# **The Affirmations of Vakai:**

# Semiotic Rongorongo of the Latter Days of Hotu Matu'a

by

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#### **INTRODUCTION**

The remote Pacific island of Rapa Nui (Easter Island) is best known for its famous *Maoi* stone statues. A Neolithic civilization of probable Polynesian origin carved these monoliths from indigenous volcanic tuff (Diamond 2005: 79). The Dutch explorer Roggeveen was the first European to chart the island in 1722. During that visit his crew killed one islander in a skirmish. For approximately 100 years thereafter that an uneasy peace ensued between the native Rapa Nui people and occasional European visitors. Then, in the 1860s, slave raids; a smallpox epidemic and out-migration reduced the population of the island from an estimate 4,000 inhabitants to less than 200 (Fischer 1997: 8-9).

Rapa Nui was formally annexed by Chile in 1888. Today it boasts an airport and welcomes tens of thousands of tourists per year. There are only a few thousand permanent inhabitants of the island and approximately 70 percent are descendents of the indigenous population (Samagalski 1990: 210-216).

#### Rongorongo - The Lost Script

Among the achievements of the indigenous Rapa Nui civilization was the development of a hieroglyphic script. Almost exclusively, samples of the writing are found upon carved tablets or ornaments of wood (possibly engraved using a shark tooth or obsidian flake). Nineteenth century scientist and Rapa Nui visitor Miklouho-Maclay proposed the name: *Kohau-Rongo-Rongo* -- "talking wood" (Tumarkin & Fedorova 1990: 110). An unusual feature of the writing is that it is presented boustrophedon (Greek for 'ox turning'). Moreover, alternate lines are inscribed upside down such that the tablet must be inverted each time a line is completed, in order to read the next line (Gerard 1992: 167).

Consequent to the crises of the 1860s all persons literate in *rongorongo* apparently perished. From that time onward the surviving islanders ceased to have use for the surviving tablets and many boards were lost. Then, in the late 1860s, the visiting Father Gaspard Zumbohm received as a souvenir, a cord of braided hair wrapped around a small piece of wood. His colleague Tepano Jaussen observed the wood to be covered with small, neatly inscribed hieroglyphics—men, fish, birds, astronomical signs and geometric symbols. He attempted to decipher the inscriptions, and drew international attention to the newfound script (Tumarkin & Fedorova 1990: 110,115).

Efforts to find and preserve *rongorongo* tablets were sufficient to secure just twenty-six wooden artifacts. Today these are catalogued both by the letters of the Alphabet and by the 'common names' typically associated with traditional function or current location. Suffixes 'recto (r)' and 'verso (v)' respectively identify front and back faces of each tablet. The total corpus of *rongorongo* comprises approximately 14,800 glyphs.

Be it on account of its intrigue as an undeciphered language, its beauty of craftsmanship, its Polynesian flavor or its similarity to comic strip illustration or animation (Mizon 1997: 1) there continues to be a high degree of interest in *rongorongo*. It is even possible to

obtain computer font sets for the script and these are of value for both recreational and research purposes.

#### Rongorongo and Folklore

William Thomson, an early visitor to Rapa Nui, teamed with businessman and translator Alexander Salmon to investigate the *rongorongo* writing system. Their source was Ure Va'e iko, an elderly Rapa Nui who claimed some knowledge of the script. Salmon interpreted to the effect that certain tablets encoded known odes from Rapa Nui folklore. Regrettably, Ure Va'e iko could not match specific *rongorongo* series' to the texts of poems that were purported to be represented (Thomson 1891: 514-26).

Fischer (1995: 311-312) suggested a connection between the Pasquan chant: *Atua Mata Riri* and *rongorongo* inscriptions upon the Santiago Staff. The general form of his scheme is a triplet system in which: [Glyph A with phallic affix] + [Glyph B] => [Glyph C] (where glyph C is some 'progeny' of glyphs A and B). A general reading would be of form "Procreative association of Glyph A with Glyph B produces Glyph

C". Fischer considers this blueprint to be reasonable basis upon which to develop translation of the *rongorongo* corpus. Significantly, the triplet of Figure 1--Bird (with phallus) [plus] Fish [equals] Sun--exhibits *prima facie* agreement with the phrase of *Atua Mata Riri* "All the birds copulated with all the fish and there was brought forth sun."



Figure 1: Bird + Fish ⇒ Sun

Translation of Atua Mata Riri Chant. (Fischer, 1995).

Rjabchikov (1997 'Conference') proposed two links between *rongorongo* glyph series' and Rapa Nui folklore. He hypothesized that short excerpts of the Echancree Tablet (Tablet D) and Small Santiago Tablet (Tablet G) correspond to the Rapu Nui chant "*He Timo te Akoako*" the "Great Old Words" (Routledge 1917: 248), (Fischer 1994: 413, 434). Rjabchikov also proposed that portions of the Keiti and the Aruku-Kurenga tablets correlate with Thor Heyerdahl's records of the Rapanui incantation known as '*Takapu*' (Rjabchikov 2001: 69-71). Notwithstanding the offerings of scholars such as Fischer and Rjabchikov, there remains a paucity of work relating the glyphic record to folklore. It is most desirable to translate *rongorongo*—especially passages which recapitulate the spoken legends. Such sectional translations affirm the veracity of the oral tradition and build our understanding of the history of an indigenous people about which precious little is known. Collectively these works provide building blocks, which enable us to assemble a more complete interpretation of the full *rongorongo* corpus. Broadly considered, the formulation of analytical epigraphic techniques productively supports the decipherment of the several 'lost scripts' of antiquity.

#### The Character of the Script

Insofar as rongorongo has resisted significant translation, there is no consensus as to exactly how the script encodes information. Whereas the number of different glyphs is probably too large for an alphabet, some epigraphers do consider rongorongo to have features of a syllabary (Macri 1995: 185), (Pozdniakov 1996: 301-303). That is; each glyph or portion of a glyph represents a syllable of a word in the Rapa Nui language. Other investigators propose that the hieroglyphics represent astronomical signs or navigation aids (Kaulins 1981: 2, Dietrich 1998: 118). Finally, there are scholars who contend that the symbols are merely artistic renderings and not a language at all (Van Tilburg 1994: 111-115). The latter hypothesis is at odds with statistical data (Pozdniakov 1996: 301-303), which demonstrate that rongorongo conforms to Ziph's law—a characteristic of all known languages. Morphologically, rongorongo characters appear to be assemblages (agglutinates) of a small pool of root glyphs (Fischer 1997: 234). Tablet after tablet, it is difficult to reconcile the freedom of artwork with an obviously constrained base glyph inventory. Finally, the most widely accepted rongorongo translation that currently exists—the Lunar Calendar of the Marami tablet—apparently contains logographs (symbols which non-pictorially present a word or idea). Within the calendar the waxing form of crescent moon apparently identifies nearly all of the nights—both the ones where the moon is waxing as well as the ones where the moon is waning. On the other hand, the glyph that depicts the waning form of crescent moon seems to be associated with the common noun form of moon--as in 'blue moon' (Guy 1990: 140-141).

In an earlier analysis of the Marami Lunar Calendar we endorsed the widely accepted paradigm that *rongorongo* comprises a semiotic/ logographic script (Berthin & Berthin 2006: 18-19). It is appropriate to enumerate our conclusions upon this subject.

- 1. Rongorongo is significantly semiotic—glyph morphology often matches glyph meaning.
- 2. Several non-semiotic glyphs (logographs) are rebuses—homophones of a root semiotic glyph definition (Krupa 1971: 1). For example, a spine (Rapa Nui *a'tua* back, behind) may also be chosen as a symbol for 'lord' (Rapa Nui '*atua*').

