be no strong evidence that drum beats either motivated, were influenced by, or developed alongside Tahitian counting meter. The lack of evidence can be summarized as follows:

1. Although many early European observers, including William Bligh, noted that nose flutes and drums often accompanied singing (see Bligh 1937 I:412), there is no mention as to whether drumming ever accompanied spoken or chanted delivery.

2. There does not appear to be any surviving documentation of early drum beat patterns for any variety of Tahitian drum.

3. The modern to ʻere was probably not in use in pre-Contact Tahiti, but rather borrowed from the Cook Islands in the latter half of the 19th century. The Tahitian to ʻere of the late 18th century, as described by William Ellis, was hollowed from the top and covered with shark skin (McLean 1999:23), which is a quite distinct instrument from the slit-log Cook Island tokere. It is therefore plausible that present-day to ʻere drum beats were introduced to the Society Islands at the same time as the slit-log instrument. In fact, many modern to ʻere drum beat patterns are shared between the Cook and Society Islands, including those described in (8.1) and (8.2). The problem of borrowing would prove less problematic were it discovered that the Cook Islands have also had a tradition of counting meter.

   It would seem that both of these possibilities for the origin of syllabic counting meter - that it may represent an extension of counting patterns natural to prose, and that it may have been influenced by drum beat patterns - must remain conjecture until either or both are corroborated by additional evidence from early post-Contact Tahiti, or from neighbouring Polynesia.

111 See, for example, (5.28).
8.3.3 Typological position of word stress counting meter

The following typology of world meters was presented in 2.4.1.2 above:

1. Pure moraic meter
2. Pure syllabic meter
3. Syllabic meter based upon:
   a. Vowel quantity
   b. Word stress
   c. Word boundary placement
   d. Alliteration
   e. Tone
4. Syllabic counting meter

Word stress counting meter may perhaps now be added to this list, with a distinction between fixed and counting meters emphasized:

I. Fixed meters
   1. Pure moraic meter
   2. Pure syllabic meter
   3. Syllabic meter based upon:
      a. Vowel Quantity
      b. Word Stress
      c. Word boundary placement
      d. Alliteration
      e. Tone

II. Counting meters
   1. Pure syllabic counting meter
   2. Syllabic counting meter based upon:
      a. Word stress

As mentioned in the literature review, Fabb and Halle suggest that “language may differentiate a syllable in more than two ways but the meter recognizes only the two types of syllable” (Fabb and Halle 2008:254-255). Concerning fixed word stress meter, Jakobson similarly observes that, “the number of syllables in the upbeat may vary, but the downbeat (ictus) constantly contains one single syllable”, and further remarks that the division in word stress meter is usually between stressed and stressless syllables (Jakobson 1960:359-360). Aside from the matter of an externally regulated line, Tahitian word stress counting meter otherwise appears to conform to Jakobson’s generalizations.
8.3.4 Distribution in corpus of counting meters

Syllabic counting meter is present in almost all of the pre-1850 texts. The few exceptions are very short in size. Word stress counting meter is much less common. It occurs most often in coordination with patterns of syllabic counting meter within a context of poetically arranged lists.\footnote{See, for example, (5.45).}

Both of these counting meters seem to have been fully productive in the pre-1850 corpus. The relative infrequency of word stress counting meter need not imply that is either archaic or of recent innovation, as its distribution does not appear to be restricted to just traditional material, or to a subset of poetic genres. It may simply be that it is mustered into use when a rhythmic effect is desired.

8.3.5 Universal rarity of counting meters

No mention was discovered in the literature of word stress counting meter in regards to any of the other poetic traditions of the world. It may, therefore, be unique to Tahitian poetry, although it would be presumptuous to advance such a claim before first surveying the oral poetries of neighbouring Polynesia for evidence of its application. Such an endeavour will be left for future study.

For syllabic counting meter to be limited to just Ancient Hebrew and Tahitian poetry seems similarly remarkable. As mentioned above, Hymes states that non-epic oral tradition is not constrained at the level of a metrical line, but commonly by a relation among lines (Hymes 1994:330); a generalization that counting meters would appear to satisfy. More research into the non-epic oral poetries of the world may therefore lead to further examples of counting meters. It may be that their extreme rarity in the literature is in part due to the field of Oral Studies’ relative neglect of non-European traditions.

Next, we will review information pertaining to the broad category of parallelism.
8.4 Parallelism

Parallelism encompasses repetition of patterns of sound, syntax, and semantics. The discussion below of syntactic and semantic parallelism will be combined, as semantic parallelism is mostly found to occur within a syntactic frame.

8.4.1 Sound parallelism

We will first review the set of special rules required by Tahitian sound parallelism.

8.4.1.1 Special rules

As mentioned in the literature review, Jakobson suggests that it is possible for linguistic rules to be different for poetry and prose (Jakobson 1960:359-360). The following poetic rules appear to apply to Tahitian sound parallelism. Some of these are similar to what has been noted for other poetic traditions of the Pacific.

1. Vowel length is not significant.  \(^{113}\)

2. The constituent vowels of diphthongs are treated independently.  \(^{114}\)

3. The pattern \(a-e\) consistently matches with \(a-i\), as does \(a-o\) with \(a-u\).  \(^{115}\) Love notes that for Samoan rhyming rules, the patterns \(a-e\) and \(a-i\) are similarly equivalent. (Love 1991:88).

4. As has been noted for Fijian, Tongan, and Samoan rhyme (see Love 1991:83, 87), only a non-conforming vowel can violate a pattern of Tahitian end-rhyme, to which consonants are invisible.  \(^{116}\) Assonant rhyme may be a more precise description for this rhyming scheme.

5. Only a non-conforming consonant can violate a pattern of consonant end-rhyme, to which vowels are invisible.  \(^{117}\)

---

\(^{113}\) See, for example, the matching long and short vowels of (6.21).

\(^{114}\) See, for example, (6.1).

\(^{115}\) See, for example, (6.27) and (6.19).

\(^{116}\) See, for example, (6.7).

\(^{117}\) See, for example, lines 4-6 of (6.12).
6. The glottal stop appears to be invisible to patterns of consonance.\textsuperscript{118} It is possible that for purposes of sound parallelism, it belongs to a class of phoneme that is neither vowel nor consonant; of which it is the sole member.

With these special rules in mind, we will next review sound parallelism pattern types that were detected during the analysis process.

\textbf{8.4.1.2 Pattern types}

The sound parallelism of the pre-1850 corpus manifests itself in the following types of pattern:

1. Simple assonance,\textsuperscript{119} of which assonant end-rhyme\textsuperscript{120} is somewhat rare.
2. Simple consonance,\textsuperscript{121} of which consonant end-rhyme\textsuperscript{122} is very rare.
3. Complex patterns that combine simpler patterns of assonance, consonance, and parallel strings of phonemes.\textsuperscript{123}

Sound patterns may be strict or loose. They most often span lines,\textsuperscript{124} although they are sometimes constrained to within the line.\textsuperscript{125} Occasionally, sound patterns are arranged in an inverted structure,\textsuperscript{126} similar to the types of inverted patterns that were noted for metrical count.

