A "Sacred Amulet from Easter Island —1885/6—"

Analyzing Enigmatic Glyphic Characters in the Context of the *rongorongo* Script

Robert M. Schoch · Tomi S. Melka

Abstract. A newly discovered artifact known as the "Sacred Amulet from Easter Island" ("EISA") displaying a limited number of *rongorongo*-like signs is brought to the attention of *rongorongo* (RR) scholars and other interested readers. Unfortunately, the names of the original Rapanui creator of the artifact, and its first European collector, have not come down to us; however, according to an old label attached to the object, it was collected in 1885 or 1886.

Initial probability estimates of this odd-looking piece suggest a custom-built "lunar-based calendar," possibly designed for propitiatory and/or divination ends. Given the re-occurrence of the "full moon" glyph /152/ on this artifact—among other glyphs—, the best way to evaluate its function and its general meaning is by comparison with the apparent "Lunar Calendar" (C*a*6—C*a*9 [= C*r*6—C*r*9]) on tablet "Mamari" (Barthel, 1958; Guy, 1990). Although there is no exact match, the partial overlap between the "Lunar Calendar" on "Mamari" and the "Sacred Amulet from Easter Island" is of interest, and requires proper documentation.

The fact that the "amulet" may post-date the year 1864—the chronological boundary marking the arrival of Christianity to Easter Island and the generally presumed "end" of the classical RR scribal tradition—does not diminish its status as a carrier of *rongorongo* signs. "EISA," evidently, cannot be equated with the pre-missionary extended texts appearing on various skillfully carved RR objects; yet, it may be an item for possible inclusion in a special sub-corpus dealing with the post-missionary pieces.

As a corollary, we conclude that in the light of past and current RR research, hypotheses should not go by unquestioned and should be critically assessed within the available evidence.

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> *Omne ignotum pro magnifico est* [Everything unknown is taken to be magnificent].
>
> (P. Cornelius Tacitus. *ca.* 98 CE. *Agricola* (*De vita et moribus Iulii Agricolae*). Book 1.30)

1. Introduction / Aims of the Study

The study of poorly known scripts that have thus far eluded generally agreed upon decipherment can be hampered by such factors as a small corpus for study, lack of a true bilingual text, apparent scribal variations and eccentricities within the corpus, questions as to whether the script under consideration is an "early script"[1] or a more developed and standardized script, and disagreements among modern scholars as to which inscriptions should be regarded as canonical (that is, authentic) and, thus, worthy of serious study. These considerations play into the study of the indigenous *rongorongo* script of Easter Island (Rapa Nui), first recorded in 1864 by the lay missionary Joseph-Eugène Eyraud.

There is a further aspect of *rongorongo* studies that should be taken into account. The majority of texts explored in the literature occur on wooden tablets and lack any type of specific context or supplementary non-linguistic data. For instance, there are no known *rongorongo* inscriptions accompanying indigenous illustrations, nor have many *rongorongo* inscriptions survived on artifacts of a functional nature beyond mere tablets; among the generally agreed upon canonical corpus of twenty-five *rongorongo* texts (Barthel, 1958; Fischer, 1997), one is inscribed on a long "staff," two are inscribed on *rei miro* (wooden gorget-like ornamental artifacts), and one short and partially defaced inscription occurs on a statuette of a *tangata manu* (birdman). The remainder are on wooden "tablets" of various shapes, sizes, and preservation status. Thus, in general, the artifacts that record the *rongorongo* texts provide little in the way of clues as to the meanings of the inscriptions.

An artifact related to the traditional *rongorongo* (= RR) practices on Easter Island (Rapa Nui) was recently located in a private collection (Schoch and Melka, 2020a). This ellipsoidal-shaped relic has an old paper label on it (see Fig. 3 below) that reads "Sacred Amulet from Easter Island—1885—" (abbreviated here as "EISA" [Easter Island Sacred

1. The designation "early script" is a convention on our part; we do not "condone" / endorse a teleological linear scale for the classification of scripts (cf., among others, Moorhouse, 1946, p. 17; Gelb, 1963, pp. 190–205, who did overtly make such claims). We recognize that the "early script/s" designation can be potentially ambiguous, as it may hint at the alphabetic script/s as the epitome of perfection, which they are not in our assessment.