Other glyphs are metonymic--semiotic by association with a common concept—such as, for example, a familiar folkloric icon. As a case in point, a presentation of the bird-shaped glyph Barthel 755--*Tane* "the god that supports the sky" (Krupa 1973: 115)--might metonymically denote the concept of daylight or passage of days and nights (Krupa 1973: 118).

3. The *rongorongo* script is agglutinative; in this respect it encodes in a manner similar to the Mayan glyph-block system. By affixing or infixing glyphs onto or into other glyphs, it is potentially possible to develop words, concepts or possibly even simple

sentences. Mayan scholar Martha Macri (1995: 186-7) offers an illustration of the agglutinative properties of the *rongorongo* script.

4. The anthropoid forms are a special genre of *rongorongo* glyphs. Hominoid morphologies can apparently encode sentences (Krupa 1972: 20-21, 25-26). Applying semiotic convention to develop a formative hypothesis, the appendages of the glyph possibly represent verb(s), the cranium/countenance and body of the glyph represent, perhaps, the subject, and any object in 'possession' of the glyph would, by extension, represent grammatical possession or grammatical object. Additionally, anthropoid glyphs may be 'caricatured'—a process, which could conceivably afford adjectival or adverbial modification. Pozdniakov (1996: 295-299) and Krupa (1972: 19-26) have published cursory reviews of attributes of anthropoid glyphs.

#### **METHOD**

#### **An Interpretable Folkloric Record**

Using the preceding four-point framework as a basis for translation, and building upon the existing translation of the Lunar Calendar, we propose to be encoded within the first 200 glyphic information units of the Marami tablet, a well-known folkloric anthology describing the latter days of the life of Hotu Matu'a--Rapa Nui leader and early island settler. This legend was first noted by Sebastian Englert; later published by Thomas Barthel. To the best of our knowledge, neither epigraphers nor post-rongorongo Pasquans have yet correlated the canonized exploits of Hotu Matu'a with hieroglyphic inscriptions upon the Marami artifact. The glyph sequence, which is the subject of our overture, encompasses all characters preceding the Lunar Calendar upon the tablet recto. As an anthology, the passage subdivides into episodes, known by various titles or abstracts. It may be abridged from Barthel as follows (Barthel 1978: 209-211; 218-222).

Hunger of Hotu Matu'a and Tuu Maheke: Hotu Matu'a and son Tuu Maheke are hungry and wife Vakai forages for food. Ravenous young Tuu begins to cry and is chastised by Hotu (called a bastard, by some accounts). Tuu suffers the characterization literally and reports it to Vakai on her return.

Affirmations of Vakai and her falling out with Hotu Matu'a: When Vakai hears of Hotu's accusation she tells that Tuu Maheke's lineage is true whereas Hotu is actually the one raised by foster parents.

Last Labours of Hotu Matu'a: The family cleaves. Hotu follows Vakai; does good works, fathers children.

**Death of Hotu Matu'a:** The chief faces death. His assets are divided (cut) among seekers of inheritances.

**Departure of the Soul and Funeral of Hotu Matu'a:** Two spirits attend Hotu's soul as it departs. His dead body is borne up in mourning.

Separation and Re-discovery of Hotu Matu'a's Skull: After the funeral, a son cuts away Hotu's head and hides it. (Ure Honu) finds the skull of Hotu Matu'a and displays it.

Theft of Hotu Matu'a's Skull: At a feast, Tuu Ko Ihu recognizes the cranium (and its value) and steals it.

*Intimidation of Tuu Ko Ihu:* Angrily, Ure Honu recruits men. They break down Tuu Ko Ihu's stone-works in search of the skull. The thief sits and laughs.

**Repatriation of the Skull:** (Ure Honu) confronts Tuu Ko Ihu and pushes him off his perch. Below the upended seat is revealed the skull. Thus, Ure reclaims his find.

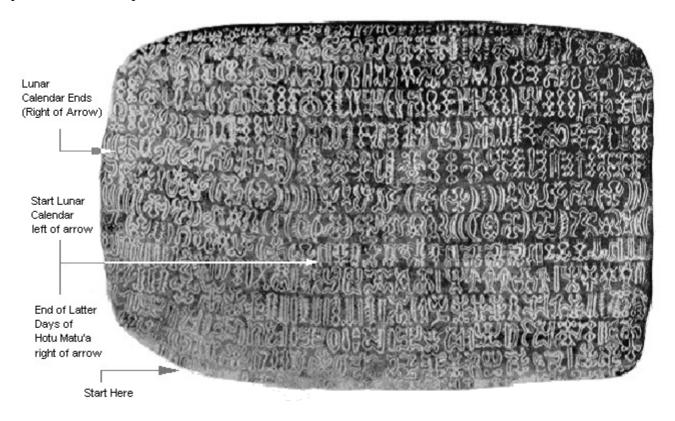


Figure 2: Tablet 'C' (Marami Tablet) 'recto' Showing Lunar Calendar and Suspected Latter Days of Hotu Matu'a.

At the time of writing this tablet is at the Museum of the Congregazione Padre dei Sacri Cuori in Rome. (Photograph reproduced with permission from the translation of "L'Ile de Pâques et ses Mystères" by Dr. Steven-Chauvet at Internet Site <a href="http://www.chauvet-translation.com">http://www.chauvet-translation.com</a>)

#### **Tablet Physical Layout**

Figure 2 presents a photograph of the Marami Tablet. Translation of the Lunar Calendar in the centre of the tablet is sufficiently developed to establish the direction of reading.

To peruse the glyph string, which we propose to encode the folklore of the latter days of Hotu Matu'a, one must start at the lower left of the tablet—the origin identified by early investigators as the proper starting point for the reading of *rongorongo* tablets (Thomson 1891: 516). Thence one advances row by row, bottom to top, left to right, turning the tablet 180° at the end of each line to accommodate the inverted boustrophedon script. The supposed anthology concludes at the beginning of the Lunar Calendar. The bounds of the target reading sequence are, therefore, constrained by the tablet layout as well as the known folklore content. The arrangement is <u>not</u> 'open ended' or flexible to our choosing. It is not sufficient to target a translation around 'islands' of particularly pictorial glyphs and then pontificate 'fluff' across whatever expanse is between them. Successful epigraphy must contend with a pre-determined regimen imposed upon a glyphic route of pre-determined length.

#### **Methods of Glyph Translation**

Table 4 presents a lexicon of translations for several of the glyphs from the Marami tablet. We used the following methods to develop the lexicon.

#### 1. Semiotic Glyphs

As noted, *rongorongo* apparently contains a large number of semiotic glyphs. The value of 'separate into two parts' is an example of a glyph for which morphology matches meaning. A great number of the glyphs that have been interpreted by scholars are of semiotic derivation and the semiotic hypothesis is generically a rational one, based upon what is known of the development of written human communication. Figure 3 presents a possible semiotic basis for a glyph that we dub 'Rapa Nui'.