Patterns constrained to names and epithets may function as recurring islands of sound parallelism. They might be considered as poems within a poem. They generally contain patterns of pure assonance,\textsuperscript{127} or combined patterns of assonance and consonance.\textsuperscript{128} Their patterns can repeat in parallel,\textsuperscript{129} or be organized into an inverted structure.\textsuperscript{130}

\textsuperscript{118} See, for example, (6.8).
\textsuperscript{119} See, for example, (6.1).
\textsuperscript{120} See, for example, (6.7).
\textsuperscript{121} See, for example, (6.8).
\textsuperscript{122} See, for example, lines 4-6 of (6.12).
\textsuperscript{123} See, for example, (6.13).
\textsuperscript{124} See, for example, (6.5).
\textsuperscript{125} See, for example, lines 1 and 2 of (6.14), and lines 1, 3, and 5 of (6.22).
\textsuperscript{126} See, for example, (6.25) and (6.27).
\textsuperscript{127} See, for example, (6.29).
\textsuperscript{128} See, for example, (6.41).
\textsuperscript{129} See, for example, (6.30).
\textsuperscript{130} See, for example, (6.34).
Generally, the process by which phonemes of a sound pattern are selected is not apparent. However, for certain passages, they are found to represent the constituent phonemes of thematically important words.\textsuperscript{131}

### 8.4.1.3 Most pattern types not unusual

The sound parallelism pattern types just described are fairly ubiquitous among the written and oral poetries of the world. For example, as mentioned above, assonant rhyme is encountered nearby in oral poetry of Fiji and Western Polynesia, where Love remarks that its use is widespread. Love additionally asserts that such rhyme is not found elsewhere in Polynesia (Love 1991:82), although it would seem that its demonstrated use in the Tahitian material, albeit infrequent, would stand as an exception to his observation.

It is universally common as well for patterns of assonance and consonance to overlap. Lord provides a relevant example from a Serbo-Croatian epic:

The importance of alliteration is apparent in such a line as “Kazaše ga u gradu Kajniđa,” “They pointed him out in the city of Kajniđa,” in which the k-g alliteration is arranged in chiastic order, k-g-g-k. Nothing would seem to have hindered the singer from using \textit{u Kajniđu gradu} in the second half of the line, but he appears to have preferred the chiastic order, in part also perhaps under the influence of the a-u-a-u assonance in the middle of the line. The singers have a sensitivity to proportion and completeness of form even within the limits of a single line. (Lord 1960:42)

It is perhaps of additional interest that the \textit{k-g-g-k} consonant pattern Lord describes is organized into an inverted structure, similar to many Tahitian sound patterns.\textsuperscript{132}

In the pre-1850 corpus, the component phonemes of patterns of sound parallelism are occasionally those that comprise a passage’s thematically important words. As mentioned in the literature review, Lord, Hymes, and Lynch have all made similar observations concerning other traditions.

\textsuperscript{131} See, for example, (6.14).
\textsuperscript{132} See, for example, (6.24).
Lord observes that in the Serbo-Croatian epic, sound clusters are organized by a “key word” which appears to bridge “idea and sound” (Lord 1956:302 cited in Foley 1988:40). Hymes notes that a word expressing a lyric’s theme will often contain its dominant sounds, resulting in “a coming together both of sound and meaning” (Hymes 1960:128-129). Lynch finds that in the Keats sonnet “On First Looking Into Chapman’s Homer”, the word silent both sums up the sonnet’s theme and dominates its sound structure (Lynch 1953:219 cited in Hymes 1960:110-111).

However, complex inverted patterns of sound parallelism, as have been detected in the Tahitian material, are not commonplace among the world’s poetries. Two such Tahitian examples are the pattern of syllable-initial alliteration noted in (6.25):

a  r-r-r-r
b  t-t
c  r-r
d  t-t-t
c’ r-r
b’ t-t
a’ r-r-r-r

and the pattern of combined assonance and consonance in (6.27):

a  t-r-t-h-i-m-a-t
b  r-r
c  a-i
d  a-i
e  r-r
d’ a-e
c’ a-i
b’ r-r
a’ t-r-t-h-i-m-a-t

These patterns, in their complexity, seem perhaps akin to some of the longer inverted patterns of syllabic counting meter; such as the metrical pattern observed in (5.26):

a  5
b  3
and the pattern in (5.27):

\[
\begin{array}{cccccc}
\text{a} & 6 \\
\text{b} & 4 \\
\text{c} & 5 \\
\text{d} & 3 \\
\text{e} & 3 \\
\text{f} & 3 \\
\text{g} & 4 \\
\text{h} & 5 \\
\text{g'} & 4 \\
\text{f'} & 3 \\
\text{e'} & 3 \\
\text{d'} & 3 \\
\text{c'} & 5 \\
\text{b'} & 4 \\
\text{a'} & 6 \\
\end{array}
\]

Although not frequently encountered, the use of complex inverted parallelism, applied to a variety of linguistic features, may represent another distinguishing characteristic of early Tahitian oral poetry.

### 8.4.2 Syntactic and semantic parallelism

Syntactic parallelism in the pre-1850 corpus almost always consists of a repeating syntactic frame that contains one or more slots for variable elements. A syntactic frame will often correspond to an item of a poetic list. Syntactic parallelism in such application may serve as a mnemonic aid. As mentioned in the literature review, Joel Sherzer has observed that some Kuna chants use
frame-parallelism to facilitate the memorization and performance of lists (Sherzer 1990:249).

Some early Tahitian examples of syntactic parallelism appears to represent canonical parallelism. This poetic style is encountered in many traditions of the world, including much of non-Oceanic Austronesian poetry.

Repeating syntactic frames have been considered poetic if they meet one or more of the following criteria:

1. The syntactic frame contains multiple part-of-speech slots, as may be observed in canonical parallelism.\(^{133}\)

2. The syntactic frame contains a part-of-speech slot where the variable elements in half or more instances either belong to the same semantic category, or demonstrate semantic progression.\(^{134}\)

3. The syntactic frame pattern is found adjacent to a pattern that satisfies 1 or 2.\(^{135}\)

The early Tahitian syntactic frame, with the exception of its variable elements, was almost always found to repeat exactly. This is similar to what William Norman notes for Quiché poetry. He states that unlike Hebrew poetry, Quiché semantically paired items must hold a “word-for-word identity between the other lexical items occupying corresponding syntactic positions in the two clauses” (Norman 1980:392-393).

**8.4.2.1 Organization of list items**

Tahitian lists are rendered poetic by means of metrical organization of their items, in addition to semantic affinity of their variable elements. Below is a brief review of both types of organization.