Amulet]; see Fig. 4); possibly the date can be interpreted as "1886". The "EISA" object is made of painted wood with hair and two pieces of bone attached (tied) to it. What caught the early interest of one of the authors (RMS) was when he was told, before seeing it, that "All around the wooden body are various strange symbols of creatures and other geometric patterns". Direct examinations of the object - combined with high resolution photos of "EISA"—revealed a number of "scrambled" signs. Many of these resemble various *rongorongo* sampled glyphs (see Jaussen, 1893; Ross, 1940; Butinov and Knorozov, 1957; Barthel, 1958; Fischer, 1997), with the rest appearing to be geometric "decorative"-like designs, and there are also some illegible or obscured areas. Although "EISA" seems to be, at least to date, an "unicum," another old artifact from Easter Island depicted in Fig. 5 (and see also Fig. 6) can draw striking parallels in terms of the elongated / ellipsoidal shape and/or its perceived function(s): a propitiatory amulet intended to increase the fertility of sea-birds' and/or sea-turtles' eggs.[2] In any case, while this artifact is briefly and heuristically described in the legend of Fig. 5 and in footnote 2, the focus of our study is the "Sacred Amulet from Easter Island—1885/6—".

The salience and re-occurrence of glyph /152/ on "EISA" (Fig. 1)—up to now a *hapax*[3] in the surviving corpus[4] and associated by scien-

2. This pre-missionary object is made of "wood" or some kind of carved plant material, and it is hollowed out so that it forms a small "container" that at one point held miscellaneous bird bones. So, in a sense it might be thought of as an artificial "egg". The symbol on side (a) appears to be a very stylized Make-make face, with side (b) portraying a strangely shaped "sea turtle"-like design (see Fig. 5). In our view of the matter, either symbol rather than rendering service to the authentic *rongorongo* script appears to fit in an iconographic context. Intuitively, however, one cannot neglect the fact that "Make-make"-like glyph /513/ (plus, variants) and "sea-turtle"-like glyphs of class /280/ and /290/ are part of the *rongorongo* sign inventory (Barthel, 1958). Following this context, one may see, e.g., Geiseler (1995, pp. 65–66), "[The chief god] Make-Make is mainly represented through the sea bird eggs of Mótŭ núĭ, located on the South-West side of Rana Kao Crater; these eggs may be gathered only in the months of July, August, and September. During all other seasons they are tabu. Make-Make is worshipped through the figure of a carved or painted sea bird; examples are presented in Plates 15 and 18 [Figs. 16 and 19]".

3. Also known as V (1, N), a word (= type) with frequency 1 along the text length. On problems that very low frequency terms present for statistical and linguistic studies, see van Rijsbergen (1979); Baayen (2001); Baroni (2006). This position is briefly formulated, e.g., in McEnery and Wilson (2001, p. 77), "At the same time quantitative analysis also tends to sideline rare occurrences".

4. Cf. Barthel (1958, pp. 118, 245), "Bemerkenswert ist das Zeichen 152 für den Vollmond: in einer ovalen Umrahmung sitzt eine Figur über drei gekurvten Bögen. Anscheinend wird damit ein „Mann im Mond" dargestellt" [Worthy of perception is sign 152 standing for the Full Moon: in one oval frame, a figure sits upon three warped arches. It seems that a "Man in the Moon" is portrayed therein], and Guy (1990,

tific extrapolation or tautology with the "full moon" in the ancient Rapanui lore[5]—is more-than-enough reason to study and detail the "Sacred Amulet from Easter Island" in the *rongorongo* literature. Specifically, the only recorded instance of /152/ on C*a*7 (= C*r*7)[6] is part of the so-called "Lunar Calendar" (= "LC") on tablet "Mamari" (see Figs. 2 and 10). As both sequences ("LC" and "EISA") share # /152/, a theoretical probability may be assigned to the occurrence of each possible next glyph on the latter artifact (scattered as they are), in line with the larger setting of "Mamari". We are also amenable to the information found in the psychological literature that "word [= glyph] familiarity depends not only on frequency of perception, but also on the relevance and familiarity of a word's [= glyph's] meanings (cf. Le Ny and Cordier, 2004). Another plausible mechanism was described by Wettler, Rapp, and Sedlmeier (2005), if a person perceives a stimulus word [= a stimulus glyph], other words [= glyphs] are evoked in their memory, which are called associations".[7] This issue will receive due attention in Sections 3 and 4.