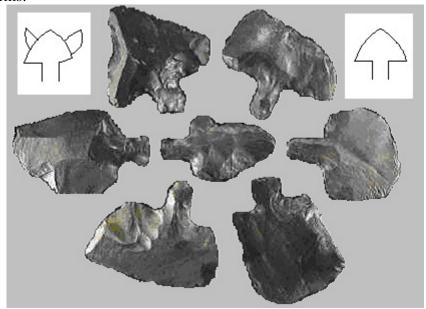
#### 2. Rebuses or Metonyms

Our work on the lunar calendar conservatively indicated four rebus or metonymic forms: 'fish-ika-growth/demise', frigate bird-taha-great, back-a'tua-lord, and turtle – honu/honui – provider. (Berthin & Berthin 2006: 97). Examples of additions to this list are: Lizard man-tangata moko-thief/steal/succession (Krupa 1974: 61), and sky-rangi-(Polynesian rebus value—beloved ruler or rank/king)<sup>2</sup>.

#### 3. Glyphs Identified by Scholars

We may accept the accuracy of published works by *rongorongo* epigraphers and assign glyph translations as proposed by these individuals. Whereas the character values associated with the Lunar Calendar may well be correct ones, other translation work is more often than not, prone to error. A principal reference, the well-known 'Jaussen's List', has been found to be "less than effective" for translation of glyph sequences (Fischer 1997: 145). Jaussen's translations were derived from the readings of a Tahitian plantation worker named Metoro Tau'a Ure. The man had spent his childhood upon Easter Island (Fischer 1997: 227) and received basic instruction in *rongorongo*. The work of Metoro has been challenged, in part, because he apparently read the Marami lunar calendar backwards (Gerard 1992: 168), (Guy 1999: 125-6) without noticing that he was allowing the 'waning' side glyphs to precede the 'waxing' ones. On account of so conspicuous a failure, his literacy in *rongorongo* must be assessed as doubtful. Nevertheless Metoro offered useful insights into identification of the actual subjects of

many of the glyphs, and it is a near certainty that he correctly identified at least a few semiotic forms.





### Figure 3: Possible Semiotic Rongorongo Glyphs

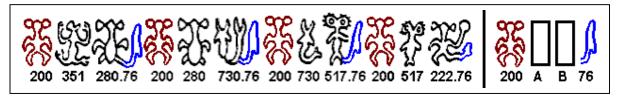
Top: Mata'a Spear Tips and Barthel Nos. 9 (*Hau-rangi*?-haranguer) and 86 (*rangi?-rank/king, sky*). Possible metonyms for authority or violence. (Photograph reprinted with permission of Peter Bostrom – Lithic Casting Lab, Troy, IL, USA)

Bottom: Relief Map of Rapa Nui with glyph inset (From photograph reprinted with Permission of Karsten Rau, © 1999, Internet Site <u>www.karsten-rau.de</u>).

Clearly the success of *rongorongo* epigraphy is contingent upon accurate inference of glyph values. The possibility of accepting erroneous translations is mitigated in several fortunate circumstances where different researchers independently and orthogonally deduce the same glyph interpretations. Building upon the completed work of such scholarly mentors, we propose, with confidence, values for symbols such as 'downward-directed-fish'—'wane or die' and 'canoe'—'voyage'.

Figure 4: The Small Santiago Tablet 'Genealogical' Glyph Arrangement Pattern

(Diagram based upon Guy 1998: 109)



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{| Glyph: Behold the King<sub>200</sub>| |Glyph A|} (|Glyph B| |Glyph: Phallic/-progeny<sub>76</sub>|). {| Glyph: Behold the King<sub>200</sub>| |Glyph B|} (|Glyph C| |Glyph: Phallic/-progeny<sub>76</sub>|). {| Glyph: Behold the King<sub>200</sub>| |Glyph C|} (|Glyph D| |Glyph: Phallic/-progeny<sub>76</sub>|). {| Glyph: Behold the King<sub>200</sub>| |Glyph D|} (|Glyph E| |Glyph: Phallic/-progeny<sub>76</sub>|).
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- **4.** Multiple Occurrences. We may suggest values for certain glyphs based upon the location of their recurrences within narrative. Consider the oft-cited glyph sequence of the Small Santiago tablet (shown in Figure 4-- subscripts identify glyph Barthel numbers). Here, the glyphs follow a logical progression of form |boundary1| · status quo 'A' · change agent 'B' · |boundary2|. In each step of the progression the change agent becomes elevated to the new status quo—only to be displaced in the following step by a newly introduced change agent. There are not a large number of possible interpretations for this set of successive syllogisms. Consistent with the concluding 'phallic' glyph, Knosorov and Butinov (1957: 5-17) propose that the whole sequence presents an Icelandic style patronymic genealogy in which the values of Glyphs A through D are deemed to represent proper names. If a match could be found to a known Pasquan genealogy then this would indeed be a very plausible translation. As a general statement regarding recurrent structures, the translation possibilities for glyphs become constrained wherever there is presentation in multiple positions. If definitions are proposed, which make sense both in diverse contexts of presentation and in faithfulness to a known record or folk story (such as the well-known anthology of Hotu Matu'a), then the translation becomes plausible. Regarding the present work, this technique reinforces the credibility of the *moroki* 'one after another' signifier glyph (Barthel 2)—an ideogram that develops three anecdotes. Specifically these are: Vakai's successive forays for food, her several flights from Hotu Matu'a and finally, the macabre filleting of the body of Hotu.
- **5.** Logical Progressions. We note and exploit logical relationships among rongorongo characters. Such relationships—abundant throughout the corpus—are of major importance among (the aforementioned) spatial or 'accumulation' signifiers plus symbols

that relate to human development (see Table 1). It is possible to use extant translations of the Marami Lunar Calendar (LC) (Berthin & Berthin 2006: 8-19) or Jaussen's List (JL) to propose some of these character values. By logical progression, we can postulate values for certain undefined characters. Table 1 illustrates this procedure and additionally offers up proposed values for 'ill-preparedness/tastelessness/immaturity' and 'baby-headed son'. We note that Rapa Nui terms 'kava' (immature) and 'hua' (maturity) also translate respectively as the metaphors 'tasteless /sour' and 'bellicose'. Of the 'kava' glyph, at least, the dominant context of presentation within the proposed Marami anthology of Hotu Matu'a seems to relate to human (rather than vegetable) development.

Table 1 Logical Relationships Among <i>Rongorongo</i> Characters								
(Infancy) (LC)	(Immature, Lousy, Unprepared, Unpalatable) 'Kava, Mata' Derived Definition	(Fruitfulness, Belligerence, Maturity) 'Hua' (LC)						
	(Child) 'Poki' (JL)							
Immature- headed son 'Tagi karaga' Derived Definition	(Son, Cohort) 'Nuku' (JL)							
LC = Known from Lunar Calendar, JL = Known from Jaussen's List								

**6.** Reduplications Glyph repetitions are common in rongorongo and indeed, word reduplication is characteristic of indigenous Polynesian languages (Fischer 2001: 112). In the Malayo-Polynesian language family, reduplication may serve a variety of linguistic functions such as pluralization and intensification (Chang 1980: 580-581). We propose that these are the purposes of duplicate and triplicate rongorongo glyphs and we translate accordingly.

Table 2: Coding and Translating of Anthropoid Glyphs										
Glyph & Barthel Numbers	Anatomic Components	Table 4 Lexicon Barthel Code & Definition	Full Translation							
206'21	Cranial Membrum Inferius Membrum Superious Infix (Inferious)	2XY Type – Pasquan 20Y Type – Enter WX6 - Deeds 21 - Empty Body	Make way for the Hungry Pasquan and his deeds.							