\(^{133}\) See, for example, (6.47) and (6.50).

\(^{134}\) See, for example, (6.87).

\(^{135}\) See, for example, lines 5 and 6 of (6.62).
8.4.2.1.1 Metrical organization

As mentioned in chapter 5, items of a list are often arranged in order to assist patterns of counting meter. It is common for longer list items, whose counts may have been difficult to accommodate, to be placed at a pattern’s end.\(^{136}\) These occurrences of longer and non-conforming metrical counts may additionally serve to indicate that the list, or a section thereof, has terminated.

As mentioned in the literature review, Love notes similarly concerning Samoan *solo* poetry that the greatest degree of mora count variability occurs in the first and last verses of a stanza (Love 1991:76; my emphasis). However, rather than to satisfy a requirement of meter, Love observes that the variability of a stanza’s first verse “corroborates observations about the tolerability of deviance in the first stanza of melodies” (Love 1991:76) and that “the possibility must be granted that stanza-terminal verses were ideally longer than other ones” (Love 1991:78).

8.4.2.1.2 Semantic categories

A syntactic frame’s variable elements, corresponding to a given part-of-speech, often belong to a single semantic category for which there does not seem to be any restriction. A semantic category may represent any taxonomic level, from the specific (e.g. attributes of rivers)\(^{137}\) to the abstract (e.g. matter exhibiting fluid dynamics).\(^{138}\)

Some semantic categories recur with greater frequency than others. Lists of deities are somewhat common as are, specific to the creation myths, lists of physical world objects and parts of the body.

8.4.2.1.3 Semantic progression

The ordering of list items occasionally reflects a pattern of semantic progression; common as well to other traditions. Sebeok provides a Cheremis

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\(^{136}\) See, for example, (5.50) and (5.51).  
\(^{137}\) See (6.66).  
\(^{138}\) See (6.67).
example that demonstrates superordinate to subordinate ordering for both slots of a syntactic frame:

1. *iumən kükü ačam kodəldaleš*
   sky’s cuckoo, my father, remains

2. *kükü šuldər abam kodəldaleš*
   cuckoo wing, my mother, remains

3. *iumən barseŋge izam kodəldaleš*
   sky’s swallow, my elder brother, remains

4. *barsenge šuldər iŋgam kodəldaleš*
   swallow wing, my elder brother’s wife, remains

5. *keŋež ləbe šol ʻəm kodəldaleš*
   summer butterfly, my younger brother, remains

6. *ləbe šuldər šüžarem kodəldaleš*
   butterfly wing, my younger sister, remains

7. *keŋež saska ške kaialam*
   summer flower, myself, I depart

8. *saska peledəšem kodəldaleš*
   flower blossoms of mine remains
   (Sebeok 1960:224-227)

By way of direct comparison, the filial ordering of the Cheremis passage’s first six lines seems somewhat analogous to the first eight lines of the Tahitian passage from (6.87), provided again below:

1. ?aore
   ?aore
   PFV.NEG
   There was no

2. metua tane PAUSE
   NP.animate
   parent man
   father.
3. ?aore
   ?aore
   PFV.NEG
   There was no

4. metua vahine PAUSE
   NP.animate
   parent woman
   mother.

5. ?aore
   ?aore
   PFV.NEG
   There was no

6. tua?ana PAUSE
   NP.animate
   older.brother
   older brother.

7. ?aore
   ?aore
   PFV.NEG
   There was no

8. tuahine PAUSE
   NP.animate
   sister
   sister.

8.4.2.2 Canonical parallelism

Some syntactic frames are not poetic lists, but rather have attributes of canonical parallelism. As mentioned, canonical parallelism can be found in many poetic traditions of the world, such as Hebrew poetry of the Old Testament, some Native American and most Indonesian traditions, and some Samoan poetry. The following Indonesian example provided by Fox is from a Kodi divination:

1. Na wolo huda koko
   Who tightened his throat in anger,
2. *Na ravi raka ate*
   Who embittered his liver with rage

3. *Na boghe halili ana wawi*
   So that he let the piglet fall from his armpit,

4. *Na weihana kapana wana manu*
   So that he let the chick slip from his wing,
   (Fox 1988:35)

Canonical parallelism in the Society Islands may have resulted from common ancestry with, or influence from, other oral poetries of the Pacific, or its presence may simply attest to this poetic style’s near universality. Compared to its ubiquitous application in many traditions, it appears to enjoy a much lesser role in the pre-1850 corpus material.

Although Tahitian paired elements often exhibit a measure of synonymy or antonymy, they do not observe a strict requirement of dyadic pairing, as has been observed for many other canonical parallelism traditions. An exception lies in sequences of antonymous pairs of locatives\(^{139}\) and points of the compass,\(^{140}\) where the intent may be to demonstrate that all dimensions of a subject matter have been taken into account.

William Norman notes that some Quiché semantic pairs are synonymous (e.g. “road, path”, “guard, sentinel”) and others antonymous (e.g. “day, night”, “mountain, plain”) (Norman 1980:392-393). We encounter as well both synonymy and antonymy in the following two lines of a Samoan *solo* provided by Love:

(n)  ʻ*ua* ʻ*ou toʻese | ʻ*ua* ʻ*ou tōvale*
    I make apology | I beg pardon

(o)  ʻ*ausa* ʻ*ina manūi | ʻ*ausa* ʻ*ina mala*
    swam lucky | swam hapless
   (Love 1991:68-69)

\(^{139}\) See, for example, (6.77).
\(^{140}\) See, for example, (6.83).
By way of comparison, the Tahitian passage from (6.47), provided again below, clearly demonstrates both synonymous and antonymous pairing:

1. tu:vaʔu  
   V.distribution  
   chase.out  
   Chase out

2. te one  
   te one  
   the sand  
   the sand

3. i ta:-ʔu  
   vaʔa MODIF.size  
   at ALIEN.NEUT-1.SG outrigger small  
   from my little canoe.

4. ?a hora~hora  
   (ʔa) V.distribution  
   INCEPT spread.out  
   Spread out

5. te one  
   te one  
   the sand  
   the sand

6. i ta:-ʔu  
   vaʔa MODIF.size  
   at ALIEN.NEUT-1.SG outrigger big  
   from my big canoe.