Concerning the terminology in use here and in other articles by Melka and Schoch, we call special attention to "pictorial" and "pictorial"-like in the context of the *rongorongo* script and of various writings systems in general. The first term is fittingly described by Ernst Pulgram (1976, p. 6),

> By pictorial is meant a realistic picture of something or some situation, intended to illustrate whatever message is to be conveyed. This kind of visual communication is comparable to a cartoon without caption. The translation of the picture into words is necessarily free, and does not infallibly convey the words the designer of the picture had in mind, nor do different viewers employ the same phrases or words in their attempts to render the sense.

As for the second term, while "pictorial"-*like* glyphs imply their conception by means of / like a picture / pictures, they encode (or potentially encode) a degree of linguistic information, e.g., logographic or syllabic, or mixed information, e.g., semantic and phonetic. For instance,

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p. 136), "This glyph [→ /152/] is egg-shaped and has inside it an anthropomorphic figure sitting in profile atop a heap of rubble. All in all a very likely representation of the man or woman in the moon cooking food in the *umu* (the "heap of rubble" depicting its cooking stones), a widespread figure not only in Polynesia, but also in Melanesia..."

5. Cf. a good many authors: Krupa (1971, pp. 8, 9); Guy (1990, pp. 136–138); Macri (1996, p. 184); Fischer (1997, p. 233); Robinson (2002, p. 237); Facchetti (2002, p. 219); Berthin and Berthin (2006, p. 95); Ávila Fuentealba (2007, p. 82, Secuencia 23); Sproat (2010, p. 126); Horley (2011, p. 22, Figure 3, p. 30, Figure 9.15).

6. Numbering and nomenclature / labeling of glyphs and RR texts used herein is that of Barthel (1958). The original source for the glyphic snippets and sequences is T. S. Barthel (ibid.); however, the glyph-designs across the article are largely vectorized in line with the LaTeX format.

7. Original quotation appears in Köhler and Rapp (2007, p. 65).

FIGURE 1. A close-up image of glyph /152/ on the "Easter Island Sacred Amulet—1885/6—" ("EISA"). For the use of the "full moon" glyph relative to the "calendar" on Easter Island, see the clear image of "C*a*" (= "C*r*," *recto* of Tablet "Mamari") in Orliac and Orliac (2008, p. 255). Apparently, the resurgence of (cf. "EISA") may dismiss the status of /152/ as an isolated "exception" occurrence in the hitherto conventional *rongorongo* corpus (cf. "Mamari Tablet"). Protective gloves were used in the handling of the object; photograph © by R. M. Schoch, taken with the permission of the anonymous owner.

the Old Egyptian hieroglyphs, the cuneiform scripts of Mesopotamia, the early Chinese writing, Maya glyphs of Mesoamerica, and other ancient scripts readily dispel doubts that they were simple arrays of raw pictures (cf. Friedrich, 1971, pp. 34–51; Gaur, 1994, pp. 143–145).

It is a fine assumption that retrievable *hapax* signs may testify, among other things, "…to the author's wish to find image-bearing expressions…" (Tuldava, 2005, p. 375), which is compatible with the logographic value of the "full moon" glyph. The incidence of the pictorial-like glyph /152/ on "EISA," we point up, is (a little) too selective and specific to be a coincidence or a random artistic act. One should also keep track of the three other attested signs on "EISA"; scribal variants /V19/, /660/, and /V700/ suggest inventive shapes of their most commonly attested matrices /19/ , /670/ , and /700/ along the corpus. This piece of evidence alone points toward the prerogative of the painter (= scribe) to reinterpret stylistically the basic designs of glyphs /19/, /670/, and /700/. Intentional (or not) different morphological realizations of a sign testify to *variants*. Such a personal hand-painting (= handwriting) on "EISA" argues for a scribal tradition aiming at standardization, yet tolerating lavish diversity due to esthetic (cf. Melka, 2014), pragmatic (the chosen medium; reduced space; interaction of paint-