7. Anthropoid Glyph Interpretation We recognize the special case of anthropoid glyph-sentences. It is necessary to conjugate these in terms of their constituent parts so as to clearly present translation. Table 2 illustrates this process. Barthel employed three code digits for anthropoids. Notwithstanding a plethora of irregularities, his convention may be broadly summarizes as follows. The leftmost digit denotes cranium type; the centre digit classifies what we refer to as membrum inferious (legs and trunk). The rightmost digit signifies the variety of the membrum superious (arms and hand). Krupa (1972: 19-26) presents a thorough explanation of Barthel's anthropoid nomenclature. Barthel's system is widely used and, therefore, we have chosen to retain it--even though its capacity for glyph description is limited.

Guy (1990:12) has proposed that a change in glyph orientation produces a change in meaning. We hypothesize that in many instances, a left facing anthropoid glyph or appendage denotes association with past glyphs or 'past tense' whereas right facing denotes 'present or future' or association to the following glyph(s). Polynesian languages are endowed with just two major tenses—past and non-past. As such there is a fortuitous match between available lateral directions and linguistic tense requirements. Anthropoids 'doing the splits' may fulfill the grammatical role of a conjunctive adverb and indicate association to glyphs on both the left and right sides. Our translation follows these conventions. The 'Extended Barthel System' (CEIPP 2001) endorses the suffix 'y' to identify left-facing glyphs or components and we follow the same principle of nomenclature.

#### TRANSLATION OF THE GLYPH SET

On occasion we propose minor changes to certain Barthel numbers associated with the initial 200-glyph sequence of the Marami tablet. Where translatable infixes or affixes have not been noted, we add designations for these. In rare cases-being at odds with Barthel's glyph characterization—we call the glyph as we see it. The copy of Barthel 190c, which precedes the affirmations of Vakai, is a classic example of a contestable anthropoid form.

Equatorial punctuation points demark specific glyph domains and subscripts refer to glyph Barthel numbers. Superscripts '2g' and '3g' identify doubled or tripled glyphs, respectively. *Rongorongo* is unpunctuated. Consistent, perhaps, with the intentions of the original author, we are able to infer sectional subtitles within the glyph body and improve the quality of translation. To cultivate the readability of the narrative (which, all efforts notwithstanding, remains a gangly hybrid of English and Pasquan grammar) we occasionally insert indefinite articles or prepositions. Square brackets frame these. Additionally, adjective forms are typically inverted. Our reading is presented in Figure 5.

#### Figure 5 (Overleaf) – Rongorongo of the Latter Days of Hotu Matu'a

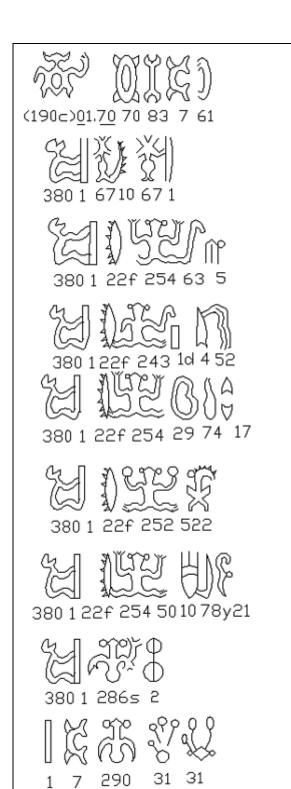
# The plot<sub>1</sub> · Crossing the land of Rank/king<sub>86</sub>·[and] Falling Short<sub>755</sub>

Pitiful<sub>50</sub>·baby<sub>74</sub>·cries<sub>37</sub>. ·Cohort<sub>5</sub> ·weeps<sub>37</sub>. · immature<sub>45</sub>. ·The plot<sub>1</sub>: •The Pasquan is<sub>290</sub> empty<sub>21?</sub>, ·gnawing<sub>69</sub>· [for] engorging<sub>700</sub>.· Pasquan to be full<sub>290</sub>. [by] great providing<sub>600V</sub>). • The plot<sub>1</sub> • (the great<sub>600</sub>·journey<sub>7</sub>)-- ·tell [of] the divisive happening<sub>385v</sub>. • The sub plot<sub>1d</sub>· of the provider (*honui*- -Vakai?) 280 a. The plot:1 ·The Pasquan (*Vakai?*) brings the deed<sub>226</sub> · (of) fruitfulness<sub>74f</sub>. ·The Pasquan brings<sub>226</sub> the incomplete plot <sub>11</sub>. ·Begin telling<sub>380</sub>· [of] the incomplete plot<sub>11</sub>. · One then another<sub>2</sub>·--meager ·harvest<sub>34</sub>. ·One then another<sub>2</sub>· -plants?<sub>34V</sub>· Tane's efforts fall short<sub>670?</sub> (*Time's a problem*) b. ·Here's a great (taha)<sup>c</sup> act<sub>606</sub>! ·The plot<sub>1</sub> (is a) · great speech<sub>604</sub>. of misery<sub>50</sub>. The speech begins to develop<sub>370</sub>.

"Haranguing<sub>9</sub>·baby-headed<sub>45</sub>
·cohort<sub>5</sub>"! Pasquan takes in (a)
headache<sub>201</sub>. ·The sub-plot<sub>1d</sub>:
Pasquan takes in (a)
headache<sub>201</sub>.·The plot<sub>1</sub>: ·Begin, to
speak [of a] divisive<sub>385</sub>· libation<sub>70</sub>.
·Throbbing headed Pasquan brings
divisiveness<sub>225</sub>·(greatly<sub>600</sub>).·

# The Progress [of] Falling Short<sub>755</sub>.

Enter Pasquan $_{215}^{d}$  to dispute $_{770b}^{e}$ . Speak. Begin to swell  $_{370}$  the flood $_{70}$  [of] disputes $_{770b}$ . [of] the little? $_{74}$  deed $_{6}$ . Here enters the Pasquan  $_{74}$  taking in $_{201}$  [of] the libations $_{70}$  [of] the child $_{91}$  (the affected child $_{91}$  --it $_{62}$  [of] Rapa Nui $_{21}$ ).



Come here [ye] 'unenlightened': take in [this] water<sub>(190c)01.70</sub>  $\stackrel{f}{\longrightarrow}$  (this) isolating<sub>83</sub> ·torrent<sub>70</sub>.

# ·The Journey<sub>7</sub>; ·the Taking in<sub>61</sub>·

Begin to  $tell_{380}$  ·the  $plot_1 \cdot - \cdot^{(2g)}$ the increasing, disturbing<sub>67</sub> ·hurtful division<sub>5f</sub>--the  $plot_1$  ·increasingly disturbing<sub>67</sub>.

Begin to  $tell_{380}$  the plot<sub>1</sub>.  $\cdot$  |?<sub>22f</sub> |·

The Pasquan affirms<sub>254</sub>· damnation<sub>63</sub>· [of] the affected cohort<sub>5t</sub>. ·

Begin to:  $tell_{380}$  the  $plot_1$ .  $\cdot$   $|?_{22f}|$  Here then the Pasquan's damnable<sub>243</sub> · little  $plot_{1d}$  · weakens<sub>52</sub> (and) divides<sub>4</sub> <sup>9</sup>! ·

Begin to  $tell_{380}$  the plot<sub>1</sub>.  $\cdot$  |?<sub>22f</sub> |· The Pasquan affirms<sub>254</sub>. [o

The Pasquan affirms<sub>254</sub>· [of] ·uncertain<sub>17</sub> ·baby74·*vaha*<sub>29</sub> (*birth*). ·

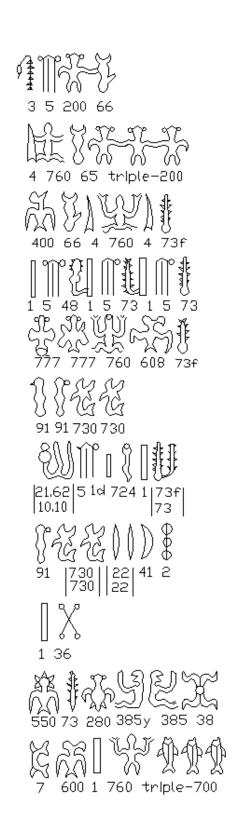
Begin to  $tell_{380}$  the plot<sub>1</sub>.  $\cdot$  |?<sub>22f</sub> |  $\cdot$ 

The Pasquan describes  $it_{252}$ —the disturbed parentage<sub>522</sub>.