8.4.2.3 Arrangement of syntactic frame patterns

There also would appear to be complete freedom regarding the possibilities of arrangement of syntactic frame patterns.\(^{141}\) They seem to follow one another in an appositional style, similar to that noted earlier for patterns of counting meter\(^ {142}\) and sound parallelism.\(^ {143}\)

\(^{141}\) See, for example, (6.60).
\(^{142}\) See, for example, (5.30) and (7.5).
It is also common for long passages of such patterns to be grouped together in an unbroken succession, such as occurs in a variety of other poetic traditions. Below are examples from Quiché and Tzotzil, containing four and seven adjoining patterns, respectively:

Quiché example provided by Norman:

\[ \text{karaj ne7(x)saqirik} \]
perhaps it-got-light

\[ \text{karaj ne7 spakataj jun saantalaj uwach uleew} \]
perhaps it-dawned a holy world

\[ \text{sneek 'aamachu7loq} \]
I-was-brought now-here

\[ \text{sneeyaaka chu7loq} \]
I-was-raised now-here

\[ \text{chwa rinutz 'aaq} \]
before the my-wall

\[ \text{chwarinuk 'axtuun} \]
before the my-fortress

\[ \text{chwiinub 'ieneem} \]
above my-walking
\[ \text{chwiinuchakaneem} \]
above my-crawling

Tzotzil example (in translation) provided by Fox:

Jaguar Animal of heaven,
Jaguar Animal of earth.
Patron of heaven,
Patron of earth.
Your legs are lame, Jaguar Animal,
Your legs are long, Jaguar Animal.
Your whiskers are spiny, Jaguar Animal,
Your whiskers are long, Jaguar Animal.
Get up, father.

143 See, for example, (6.4).
Get up, mother.
Stand up, father,
Stand up, mother.
Rise up, father,
Rise up, mother.
(Fox 1977:75)

By way of comparison, the Tahitian passage from (6.62), provided again below, seems similar to the above Quiché and Tzotzil examples in its application of adjoining syntactic frame patterns restricted to just two occurrences per pattern:

1. i-a te puna tau tua PAUSE
   i-a te puna tau N.body.part
   at-PROP the fishing.spot reef.block back
   at the rear of the reef fishing spot,

2. i-a te puna tau aro PAUSE
   i-a te puna tau N.body.part
   at-PROP the fishing.spot reef.block face
   at the front of the reef fishing spot,

3. i-a te ?are i hiti PAUSE
   i-a te ?are i LOC.point.of.the.compass
   at-PROP the wave at east
   at the eastern waves,

4. i-a te ?are i to?a PAUSE
   i-a te ?are i LOC.point.of.the.compass
   at-PROP the wave at west
   at the western waves,

5. i-a tu: po?a PAUSE
   i-a MODIF po?a
   at-PROP even recess
   at the stable recess,

6. i-a ahu po?a PAUSE
   i-a MODIF po?a
   at-PROP burning recess
   at the burning recess,
In the preceding sections, we have reviewed information relevant to manner and tempo of delivery, the poetic line, the use of counting meters, and the use of sound, syntactic, and semantic parallelism. We will next review findings relevant to manner of composition.

8.5 Aspects of the poetry relevant to manner of composition

In chapter 7, we discussed aspects of the poetry pertaining to the question of whether it was composed prior to performance and memorized by skilled reciters, or composed in performance by poets who had acquired an oral-formulaic linguistic capacity. The following evidence was presented:

Evidence justifying the possibility of composition-prior-to-performance:

1. Whereas the Oral Formulaic Theory purports to only apply to traditional material (see Lord 1987:327), most anau (“lamentation”), fa’ateni (“praise”), fa’atatara (“praise with challenge”) and rauti (“battle address”) genre texts do not incorporate traditional content. Therefore, corpus poetry of these genres is more likely to have been the product of another process; possibly of composition-prior-to-performance and memorization.

2. The importance of textual fixity has been documented for many Polynesian traditions, where oral poetry is often composed prior to performance, and later memorized by skilled reciters.

Evidence suggestive of composition-prior-to-performance:

1. The two versions of the non-traditional “E pehe tai vahine” lament are nearly verbatim, which is suggestive of memorization.

2. Concerning variations between the two versions of the lament, the three apparently missing lines from the Ahnne version of (7.2) and the absence of metrical organization in the Ahnne version of (7.4) may be indicative of memorization error. Slightly problematic is that the non-essentially recurring, and therefore potentially oral-formulaic, i roto from the Alexander version of (7.4) would be somewhat unexpected of a poem not composed in performance.

3. The prose-like introduction to Tane’s saying in the first passage of (7.6) seems consistent with memorization error. Problematic is that the content of that passage is traditional, and so a process of composition involving memorization would not have been expected.
Evidence justifying the possibility of composition-in-performance:

1. The material incorporated into *paripari* (“description”) and religious genre poetry is mostly traditional. The content of ‘*a’ai* (“myth”) genre poems appears to be entirely traditional. Although traditional content is not in and of itself indicative of composition-in-performance, it is generally considered a prerequisite.

2. Details of authorship and ownership are not provided for any transcription of the corpus. Although it may be that such information was simply left undocumented by European transcribers, its absence leaves open the possibility of composition-in-performance.

3. While we are aware of two recitations of a single text that are described as “nearly the same”, it is never explicitly stated in Henry that any two recitations are, in fact, verbatim. This leaves open the possibility that multiple versions of texts were within a range of fixity appropriate for composition-in-performance.

4. It is perhaps no coincidence that recurrences of formulae and theme, limited though they may be, occur only in the corpus’ traditional material. As previously mentioned, the Oral Formulaic Theory only purports to apply to traditional content (see Lord 1987:327).

5. In regards to ‘*a’ai* (“myth”) genre traditional content, no Peabody test for oral-formulaic composition was discovered to have failed. The consistency of phoneme test appears to have succeeded, and it seems likely that the consistency of formula, enjambment, and theme tests partially succeeded. There is insufficient data regarding the consistency of song test.

6. The very loose fit between early Tahitian poetry incorporating traditional content and Peabody’s rules may be due in part to conceivably greater metrical challenges inherent to fixed meter poetry, and to text length:

   a. As noted in the literature review, the primary function of formulae in the European oral epic is to inject pre-determined metrical counts that satisfy the requirements of a fixed line. Perhaps the freedom of counting pattern organization enjoyed by a Tahitian poet lessens a formula’s metrical utility; thereby reducing it to a less essential role.

   b. The Tahitian texts, with perhaps one exception, are not epic in length. Perhaps there is a relationship between short length and paucity of recurring themes.

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144 As has been mentioned, the possible exception is the 9,265 word ‘*a’ai* (“myth”) genre text *Te parau a Honoura* (“The tale of Honoura”) (see Henry 1895:256-291).
Evidence suggestive of composition-in-performance:

1. Each of the ‘a ‘ai (“myth”) genre stories is built up in an additive, paratactic manner. Such is also the construction style of the oral-formulaic epic.

2. The passages of (7.5) and (7.7) above incorporate nearly the same traditional content, and demonstrate several characteristics that would be expected of an oral-formulaic process:
   a. They are not verbatim, or nearly so. Rather, their degree of fixity seems appropriate for a process of composition-in-performance.
   b. Versions demonstrate different patterns of meter and parallelism, but are consistently poetic throughout; especially the compared passages of (7.7).
   c. There is no indication of memorization error.