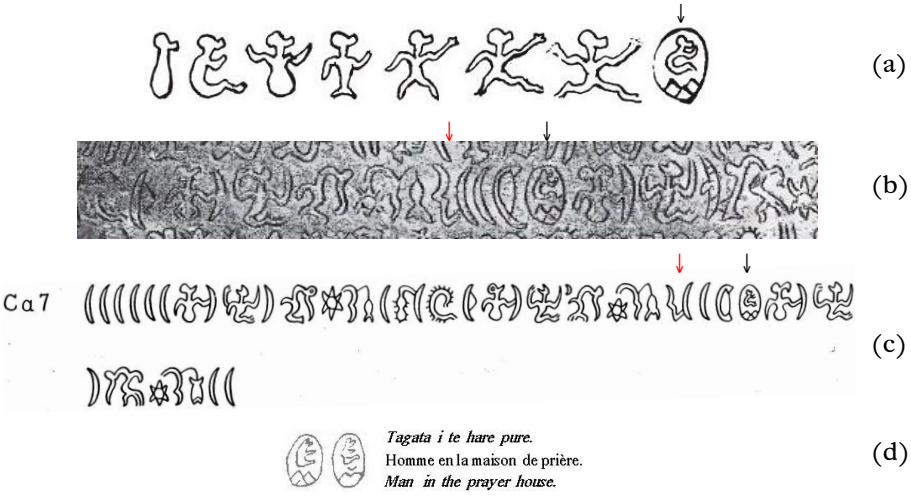

FIGURE 2. (a) One of the earliest depictions of glyph /152/ is that of John Linton Palmer (1876, Plate I, 4th line). Palmer recognizes that he "...delineated a number of the [*rongorongo*] symbols inscribed on the tablets, about the same size as the originals, and taken indifferently [and, in no uncertain terms, disjointedly; *our comment*] from the casts and photographs"; (b) an "old" image of a section of C*a*7 (= C*r*7) exhibiting glyph /152/ (Thomson, 1891, Plate XLV); (c) occurrence of /152/ on line 7 of side *a* (i.e., recto) of "Mamari" (text "C") after the drawings of Bodo Spranz (in Barthel, 1958). The *hapax graphomenon* (O)motohi (= "full moon") is marked with the symbol "↓" in (b) and (c). In Jaussen (1893), subsection *Ethnographie* [Ethnographical] (d), the aforesaid glyph is rendered as "Tagata i te hare pure" [FRE. Homme en la maison de prière; ENG. Man in the prayer house] in line with Metoro's made-up reading; see, e.g., A. Métraux (1940, pp. 396–397); S. R. Fischer (1997, pp. 227–229); J. B. M. Guy (1999, p. 127, Fig. 1).

ing implement and the topology of the object), and physiological reasons (anatomical features of the authorial hand, health issues, occasional carelessness, etc.; cf. in a broader context, Schomaker and Bulacu, 2004; Davis, 2007).

Since the RR corpus in existence is limited, whether in quantitative terms regarding the corroboration of suggested hypotheses and decipherments,[8] in chronological / diachronic terms, or as to the genre variety (Melka, 2009), we are obliged to remark here: any new (pre-, or post-missionary) piece showing genuine or derivate *rongorongo* signs, merits discussion in the literature. The present focus is on the classical script, though later graphic elaborations such as *ta'u* and *mama* should be examined for their theoretical inferences, social and linguistic (see, e.g.,

8. The many decipherments of RR served up thus far to us represent a subject-matter that requires a special treatment elsewhere.