Begin to  $tell_{380}$  the plot<sub>1</sub>.  $\cdot$  |?<sub>22f</sub> |·

The Pasquan's affirmations<sub>254</sub> · divide<sub>10</sub> · [to] destitution<sub>50</sub> · the affected lives<sub>78y,21</sub>  $^{\rm h}$ .

Begin to  $tell_{380}$  the  $plot_1$ . Here, assert the Pasquan's, continuing  $weal(s)_{286s}$ ; ·Well  $built_2$ . ·The  $plot_1$ : ·The  $journey_7$ · [for] ·Pasquan's enduring  $weal(s)_{290}$ . ·Go many places to many  $places_{31}$ ·-- many assemblages?<sub>31</sub> (or months).



The report<sub>3</sub> (rongo) · [of] the king<sub>5</sub>·

#### The Pasquan) 200 Dies 66

Brigandly<sub>760</sub> ·(tangata moko) apportion<sub>4</sub> ·[of] the dying<sub>65v</sub>. ·Make way [for] many Pasquans  $_{200.200.200,(3g)}$ . ·Great speakings<sub>400</sub>·[of] |the dying<sub>66</sub>· [and] dividing.<sub>4</sub>· Proclaim succession<sub>760</sub>· cutting<sub>4</sub> ·the body<sub>73f</sub>: Land<sub>1</sub> · [to] the cohort  $_{5}$  ·(fruitful<sub>48</sub>, ·land<sub>1</sub>·[of] the affected king<sub>5</sub>--·the body part<sub>73</sub> · [as] land<sub>1</sub>)--·the affected king's<sub>5</sub> ·body<sub>73</sub>.

 $Kuihi_{777}$ ,  $\cdot Kuaha_{777}$  (spirits)· steal the breath, affirming<sub>760</sub> ·the great permanent separating<sub>608</sub> · [of] the body<sub>73f</sub>.·

# |<sup>(2g)</sup>Many Different Children <sub>91,91</sub> · | |(2g)Progress, Greatly

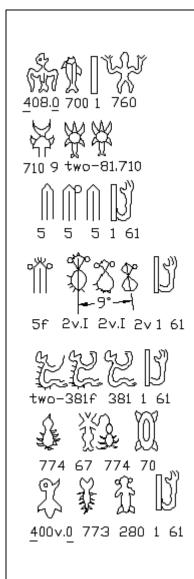
### Mourning<sub>730,730</sub>.

The plot<sub>1</sub>· [of] the divided body<sub>73,10,73f?</sub> · [of] the affected cohort<sub>5</sub>-- · one then another<sub>21,62</sub>· [into] <sup>(2g)</sup>two small parts divided<sub>10.10</sub>. · (Sub plot<sub>1d</sub>: 'It' on cave<sub>724</sub>)? · Child,<sub>91</sub>· <sup>(2g)</sup>progress greatly mourning<sub>730,730</sub> · great "slat tip" (end)<sub>22</sub><sup>(2g)</sup>.

# Past moon<sub>41</sub><sup>j</sup> ---Illustrious Matter (is) finished<sub>2</sub>· Plot<sub>1</sub>·

A great day<sub>550</sub>!· Crossing36· the body part<sub>73</sub>· finder (*Ure Honu*<sub>280</sub>)· (<sup>2g)</sup>say, did happen to scrutinize·--shall begin to tell discernment <sup>k</sup> (act of finding?)<sub>385y,385</sub>·—[of] the matter long set aside<sub>38</sub>.

The great<sub>600</sub> ·journey<sub>7</sub>--·the plot<sub>1</sub>: ·Affirmation of thievery<sub>760</sub> [at] ·  $^{(3g)}$  the huge engorgement  $_{700,700,700}$  (feast). ·



The plot<sub>1</sub>: · describe ogling (by Tuu Ko Ihu); great permanent separation  $_{408}$ · [of] the increase $_{700}$ . · Affirm the thievery $_{760}$ . ·

'The Loss<sub>710</sub>. The Haranguing<sub>9</sub>. . (29) The very significant Dawning (Coming to Light)<sub>81.710,81.710</sub>!

 $^{(3g)}$ Tall thug<sup>l</sup> ·affected king· tall thug<sub>5,5,5</sub>: ·[a] plot<sub>1</sub> [of]·action<sub>61</sub>.· Shaking headed king<sub>5f</sub>:

 $\cdot^{(3g)}$ (What's) well built is massively shaken/degraded<sub>2v,2v,2v</sub><sup>m</sup>: ·[a] plot<sub>1</sub> [of]·action<sub>61</sub>.· <sup>(3g)</sup>Begin to take in a very great lower lumbar shaking<sub>381f,381f</sub>: ·[a] plot<sub>1</sub> [of]·action<sub>61</sub>.· Shake the belligerent<sub>774</sub> (one).· Upset<sub>67</sub> ·the shaking object *(or what's well built)* <sub>774</sub>.

·[The] libation<sub>70</sub>: ·

Tell of observing the giving<sub>600v</sub>· [of] the skull<sub>773</sub>· [to] (*finder*) Ure Honu<sub>280</sub> ·(the plot<sub>1</sub> [of]·action<sub>61</sub>.)·

#### End Notes:

- a. A new character—"provider" (honui)--not the hungry individual.
- b. Tane the sky god. Associated with sun/moon in Lunar Calendar (Berthin 2006: 95).
- c. Frigate Bird. Associated with aged, great, long (taha) events (Guy 1990: 144).
- d. The hand glyphs (verbs) of the Pasquan hominoid (Barthel 215) appear to reference the preceding 'dysfunction' glyph and following 'dispute' glyph.
- e. Possibly derived from 'Rau-hiva-aringa-erua' a bi-facial (Janus faced) warrior of Rapa Nui lore. In battle, the two faces of this warrior began to argue with each other and Rau-hiva-aringa-erua was thus distracted and slain (Kjellgren 2002).
- f. This glyph derives from the adjacent symbol for 'information' (idiomatic 'water'—vai) (Barthel 70). Despite its anthropoid form it does not refer to an animate character.