3. Evidence that is external to the corpus material is the discovery of patterns of syllabic counting meter in the rhetoric of a modern-day blogger, which was discussed above in chapter 5. If such represents a linguistic poetic capacity, as appears likely, then it would seem reasonable to infer inheritance from the early era. Greater study of modern Tahitian poetry and poetic language use would be needed in order to advance this proposal further.

From the sparse evidence reviewed, it seems likely that both memorization and composition-in-performance played roles in the early compositional process, perhaps along lines of non-traditional and traditional content. A scenario that might fit all of the evidence is that poems of non-traditional content were composed prior to performance and memorized, and some of their reciters were poets capable of composing in performance; providing occasional poetic flourish. Poetry incorporating traditional content may typically have been a product of a Tahitian style of composition-in-performance, except when delivered by novice oral poets; who perhaps relied more upon memorization.

However, it would seem that any proposed scenario must remain conjecture, unless sufficient additional information from the early era comes to light, or unless the early manner of composition might be reconstructed from further study of both the poetries of neighbouring Polynesia, and modern poetic compositional practice.
8.6 Conclusion

In this chapter, information presented in the previous three chapters was summarized, and a selection of findings interpreted in light of the literature review. Several of the early material’s idiosyncratic aspects will be briefly restated in the concluding chapter which follows.
9 Conclusion

As mentioned in the Introduction, no study of Tahitian poetic organization - early, modern, oral, or literate - appears to have previously been undertaken. The principal aim of this thesis has been to discover such organization within material deemed to have been originally composed in the pre-Contact era. In addition to potential contributions to the field of Oral Studies, it was intended that any findings might serve as a stylistic baseline for the study of modern Tahitian poetry and use of poetic language.

The process of analysis comprised a two part method of pattern detection: an automated process that generated pattern candidates, followed by a manual review of those candidates. Wholly manual analysis was pursued as well for some types of information where tagging was lacking, such as semantic patterns and oral traditional formulae. It was intended that the detection process feed a broader one of poetic literary analysis, and for its claims to be accepted or rejected within that context.

Pattern types that seemed to unambiguously demonstrate poetic organization were identified and discussed in chapter 5 pertaining to syllabic counting and word stress counting meter, in chapter 6 regarding sound, syntactic, and semantic parallelism, and in chapter 7 regarding aspects of the poetry relevant to manner of composition. These results were summarized, and to a degree interpreted, in the previous chapter.

9.1 Benefit of computational assistance

The thesis’ secondary aim was to develop and derive benefit from a process of computationally-assisted pattern detection. Although it may be impossible to ascertain how much poetic organization yet remains undiscovered within the pre-1850 data, it may be concluded that lacking the automated process, a significant portion of patterns that did surface would have been overlooked. For example, the emergence of complex patterns of sound parallelism was nearly always unexpected, despite the fact that more basic examples of similar pattern types had been previously recognized.
As to the benefit of reviewing such a large quantity of generated patterns, for a candidate to be judged poetic typically depended upon sufficient occurrence of similar patterns throughout the corpus, combined with a corresponding paucity in prose. For many pattern types, determining poetic intent would have become frustrated without the volume and breadth of candidates that the automated process was capable of providing.

### 9.2 Task of determining poetic intent

Some scepticism might be warranted regarding the matter of identifying poetic intent; an admittedly difficult and inherently fuzzy undertaking. In order that such evaluations might not be overly subjective, candidate patterns were filtered through the set of the criteria discussed in 4.3.1.

It was first necessary that a candidate be extremely rare to non-existent in prose, although the likelihood of a pattern’s being common to prose was mostly based upon the author’s experience. It was further required that a candidate pattern occur at least twice in the same text, that placement of the pattern appear intentional, and that similar pattern types exist in at least two other texts of the same genre.

Subsequent to this process, poetic intent might be asserted were a candidate pattern found to match any method of poetic organization inventoried in the literature review. For promising pattern types unspecified in the literature, statistical support was occasionally sought if sufficient data were available. Failing either of these methods for validation, a pattern might be esteemed to self-justify as poetic were it found to be especially complex or repetitive. For example, particularly complex patterns of inversion, whether of meter or sound parallelism, might support a claim for the poetic use of inversion. Concerning repetition, a passage comprised entirely of repeating syntactic frames might support a claim for the poetic use of syntactic frames.
9.3 Review of idiosyncratic aspects of the early poetry

As mentioned in the Introduction, John Miles Foley recommends that “We must give the idiosyncratic aspects of each tradition their due, for only when we perceive sameness against the background of rigorously examined individualized traits can we claim a true comparison of oral traditions” (Foley 1981:275). Although some aspects of the early poetry, such as much of its use of sound and syntactic parallelism, find similar application in many of the world’s traditions, others seem perhaps more distinctive to the Tahitian material.

One such is the early Tahitian poet’s broad freedom to select, appositionally arrange, and overlap different types of poetic organization. Save for a dependency upon the colon line and the occasional restriction of sound parallelism to phonemes of thematically important words, no type of organization seems particularly fettered, nor is any persistently applied throughout a text. In no text, for example, are all lines metrically governed.

Counting meter, encountered in nearly all corpus texts, may be the aspect most characteristic of the early poetry. Its use is especially pronounced in passages where word stress counting patterns, generally of repeating count, co-occur with separate patterns of syllable count; perhaps a poetic analogue to the accompaniment in music of a treble clef melody with a bass clef rhythm.

The counts of syllabic counting meter occasionally form long inverted patterns, of a complexity matched by that of some inverted patterns of sound parallelism. The application of complex inverted parallelism to more than one type of linguistic feature might be viewed as another distinctive aspect of the corpus material.

An uncommon use of sound parallelism is encountered in the occasional restriction of patterns to a name or epithet. Found throughout the corpus, such perhaps serve a formulaic role as ready-made poems within a poem.

Uses of syntactic and semantic parallelism are generally less remarkable. An exception, however, is where the ordering of syntactic frames representing items of a list appears to be metrically motivated. For such lists, longer items,
whose counts may have proved difficult to accommodate, are generally placed at the list’s end.

### 9.4 Regarding some weakly attested data

As has been noted, any method of poetic organization thus far inventoried needed to satisfy the criteria discussed above in 4.3.1. However, some pattern types that failed to qualify may eventually prove to be of interest if similar findings were discovered in more recent Tahitian poetry, or among the poetic traditions of neighbouring Polynesia. Perhaps the three most promising of these are the possibility of metrical patterns of decremental count, the possibility of sound parallelism linking the end of one line to the beginning of the next, and the possibility of larger metrical structures.

Two other topics of potential interest, for which data is similarly meagre, are whether or not rules exist as to when counts bordering a metrical pattern may be combined in order to extend that pattern, and whether early Tahitian poetic style should be considered as dwelling within the realm of art, or rhetoric.