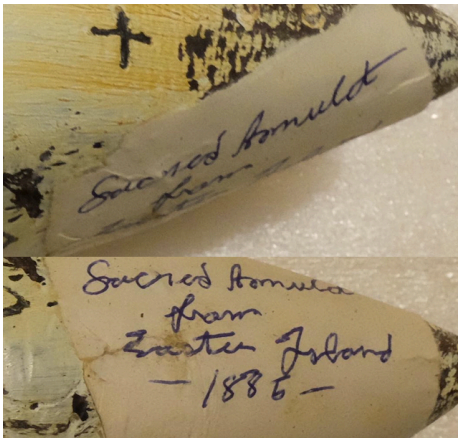

FIGURE 3. Label glued over the bottom surface of the artifact bears the inscription "Sacred Amulet from Easter Island—1885—" (or possibly, 1886). The makeshift label was made—most certainly—after the acquisition of the item. It is not known at present if the handwriting belongs to the original European collector or purchaser of the piece in question (= an "Irish missionary"), to a possible later (unknown) owner, or to Harry Geoffrey Beasley (1881–1939), another person in the line of ownerships (v. infra). At this time, any suggestion regarding additional *rongorongo*-like symbols hiding in the area beneath the paper label (conveying the "identity" and provenance of the artifact) is undecided. The owner of the artifact does not want to attempt the removal of the label. Photographs © by R. M. Schoch, taken with the permission of the anonymous owner.

Fischer, 1997, pp. 6, 513; Wieczorek and Horley, 2015; Horley, Davletshin, and Wieczorek, 2018).

The recovery of the piece discussed in this article, i.e., "EISA," is attributable to the searches and contacts of RMS with private collectors of Oceanic / Polynesian artifacts. Along with the "*Rangitoki* bark-cloth fragment" (Fig. 7) and the "*San Diego* Tablet" (Fig. 8),[9] in the absence of scholarly concern and diligent pursuit, these artifacts would probably have a nearly zero chance of coming to the notice of researchers, script experts, linguists, anthropologists, and other students. Rather, they would remain hidden in the recesses of private collections and/or antique shops.

Because of the limited number of genuine *rongorongo* items, and the dim prospects of finding other suitable and reasonably long pieces, it is in our opinion useful to peruse the "Sacred Amulet from Easter Island—1885/6—" and other objects that presumably bear genuine RR glyphs.

9. Schoch and Melka (2019); Melka and Schoch (2020a).

(a) view 1 (b) view 2 (c) view 3 (d) view 4

FIGURE 4. Easter Island Sacred Amulet ("EISA"). Protective gloves were used in the handling of the object. Scale is in centimeters. Photographs © by R. M. Schoch, taken with the permission of the anonymous owner.

This reemphasis is justified, if we recall at this juncture, the attitudes of some researchers on this critical matter.

Ormonde Maddock Dalton, one of the least quoted original sources across the *rongorongo* bibliography, pointed out that arguments regarding the meaning and interpretation of *rongorongo* would be stronger "...if we had really a large number of tablets to work from instead of less than twenty" (Dalton, 1904, p. 5). Sebastian Englert, in monitoring the post-1864 habit of the natives to reroute or hide RR tablets and other heirlooms in caves, explains,

> The traditions tell that the openings of such caves were carefully blocked up and concealed by their owners, and very few that could be classified as such repositories have been found. No new *ko hau rongorongo* have been discovered recently, and it seems likely that any that might turn up in the future would be in too bad condition to be of much use. (Englert, 1970, p. 78)

A few pages later, the German Capuchin priest continues,

(a) (b)

FIGURE 5. Elongated / ellipsoidal artifacts in the guise of sea-bird eggs, of *tahonga*(s) (*Tahonga* are "egg"-shaped / "coconut"-shaped / "cardiod" wooden pendants that were worn as insignia of rank / social status among the Old Rapanui residents; see, e.g., Chauvet, 1935, Plate 35, Figs. 91, 92, 93, and 94; Heyerdahl, 1975, PLATE 51a, 51b, 52b, and 52d; Orliac and Orliac, 2008, pp. 196–226; and Fig. 6) or gourd-like fruits, were apparently manufactured on Easter Island more often than some may realize. This indigenous portable object collected *circa* 1815–1816 by Otto von Kotzebüe (= Kotzebue) or a member of his crew when he visited Easter Island aboard the Russian vessel "Rurick" (cf. von Kotzebue, 1825) was subsequently passed down through his descendants and a related family until it was sold in 1990 to a private collector. Size estimated at approximately 10 cm in maximum length [currently the anonymous owner is out of contact due to the COVID-19 pandemic]. The paper label at the bottom of Fig. 5a, reads "Oster - Insel... [Easter Island] (remainder uncertain)". Photographs © by R. M. Schoch, taken with the kind permission of the anonymous owner.