- g. According to the oral folklore, the target of these machinations was king Hotu Matu'a.
- h. The ear/eye type lozenge on the right side of a glyph seems to indicate 'being affected'. By extension, a lozenge on the left of a glyph would denote an instigator.
- i. Barthel 4 (*iviheheu*) is hardworking. For example, semiotics justifies it as, needle, blade, cut, wound, apportion. The latter three are a common Pasquan concept expressed by terms such as 'rara, rara'u'. The author possibly alludes to pains of death, corpse preparations, or finally (and surely), allocations of inheritance among Hotu Matu'a's sons. Intriguingly, in Polynesian lore, the nearby lizard glyph (Barthel 760) is also associated with the concept of succession (Krupa 1974:61).
- j. A simple interpretation of this phrase would be to accept the 'past moon' glyph *mahina* (Barthel 41), as metaphoric for an old dying person and link the moon glyph to the previous description of mourning. An alternate parallel would be the selection of a 'past moon' to signify a happening. We choose this option and link the moon glyph to the preamble that introduces the "Rediscovery of the Skull."
- k. It was practice on Rapa Nui to retain and incise patterns in the skulls of powerful persons (Hough 1889: 883). Such skeletal crania were thought to impart supernaturally derived blessings to the owner (Englert 1970: 86-87). The glyphs combination 280, 385y, 385 also occur in the Lunar Calendar to depict (extra) intercalary moons. In the context of each narrative, then, the interpretation "to find" is appropriate. (Berthin 2006: 95).
- 1. We determine the 'un-lozenged' 'cohort' glyph to be a pictorial representation of the 'lizard head' glyph. That zoomorph, 'tangata moko'—'lizard-man' (thief) affords a suitable interpretation.
- m. 'The wall is degraded'. The axis of symmetry of this glyph leans nearly 9º relative to the first glyph of the triad--an example of the duality between morphology and meaning in rongorongo.

#### **CONCLUSIONS**

#### **Veracity of Folklore**

Our reading of the Marami tablet affirms a concise and accurate summary of the anthology of the latter days of Hotu Matu'a. It has been hypothesized (Reiser 2005: 516) that the reliability of the oral tradition of the Rapa Nui people was compromised on account of the decimation of population that occurred in the late nineteenth century. On the other hand, tradition has it that Polynesians jealously guarded the accuracy of their oral tradition. In some situations, changing a chant was purported to have been punishable by death (Chauvet 1935: 69). Accepting the present translation to be credible, we find that any factual distortion associated with oral transmission has been minor indeed. In this particular instance the oral and written records substantially conform.

For completeness we do note the omission of minor details from the *rongorongo* account. Tradition holds, for example, that Ure Honu's feast was associated with a house dedication (Barthel 1978: 221) whereas the *rongorongo* makes no mention of the new abode. Given the brevity of the account that is inscribed upon the Marami tablet it is not too surprising to come across a few missing elements.

Of particular interest is the final glyph set—a sequence that we hypothesize to depict the recovery of the skull by Ure Honu. Barthel's description of this conflict is presented in Figure 6 along with a series of twenty-five odd Marami glyphs, which we consider to be portrayals of the same narrative. The order of presentation is exactly the same for both

the glyph sequence and the narrative! And in a telling detail, the vertical axis of the final (Barthel 2v) triplet--which we have proposed to denote the degrading of Tuu Ko Ihu's stonework--is 9° off plumb (see Figure 6). Such incline is evocative of the act of tilting of a structure. To be sure there will always be a diversity of interpretations for the complete 'chorus' of Figure 6. However, we doubt that an alternate model will ever be found, which approximates this glyph sequence as effectively as Barthel's folkloric narrative.

Figure 6: Matching Oral Tradition (Barthel 19	978: 222) to the Rongorongo Record
Barthel: <i>Ure Honu grew angry. He called his people, a great number of men, to conduct a raid.</i> <u>Direct:</u> Tall thug, victim, tall thug (a plot [of] action) [of] the shaking-headed king.	
Barthel: He lifted up the one side then let it fall down again. He found nothing. Then Ure called, "dig the ground and continue the search".	\$\$\$ D
<u>Direct:</u> What's) well built is massively shaken/degraded. (A plot [of] action).	- <b>-</b> 9° <b>-</b>
Barthel: The king sitting on the stone. They lifted the king off and let him fall.  Direct: Begin to take in a very great lower lumbar shaking. (A plot [of] action).	
Barthel: They lifted the stone, and the skull looked (at them) below. They took it, a clamour began because the skull [was] found.  Direct: shake the belligerent (one). Upset the shaking object (or what's well built).	
Barthel: Ure Honu was satisfied. Ure Honu knew that it was the skull of the king.  Direct: The libation. Tell of observing the giving [of] the skull [to] Ure Honu (finder/provider). (The plot [of] action).	MUFF D

### Affirmations of the Semiotic/Logographic Model

**Dominance of Semiotic Glyph Forms** We propose that the Rapa Nui term (Barthel 1) 'henua' (land/domain/ plot) affords a semiotic representation. This is a credible assumption insofar as the independently derived Chinese character wei for 'field' is of quite similar (semiotic) morphology to the re-duplicated henua (land) agglutinate (Barthel 15). We further acknowledge (Barthel No. 5) 'ariki' (king, cohort) to be an abstract representation of an anthropoid cranium. Figure 7 illustrates these pictographs.





Left, Barthel 15 (Settled Lands?), Centre, Chinese Character Wei (Field) Right, Barthel 5f – King, Cohort

With inclusion of the frequently occurring Barthel 1 and Barthel 5 glyphs into the pictographic population, it becomes possible to categorize as semiotic or rebus-type, approximately 160-170 of the glyphs from the entire anthology of Hotu Matu'a--that is 75-80% of the total. Moreover, major glyph sub-sequences (such as the funeral blessings of the sons and the final confrontation between Ure Honu and Tuu Ko Ihu) show themselves to be almost completely amenable to semiotic translation! In these regards, our translation affirms a semiotic/logographic model for *rongorongo*. Complete

We note that several glyphs (*Tane, Taha, Marama, Mahina, Ata, Matu'a hagai* (partial), *Ra'a, Hua, Ika, Rangi, Honui and Rongo*) recur in both the Lunar calendar and the folklore anthology of Hotu Matu'a. In conformity to the conjecture of Barthel—advanced in his *Grundlagen zur Entzifferung der Osterinselschrift* (Fischer 1997: 234)—these characters retain consistent Pasquan definitions (or rebus values) wherever they occur.

Limitation of the Phonetic Component A major divergence of our work from certain classical epigraphers such as Barthel and Guy (Fischer 1997: 234, Guy 1990: 144) is that we determine the phonetic component of *rongorongo* to be restricted to 'whole word' rebuses. In agreement with Englert (1970: 80) we find no evidence for any phonetic accessory within the script. Nowhere is the deficiency of phonetics more evident than in relationship to missing proper names.

Based upon assessment of the Spanish Treaty of 1770, Fischer (1997: 3-5) noted the inability of the Rapa Nui chiefs to write proper names in rongorongo. He concluded that rongorongo had not yet developed at the time of the treaty. Surprisingly, our work shows that proper names remained absent from later and well-developed rongorongos—at least insofar as the anthology of Hotu Matu'a upon the Marami Tablet typifies possible post-contact composition. Within the anthology, the Rapa Nui patriarch himself is variously referred to as 'hungry Pasquan' or 'headachy Pasquan'—never Hotu Matu'a. Tuu Ko Ihu a later king of Rapa Nui is derogatively characterized as an 'ogler' or a 'lizard man' (thief)—never as Tuu Ko Ihu. Ure Honu alone is represented by his namesake (male turtle). Yet, we have proposed that the turtle glyph honu easily associates with the rebus term 'honui-provider' and, Rapa Nui lore recognizes Ure Honu primarily as the finder of the skull of Hotu Matu'a. We doubt that our treasure-retrieving gentleman was ever

christened 'Turtle'—suspecting instead that he came to be nicknamed for his famous input to the inventory of precious artifacts upon Easter Island.