Examples of very limited data will next be presented, with the expectation that further discussion will require support and clarification from research outside the confines of the pre-1850 corpus.

### 9.4.1 Decremental count

The types of metrical pattern discussed in chapter 5 were of count repetition, incremental count, inverted count, and alternation of any count pattern except for inverted count. Given the great freedom that the early Tahitian poet enjoyed in assembling count patterns, it is somewhat surprising that decremental count did not appear as an option.
In fact, a few rare occurrences of decremental count may be found in the corpus. One such is the pattern of word stress count in (9.1) below, which groups as:

4,3,2

(9.1) Extract from “Tane, the man-god” (Henry 1928:364-371)

<table>
<thead>
<tr>
<th>σ_ne</th>
<th>Stress</th>
<th>Text</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>'tane</td>
<td>ˈtaːne</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
<tr>
<td>2.</td>
<td>i te raʔi tua tini</td>
<td>PAUSE</td>
</tr>
<tr>
<td>8</td>
<td>1 1 2 2 2</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>0 0 1 1 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIROBJ the sky NUMB ten</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the tenth sky,</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>'tane</td>
<td>ˈtaːne</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
<tr>
<td>4.</td>
<td>i te raʔi haːmama</td>
<td>PAUSE</td>
</tr>
<tr>
<td>7</td>
<td>1 1 2 3</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>0 0 1 1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DIROBJ the sky open</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of the open sky,</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>'tane</td>
<td>ˈtaːne</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Tane</td>
</tr>
</tbody>
</table>
9.4.2 Sound parallelism linking the ends and beginnings of lines

As was noted in the literature review, Hawaiian poets would sometimes “indulge in ‘linked assonance,’ by which the sounds of the last word of one verse echo in the first word of the next” (Roberts 1926:66 and Elbert & Mahoe 1970:11, cited in Love 1991:82). A very few examples of possibly linked sound parallelism were discovered in some religious genre texts, such as the pattern ʻa-i found at the end of line 1, and near the beginning of line 2 in (9.2) below:

(9.2) “Warning by messengers of the paʻi-atua service” (Henry 1928:158-159)

1. i te tai
dirobj the sea
concerning the sea,

2. e taimara-hia
tai
ipfv to.sanctify-PASS
that is sanctified

9.4.3 Larger metrical structures

A single example of what appears to be a superordinate structure for counting meter was discovered in the passage in (5.50). Its 32 syllable counts may be organized into:

A grouping of 4 counts:
2,2,2

3
A grouping of 4 counts:
2,2,2
3

A grouping of 8 counts:
2,2,2,2,2,2,2,2
3

A grouping of 16 counts:
2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2,2
6

9.4.4 Combining counts that border metrical patterns

In (5.28) above, and repeated in (9.3) below, we note an example of an inverted pattern of syllable count preceded by a 3,3,3 pattern of repetition, and followed by the possibly unaffiliated counts 5 and 4. These patterns may be grouped as:

3,3,3
a  8
b  6
c  3
b’ 6
a’ 8

5
4

If the surrounding counts at both edges of the pattern were permitted to combine, the pattern would extend:

a  9
b  8
c  6
d  3
(9.3) Extract from “Strife and reconciliation between heaven and earth” (Henry 1928:353-354)

σne

Text

1. ?a riri

3

1 2

INCEPT angry

Angered became

2. ?o tane PAUSE

3

1 2

PROP Tane

Tane,

3. atua

3

3

god

god

4. o te mau mea purotu PAUSE

8

1 1 1 2 3

of the PL thing beautiful

of all beautiful things.

5. titiri iho ai

6

3 2 1

throw downward AIPART

He threw

6. i raro PAUSE

3

1 2

DIROBJ down

down

7. e ?auhune nui PAUSE

6

1 3 2

EXIST harvest great

great harvests,
Several similar examples were encountered in the corpus. For longer cola, we noted that enjambment often occurs when two or more modifiers are found to trail the noun of a noun phrase. However, given a paucity of examples regarding border counts, no context yet emerges concerning when the counts of the generally unremarkable cola located at a pattern’s edge might be expected to combine.

### 9.4.5 Early Tahitian poetry as art or rhetoric

As has been mentioned, a productive use of syllabic counting meter was discovered in the rhetoric of a modern-day Tahitian blogger; an example of which was provided in (5.44). Should such blog entries be interpreted as poetry, or should Tahitian meter and perhaps other of the methods that comprise its poetic style be interpreted rather as potential rhetorical devices; as might alliteration and assonance with regard to English rhetoric?

Edward Quipp posits, specifically concerning poetry, the possibility that “the art-experience presents the means of access to an order of truth that is beyond the reach of other experiences” (Quipp 2007:3).

Concerning oral poetry, Eric Havelock suggests that:

The rhythmic language of orality combined the didactic and aesthetic modes in a single art. Its content was formidable and majestic and yet at the same time spellbinding. Each reinforced the effect of the other. The spell acquired
serious dignity because of the weight it carried: the didactic weight acquired a charm conferred by the spell.
(Havelock 1986:120)

For the content residing within a work of oral poetry to become imbued, via the magic of art, with the intimation of truth might be judged by the rhetorician to be a supreme accomplishment. Many more blogs and other examples of Tahitian rhetorical style will need to be studied, however, before further discussion may be possible concerning such speculation.

9.5 Observations relevant to formal linguistics

The following two observations derive from the current study, and may be of value with regard to aspects of Tahitian formal linguistics:

1. The quantity and quality of the metrical patterns detectable in the corpus would appear to validate the diphthong descriptions proposed by Lee Bickmore (1995:414) and Académie Tahitienne (1986:5), discussed above in 3.4, as well as Bickmore’s Tahitian stress placement algorithm (see Bickmore 1995), discussed above in 5.1.1.

2. For purposes of stress placement, Bickmore proposes a rule of final extrametricality which only applies to words such as ʻariʻa (‘king’) and ʻnunaʻa (‘people’), where a word’s penultimate and ultimate vowels are identical and separated by a glottal stop (see Bickmore 1995:422-423). That this rule should only apply to like vowels separated by a glottal stop may be of interest. As mentioned above in 8.4.1.1, the glottal stop appears to be invisible to patterns of consonance. It seems that for purposes of sound parallelism, it belongs to a class of phoneme that is neither vowel nor consonant. Are there perhaps other aspects of Tahitian phonology where the glottal stop is found to be treated differently than other consonants?

9.6 Avenues of future research

The following are some potential avenues for future research:

1. Are the seemingly distinctive aspects of early Tahitian oral poetry unique, or are there parallels to be found with other Polynesian poetic traditions? The poetries of the nearby Austral, Gambier, Marquesas, and Tuamotu Islands remain fairly under-studied. A greater degree of scholarship has been applied to poetic traditions of the Cook Islands, Hawaii, New Zealand, Samoa, and
Tonga; however perhaps not with the newly identified traits of early Tahitian poetry in mind. Were parallels to be found, they might confirm or serve to generalize the present Tahitian findings, or might assist in interpreting those aspects of pre-1850 corpus that, for the time being, only allow for conjecture. Any discovered similarities might additionally help in determining whether characteristics of the early poetry represent common inheritance, borrowing, or innovation.