Internal Structure Notwithstanding that rongorongo is unpunctuated we find evidence for internal structure within glyph sequences. Our conclusions match the findings of scholars such as Krupa (1971: 8-9) (who, based upon observed repetitions of morphologically similar glyphs, presented the Lunar Calendar in the form of an eight stanza poem). Table 3 categorizes the folklore of Hotu Matu'a as it is apparently presented upon the Marami tablet. We note two 'choruses'—short repetitious sequences—that were undoubtedly crowd-pleasers in days of yore. The first (marquee) chorus presents the affirmations, with which Vakai condemned Hotu Matu'a. The second chorus concludes the anthology and chronicles actions against Tuu Ko Ihu by Ure Honu to win the return of Hotu Matu'a's skull.

Table 3: Rongorongo Verse Structure – Latter Days of Hotu Matu'a

Category	Descriptor	Folklore Element			
Parentheses	'Falling Short'	The Hunger and Chastising of Tuu Maheke			
Free verse		Hotu Argues and Learns			
Chorus	7 stanzascommon initial glyphs The Affirmations of Vakai				
Free verse		Relocation of Vakai and Hotu			
Parentheses	'Brigandly Cut Body'	Succession upon the Demise of Hotu Matu'a			
Parentheses	'Body Plot Son'	The Estate Divided Among Heirs			
Parentheses	'Body'	Body is Taken Away by Spirits.			
Parentheses	'Children Progress Mourning'	Funeral, Skull Division and Concealment			
Free verse		Ure Honu's Discovery of the Skull			
Parentheses	'Plot Thievery'	Great Feast & Tuu Ko Ihu's Theft			
Free verse		Skull Retrieval Introduction			
Chorus	5 Stanzas–Triads & Common End Glyphs	The Retrieval of the Skull			

We observe a useful family of grammatical devices, and propose that these be designated by the title: 'Descriptive Parentheses'. As with English parentheses these glyphic structures bound information sequences that have a specific theme. *Rongrongo* glyphs, however, are endowed with their own conceptual meanings and these augment, introduce or summarize the parenthetically enclosed materials. The obvious purpose of the bookend structures is to label and punctuate the subsections of narrative. Sometimes, however, one parenthetic glyph enlivens the body of an anecdote whereas the redundant copy introduces or concludes the subsection—affording opportunity for re-statement. Repetition is a useful device in storytelling and chanting— 'Descriptive Parentheses' afford a vehicle for recapitulation.

Finally, we remark the prevalence of the *henua* (domain/plot) glyph (Barthel 1) in *rongorongo*. Perhaps this sign might have been used, in certain cases, to facilitate narrative division or character differentiation. For example, the placement of a morphologically 'nicknamed' character adjacent to, or in possession of a *henua* glyph, could signify the nomination of the character to the status of narrative protagonist within that specific 'domain.'

#### A Rosetta Stone

The Marami Tablet is unique among rongorongo artifacts in that it presents lengthy character sequences, which translate by semiotic reading of the glyphs, into works of literature or science. During the early 1860s, after the understanding of rongorongo had been substantially lost, the missionary Eugene Eyraud observed that rongorongo tablets were to be found in almost every island household. The names of the glyphic symbols were known but the reading of the language was unknown (Englert 1970: 74). Against this backdrop Marami ought to have been kept in especial high regard since its Maramataka and Hotu Matu'a anthology could doubtless have been elicited by cursory naming of the large numbers of significant, semiotic 'keyword' symbols in those two subsequences. Incredibly, the Pasquans never made such connection between the telltale glyph patterns and the related keystone writings of their past indigenous civilization. Of the islanders tepid epigraphic interest Eyraud ruefully commented: "...little they make of these [tablets.]" (Flenley & Bahn 1992: 183). It remained for the renowned ethnographer Thomas Barthel to first remark the Marami Lunar Calendar in his cornerstone publication nearly a century later (Barthel 1958: 242-247). If our proposed translation of the Hotu Matu'a anthology is endorsed as a valid adjunct to Barthel's seminal epigraphy, and if rongorongo is generally affirmed to be a semiotic-logographic script of the nature proposed herein, then the Marami board truly represents an epigraphic treasure. Perhaps one day this *rongorongo* tablet shall stand as an equal in the company of Caspar Antonio Chi's Mayan note to Diego de Landa, the cliff cuneiform inscriptions of Behistun Persia and—greatest of them all—the Rosetta Stone.

Table 4: Marami Tablet Glyph Lexicon

Basis Types: 1. Semiotic glyph, 2. Rebus glyph, 3. Scholar interpretation, 4. Glyph occurs multiple times, 5. Glyph meaning inferred by logical progression, 6. Glyph also occurs in reduplicated form. LC: Lunar Calendar, JL: Jaussen's List.

Glyph & Barthel	Meaning Rapa Nui	Basis Type	Reference	Glyph & Barthel	Meaning Rapa Nui	Ba sis	Reference	
Number	,			Number	,	Ty pe		
Anthropoids-Cranial			Young People and Family					
2XY Series	Man, Woman He, She <i>Tangata</i>	1, 3, 4, 6, JL	Butinov/ Knosorov 1957: 15.	5	King, cohort, son? Ariki, nuku	3, 4, 6, JL	Chauvet 1935: Fig. 175.	
3XY,4XY Series	3XY -Tell 4XY-Long Speaking Vanaga, Parau	1, 3, 4, 6, LC	Berthin et al. 2006: 10-11.	45.5	Immature Headed Son Tagi karaga	- LC	LC – JL logical progres- -sion. See Table 1.	
6ZX Series	Long, Aged, (Great) <i>Taha</i>	2, 3, 4, LC	Guy, 1990: 144.	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Baby, small piece. Ata, iti	3, 4 LC	Krupa 1971: 8	
	Anthropoids-Boo							
20Y,21Y, 30Y, 31Y 60Y Type	Enter Arrive (Standard glyph posture) Tata mai, popo	1, 3, 4, 6, LC	Berthin et. al. 2006: 16-17	29	Hollow, Cavity <i>Vaha</i>	1, JL	Butinov/ Knosorov 1957: (their) Table 1.	
22Y,32Y Series	Bring, Obtain Rava'a, He-tari-mai	1, 3, 4	Krupa 1972: 22 messenger (carrier)	91	Child, Poki	3, 4, 6, JL	Chauvet 1935: Fig. 173.	
24Y,25Y 34Y,35Y Series	(seated woman) conjunctive adverb?* Noho tako'a, poreko	1, 3, 4, JL	Krupa 1972: 22 (childbirth-as in: glyph A left "births" glyph B right)	₹ СС 52 522	tumultuous parentage (Foster Parent?) matu'a hâgai	3, LC	Variant of Berthin et al. 2006: 95.	
37Y, 38Y Series	Sit, Unfurl (begin) tuku	1,3, 4, 6, JL, LC	Guy 1990: 136.	Birds, Fish, Bones				
29Y,39Y Series	Feasting hakakai	1, 3, 4, LC	Krupa 1971: 8.	600 600	Bird, <u>great,</u> <i>Taha</i>	2, 3, 4, LC	Butinov/ Knosorov 1957: (their) Table 1.	

280	Turtle,find, provision, windfall Honu(i)	1, 2, 3, 4, LC	Guy 1990: 145. Rjabchikov 1997: 363	र्ना 670	Time- keeper (Tane or Rongo?) (Evening?) ahiahi	3, LC	Berthin et al. 2006: 94-95, Krupa 1971: 13.
Th Th The Total 777	Super-Natural Spirits Kuihi Kuaha	1		600v	Give, yield Mamai Manu	4, 5	Antonym of 190c?
770	Dispute Mamahi, tatake	1, 3,	Kjellgren 2002	₹ 700	Engorge, feast Fish up-lka	1, 2?, 3, 4, 6, LC	Guy 1990: 140-1.
760	Lizard man, Thievery Tangata moko	2, 3, 4, JL	Krupa 1974: 61.	65 66	Die, ill, wane. Fish down –Ika.	2, 3, 4, 6, LC, JL	Guy 1990: 140-1.
				73 73f	Dead Body skull Puoko	1, 4	A proof of this definition is under development.
Anthrop	ooid Membrum S	Superior	us Affixes		Logical Pro	gressio	ons
1 8	Here	4		Λ	Immature,	LC,	Guy1990: 140
WX0 Series	A nei			45	Unpalatable Unprepared <i>Kava</i> , <i>Mata</i>	5- (like <i>Hua</i> )	- see our Table 1.
ارگری 61; WX1 Series	Take in Mana'u, Kai	1, 3, 4, LC	Guy, 1990: 147.	₹ 74	Fruit, Mature, Belligerent <i>Hua</i>	1, 3, 4, 5, LC- like <i>Kava</i>	Guy 1990: 140.
62; WX2 Series	Have or get 'it' To'o Rava'a	1, 3,	Berthin et al. 2006: 93. (have glyph 21)	7	Canoe (Journey) turn heel Rei, vaka	1, 3, 4 JL	Rjabchikov 1997: 362, 365. Chauvet 1935: Fig. 175.
63; WX3 Series	Hide, Block, Reprobation. Tuhi, Are	1, 4	(point the finger to incriminate)	70	Full cycle, Full story/ drink, water Aamu, vai	3, 4, 5 JL	Berthin et. al. 2006: 95-6. Chauvet 1935: Fig. 173.
WX4 Series	Proclaim, Enlighten, Affirm Hakahere hakahiku	1, 4	Krupa 1972: 21 (offer, recite)	38	Affair set aside, old work <i>Ariga ora</i> , <i>porou</i>	5 JL	(Barthel 70) aamu variant? Chauvet 1935: Fig. 175.
10; WX5 Series	Divide, Cut Iviheheu, Avahi, Rara	1, 3, 4, 6, JL LC	Berthin et al. 2006: 93.	21	It, thing, a place <i>Me'e</i>	4, 5- Like 29Y	
6; WX6 Series	Acts, works deeds <i>Aga</i>	1, 4	Krupa 1972: 21	∯ 17	Uncertainty hahati		

WX8 Series	Separate, take flight  Oho-ro-avai	4	Krupa 1972: 21	21.62	Two parts— One then another	1, 5-	Like Barthel 21 or 2.
Miscellaneous Affixes or Infixes				724	Skull in cave E kamo- kamo a te puoko i ana		
52	Wind, Water (weak force). <i>Toto, vai</i>	1, 3 JL	Rjabchikov 1997: 362, 366.	% 36	Cross Penapena?	1, 3	Guy 2008.
f,I	Throbbing, Trembling Remereme	1, 4, 6	(affix)	90 0 31	Go to many places Uéué, Vanavana	1	Variant of Barthel 2.
ۍ 37	Crying matavai	1, 4		ф ф 2d	One then another. Well built. moroki	1, 3, 4	Blanco 1993: 63.
3	Report Rongo	3 LC	Guy 1990: 146.	₹                 	Separate, Isolate vahi	1, 5-	Near antonym of 2d.
ि 69	Pang, Pain <i>Maruaki, hukia</i>	1		/ <u>/</u> 755	Part ways, shortfall, Dysfunction. manga	1, 4	
8 2,4	Harangue (superfix) <i>Hua-rangi</i>	1, 2, 3, 4, JL	Barthel 86 allograph		PI	ants	
⟨ <u>⟩</u> 86	Rank/king, sky rangi	2, 5 JL	Chauvet 1935: Fig. 173.	34	Solanum, Harvest poroporo	1, 3 JL	Chauvet 1935: Fig. 174.
5'≥' 190c	Gone, Deprive (Superfix) Garo	5	Antonym of Barthel 600v?	<del>1</del>	Plant?	1	
© Type 106-108	Empty (body infix) Hahata, pau	1,3	Blanco 1993: 63.		Astronom	ical Glyp	
0	See, ogle (cranial infix) <i>Tikea,û'iga</i>	1, 3,	Berthin et al. 2006: 93.		Sun, Good Day <i>Ra'a</i>	1, 2, 3, 4, 6 LC, JL	Widely Accepted.
A	To pass, progress (Subfix) hakaépa	2,4,6		22	Stick tip (End). Oti, Oka	3 JL	Chauvet 1935: Fig. 174.
⟨Ŷ	Land Crossed (subfix) ku'iku'i	1		Ф Ф 2	What is resplendent <i>Te inoino</i>	3 JL	Chauvet 1935: Fig. 175.

67 var 68 var	Disturb, Upset, Foreboding, ship wake, palm tree. <i>Niu</i>	1, 3, 4 JL	Chauvet 1935: Fig 174	) 41	The moon mahina	1, 3 LC, JL	Guy 1990: 144.
55	Mourn (superfix)	4, 6		∞ <b>∘</b> 2	What is brilliant Te inoino	3 JL	Synecdoche Chauvet 1935: Fig. 175.
710	Lose/ Gain neke/ tohake	1, 2, 4, 6, 5 LC	(synec- dochic) ika (Barthel 700)	© 7 8y	Life? oraga	3	Berthin et al. 2006: 95-96. ("silver cord")
	Miscellaneous	Glyphs	3	Miscellaneous Glyphs			
₩ 50	Destitute, Ruined, Pitiful tagi	4, 5 LC	(Variant of Barthel 700x)	{	Rapa Nui	1	
14	Needle, Blade Cut, Apportion Break. Ivihehe	1, 3, 4 JL	Chauvet 1935: Fig. 175.	774 or 2v	Stonework. One then another. Paenga, moroki	1, 3, 4, 6	Blanco 1993: 63.
]/[ 1,1d	Land, domain, plot henua	1, 4 JL	Butinov/ Knosorov 1957: (their) Table 1.	11	Obscured, Incomplete or negated Kai gaeke, ina, ta'e	3, 4 LC	Berthin & Berthin 2006: pp. 95-6. (diagonal lines).

#### **ENDNOTES**

- 1: Polynesian philosophy stresses the necessity of sacrifice for growth—a contronym that is apparently influential in *rongorongo*, but unremarkable in 'Western' languages (King 2003). Acknowledging the cultural difference we interpret fish-pointing-up '*ika*' (Barthel 711) as, simply, 'engorgement' rather than 'the sacrifice for engorgement.'
- 2: Barthel 9 and Barthel 86 are common allographs of the glyph identified by Metoro/Jaussen as 'rangi' (Chauvet 1935: Fig. 173). The term 'rangi' encompasses a broad range of meanings--sky, cloud, and noise. The frequent occurence of this glyph genus in rongorongo is suggestive of a metonymic function such as the definition of authority—the English equivalent of 'highness' (Maori rangi, Hawaiian lani). Allographs of the 'rangi' glyph may enable differentiation among homophonic concepts—especially those near-antonyms of "highness" and "noise". To such end, we propose that the root form (Barthel 86) be maintained according to the value proposed by Metoro/Jaussen--'rangi' (highness, rank/king). The very common, adorned version (Barthel 9) 'hatted sky', 'ha'u-rangi' may well denote the darker Polynesian concept of haranguing—Maori haurangi; Hawaiian haulani. The aforementioned English definitions of 'rank/king' and 'haranguing'—workmanlike translations at best—fortuitously offer themselves as near-homophones of their Polynesian counterparts!

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