2. The universal typology for meters has expanded. Counting meters are no longer restricted to just a tally of pure syllables, but may also be based upon occurrences of word stress. This fact introduces the possibility of other types of counting meter among the world’s myriad under-studied oral poetries. Metrical varieties may eventually be discovered that fill gaps in the enlarged paradigm. Perhaps there exist counting meters of pure mora count, or of syllabic count based upon vowel quantity, word boundary placement, alliteration, or tone.

3. As mentioned in the literature review, mora count plays a role in many Eastern Polynesian poetries. Bruce Biggs discovered a “rule of eight” morae per half-line in Maori song texts (see Biggs 1980), which was subsequently observed by Kevin Salisbury in mako songs of Pukapuka, and by Steven Roger Fischer in chants from Tokelau, Mangareva, Hawaii, Mangaia, and the Tuamotus (McLean 1996:258-259). Why is moraic meter apparently absent from the early Tahitian material?

4. Research might be undertaken into any of the weakly attested data topics mentioned in 9.4.

5. With the pre-1850 findings serving as stylistic baseline, it would be of interest to determine how Tahitian poetic organization has since evolved, which aspects of the early oral style may still be productive, and the degree to which external poetic influences have perhaps been adopted. In regards to these topics, perceptions and interpretations of native speaker poets and scholars should prove to be especially valuable.
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### Appendix A. List of grammatical abbreviations

Below is a list of grammatical abbreviations employed in the interlinear glosses, as well as elsewhere in the text.

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>First person</td>
</tr>
<tr>
<td>2</td>
<td>Second person</td>
</tr>
<tr>
<td>3</td>
<td>Third person</td>
</tr>
<tr>
<td>AIPART</td>
<td>Polynesian ai particle</td>
</tr>
<tr>
<td>ALIEN</td>
<td>Alienable possessive</td>
</tr>
<tr>
<td>ANAPH</td>
<td>Anaphor particle (e.g. ia)</td>
</tr>
<tr>
<td>ART</td>
<td>Article</td>
</tr>
<tr>
<td>CARD</td>
<td>Cardinal number</td>
</tr>
<tr>
<td>CAUS</td>
<td>Causativizing prefix (e.g. fa ‘a-, ha ‘a-)</td>
</tr>
<tr>
<td>CONJ</td>
<td>Conjunction</td>
</tr>
<tr>
<td>DEM</td>
<td>Demonstrative</td>
</tr>
<tr>
<td>DIROBJ</td>
<td>Direct object marker i</td>
</tr>
<tr>
<td>DU</td>
<td>Dual</td>
</tr>
<tr>
<td>DUR</td>
<td>Durative aspect</td>
</tr>
<tr>
<td>EXCL</td>
<td>Exclusive</td>
</tr>
<tr>
<td>EXIST</td>
<td>Existential marker (e.g. e, ‘o)</td>
</tr>
<tr>
<td>IMP</td>
<td>Imperative mood</td>
</tr>
<tr>
<td>INALIEN</td>
<td>Inalienable possessive</td>
</tr>
<tr>
<td>INCEPT</td>
<td>Inceptive aspect</td>
</tr>
<tr>
<td>INCL</td>
<td>Inclusive</td>
</tr>
<tr>
<td>IPFV</td>
<td>Imperfective aspect</td>
</tr>
<tr>
<td>LOC</td>
<td>Locative (e.g. roto, ni ‘a)</td>
</tr>
<tr>
<td>MODIF</td>
<td>Modifier</td>
</tr>
<tr>
<td>N</td>
<td>Noun</td>
</tr>
<tr>
<td>NEG</td>
<td>Negative</td>
</tr>
<tr>
<td>NEUT</td>
<td>Neutral possessive</td>
</tr>
<tr>
<td>NMLZ</td>
<td>Nominalizing suffix (e.g. -ra ‘a)</td>
</tr>
<tr>
<td>NP</td>
<td>Noun phrase</td>
</tr>
<tr>
<td>NPROP</td>
<td>Proper noun</td>
</tr>
<tr>
<td>NUMB</td>
<td>Number marker (e.g. ‘a, e)</td>
</tr>
<tr>
<td>ORD</td>
<td>Ordinal number</td>
</tr>
<tr>
<td>P</td>
<td>Preposition</td>
</tr>
<tr>
<td>PASS</td>
<td>Passivizing suffix (e.g. -hia)</td>
</tr>
<tr>
<td>PAUSE</td>
<td>Syntactic pause</td>
</tr>
<tr>
<td>PPRON</td>
<td>Personal pronoun (e.g. ‘oia, tātou)</td>
</tr>
<tr>
<td>PFV</td>
<td>Perfective aspect</td>
</tr>
<tr>
<td>PL</td>
<td>Plural</td>
</tr>
<tr>
<td>PLF</td>
<td>Finite plural</td>
</tr>
<tr>
<td>POSS</td>
<td>Possessive (e.g. tā, nō, a)</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Description</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------</td>
</tr>
<tr>
<td>PREP</td>
<td>Preposition (e.g. nō, mai)</td>
</tr>
<tr>
<td>PROP</td>
<td>Proper noun marker (e.g. ʻo, a)</td>
</tr>
<tr>
<td>PROX</td>
<td>Proximate</td>
</tr>
<tr>
<td>QUOT</td>
<td>Quotative marker</td>
</tr>
<tr>
<td>SBJV</td>
<td>Subjunctive mood</td>
</tr>
<tr>
<td>SG</td>
<td>Singular</td>
</tr>
<tr>
<td>SITU</td>
<td>Situational aspect</td>
</tr>
<tr>
<td>STRONG</td>
<td>Strong possessive</td>
</tr>
<tr>
<td>V</td>
<td>Verb</td>
</tr>
<tr>
<td>VOC</td>
<td>Vocative</td>
</tr>
<tr>
<td>VP</td>
<td>Verb phrase</td>
</tr>
<tr>
<td>WEAK</td>
<td>Weak possessive</td>
</tr>
</tbody>
</table>
Appendix B. Descriptions of the Tahitian diphthong in the literature

Below are several descriptions for the Tahitian diphthong, listed in order of their original publication date. Translations of the French language sources are my own.

Davies (1823:8):

The Tahitian Diphthongs are the following; ae, ai, ao, au, ei, eo, eu, ia, iu, oe, oi, ou, ue, and ui, and their powers are as follows;
- ae in pae, rae, tae, &c. as some pronounce ay in say.
- ai in tai, rai, mai, - like i in mine, time, or y in cry.
- ao in tao, pao, rao - as ao short in one Syllable.
- au in fau, tau, - as aoo short not used in English [sic].
- ei in hei, tei, rei - similar to ay in nay.
- eo in veo, reo - short in one syllable.
- eu in peu, heheu - a combination of e and u short.
- ia in ia’u, ia’na - as ya or ia in French in diable.
- iu in fiu, - as u in cube or use.
- oe in hoe, poe - pronounced short in one syllable.
- oi in hoi, tapoi - as oi in join voice.
- ou in hou, pau - as ou in house mouse.
- ue in pue, hue - short in one syllable.
- ui in hui, rahui - ui short in one syllable.

The Tahitian monosyllables are chiefly formed of single vowels or diphthongs, together with a few words consisting of three letters. Words consisting of two or three syllables form the greatest part of the language, most above that number are compounds: every syllable and every word without exception ends in a vowel.

Jaussen (1969:7-8):

In addition to vowels and consonants, there exist in Tahitian the following diphthongs: Ae ... Ai ... Ao ... Au ... Ei ... Eu ... Ia ... Ie ... Io ... Iu ... Oi ... Ou

Rossiter (1919:5):

Every syllable must terminate with a vowel, but a vowel following another vowel forms a monosyllable, and never combines with another vowel to form a diphthong. ... Among the French grammarians Mgr. Dordillon,

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145 Jaussen (1969) was initially published in 1861.
compiler of the Marquesan dictionary agrees with the leading grammarians of other Polynesian dialects on this point.  

**Lovy and Bouge (1953:8):**

**DIPHTHONGS**

ai is pronounced as aï in évantail.

ae is pronounced as è (very accented, almost a).

eu is pronounced as éou in Léouzon.

ei is pronounced as ei in réitérer.

iu is pronounced as iou in biniou.

oi is pronounced as oï in langue d’oïl.

ue is pronounced as oué in bouéé.

ea is pronounced as éa in Léa.

ia is pronounced as ia in paria.

ou is pronounced as ou in : « Et tu feras dodo où? »

io is pronounced as io in trio.

ie is pronounced as ié in prier.

au is pronounced as aou in miaou.

ua is pronounced as oua in troua.

ao is pronounced as ao in Gao.

eo is pronounced as éo in Théophile.

oa is pronounced as oa in boa.

oe is pronounced as ôé in Crusoé.

uo is pronounced as ouo in Drouot.

**NOTE**

The pronunciation indicated for these diphthongs is given here only to function as a general indication. In fact there are, for nearly each one of them, several means of pronunciation. The only way to reproduce these sounds exactly, which are often difficult to imitate, is to listen to them being pronounced by a Tahitian.

**Vernier (1959:16):**

When vowels follow each other they are all pronounced separately. Ex. **Uouo**, white.”

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146 Burbidge's grammar and vocabulary (1930:9) and Christensen's study guide and vocabulary (1958:i) also make use of Rossiter's description.

147 It appears that the Lovy and Bouge have defined a diphthong to be any two contiguous short vowels with the exception of /ui/ - which was possibly an oversight. However, in many of their French examples the vowel combinations are clearly heterosyllabic: **Léouzon, bouée, prier, Théophile**, etc.
The diphthong, being the union of two sounds heard distinctly but from a single vocal transmission, as in French, ui, ieu, iel, etc., diphthongs are found in Tahitian in almost every word: **au, ao, ai, ei, eu, ia, io, iu, oa, oe, oi, ou, ua, ue, ui, uo**...

**Iorss (1961:13):**

All vowels are pronounced separately.

**Tryon (1970:5):**

The syllable in Tahitian consists of ±C +N, where C equals a consonant or glottal stop, and N equals either a short vowel, a long vowel (i.e. two identical vowels), or a sequence of two different vowels. ± indicates that the consonant is optional, while + indicates that the vowel or sequence is obligatory in the syllable. Where a sequence of three vowels occurs, the first two should be taken as one syllable, except when the second vowel is long. Examples:

- Pō-ти girl
- Ta-maître boy
- Ta-а-та person
- Өи a he, she
- Өр-tа-ne male (fish, tree)
- Ma-nu bird

**Graham (1972:ii):**

[Method of pronouncing] unlike vowels when placed side by side (ae). Each vowel is pronounced clearly and distinctly, but the voice will glide gently from one to the other with no noticeable break (stop).

**Lemaître (1973:14):**

Vowels which follow one another without an intervening consonant must be pronounced distinctly according to the preceding description, except however in certain combinations: ai ... ae ... oi ... ao ... au

**Académie Tahitienne (1986:5):**

When two vowels are short and the first is more open, a diphthong is produced ... If the second vowel is more open, then a diphthong is not produced.
Corne (1987:2):

… the diphthongs /ao, ae, ai, au, oe, oi, ou, ei, eu, iu/ display various degrees of vowel assimilation


In a $V_1 \ V_2$ sequence, if $V_1$ is more sonorous than $V_2$, then $V_1$ and $V_2$ are tautosyllabic (where $V_2$ results in a phonetic off-glide), except in the case of /eu/, otherwise $V_1$ and $V_2$ are heterosyllabic.

... In cases of level sonority across different vowels, the sequence is generally heterosyllabic, as in no.é.ma ‘November’ and ʔa.pí.u ‘sheet of purau leaves’, although there is certainly some variability here. For example, the word /tiunu/ ‘June’ was sometimes pronounced ti.ú.nu, and sometimes tíu.nu


Tahitian possesses no (or few) diphthongs ... This phenomena [the diphthong] mostly affects long vowels ... For example: ... /ma:re:/ or /ma:rej/ ... /ma:hae/ or /maehae/ ... /pe:ni/ or /pejni/

... Monophthongs ... This is the case of two vowels that reduce into a single vowel utterance. What is happening is either a reduction of one of the two vowels, or the appearance of a new phoneme. For example: /pae/ or /paɛ/ or /pɛ/ ... /naonao/ or /naɔnaɔ/ or /nɔnɔ/.

Bi-vocalic groups (C)V1V2 must be considered as belonging not to one and the same syllable, but always to two syllables. For example: -pau = 2 syllables ... tea = 2 syllables ... mai = 2 syllables ... roi = 2 syllables

Tryon (1997:12):

In the sequence of vowels, the general rule requires each vowel of the sequence to be pronounced distinctly. However, ai, au, ae, ei, eu and oi tend to be diphthongized.

When different vowels follow each other, the general rule requires that each one be pronounced distinctly. However, certain sequences tend to get diphthongized, in particular when they contain an I or a U:

AI, [ay] EI, [éy] OI, [oy] but UI, [oo i]
IA, [ya] IE, [yé] IO, [yo] IU, [yoo]
UA, [wa] UE, [wé] UO, [wo]

Note also that the sequence AE is frequently pronounced [è] as in réve.