> Furthermore, if some thousands of tablets had been preserved instead of the pitifully few that survive, it might have been possible to carry out the kinds of comparative studies which are impossible with the tiny available remnants. (ibid., pp. 80–81)

The Chilean ethno-musicologist Ramón Batista Campbell (1971, p. 379), in turn, was of the opinion that a few other authentic pieces may be encountered in some museums and select private collections, if

FIGURE 6. Here is illustrated a type of *tahonga* or *tahonga-like* object that is composed of wood, bark-cloth, plant fibers, fragments of feathers, and obsidian (forming the bird's beak—most of the obsidian sliver is covered with bark-cloth) and pigments; see especially Eggertsson (2011, p. 120) relative to "...the perception of [a] bird or human being hatched from an egg [= a *tahonga*-like object; *our note*]". According to the records of the current anonymous owner, who purchased it at an auction in the Netherlands in 1990, this egg-shaped artifact was collected from Easter Island in 1888 and was once owned by the Dada and Surrealist artist Max Ernst (1891–1976). Erika Vogler (1989, pp. 75–76) describes the strong interest and attachment that Max Ernst had to Rapanui human- and bird-like figurines and artistic forms; this interest was translated into a number of paintings and collages realized by him during the 1920s and 1930s (see Vogler, 1989, pp. 76–77). Scale is in centimeters. Photograph © by R. M. Schoch, taken with the kind permission of the anonymous owner.

one considered the random distribution of *rongorongo* inscriptions across the different geographic coordinates—from Honolulu in Hawai'i to St Petersburg, Russia; from Santiago de Chile to Washington, DC (USA). The Belgian researcher Jean Bianco (1976, p. 17) addressed the question in these terms,

> La rareté des tablettes pascuanes est une des principales raisons qu'évoque Barthel quant à la difficulté de pénétrer profondement la thématique de cette écriture".[10]

Thomas S. Barthel (1993), after decades-long devotion to the classical script of Rapa Nui, appears to be more restrained in his optimism regarding the acquisition of new pieces,

10. [The dearth of Rapanui tablets is one of the main reasons evoked by Barthel regarding the difficulty in gaining deeper access to the subject-matters of this script].

FIGURE 7. The "*Rangitoki* bark-cloth fragment". This piece was collected on Easter Island in March 1869 (Schoch and Melka, 2019; 2020b). Overall length of the fragment is approximately 15.5 cm. Photograph © by R. M. Schoch, taken with the permission of the anonymous owner.

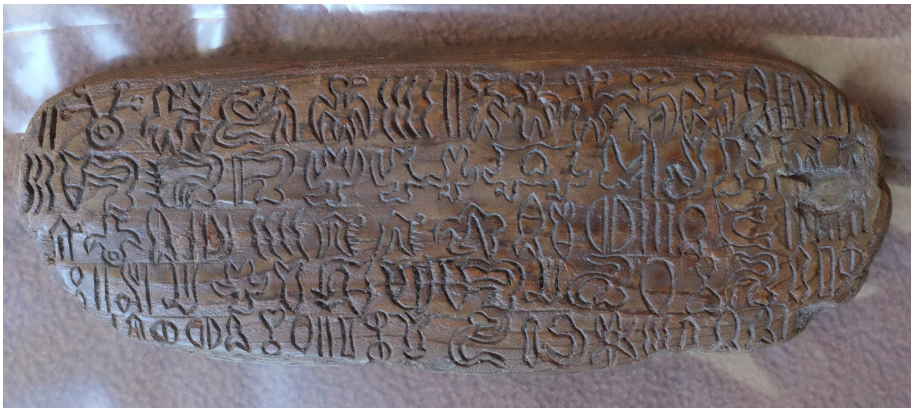

FIGURE 8. The "*San Diego* Tablet"; side *a* (?) / *recto* (?); designation of sides is out of convenience (see especially Melka and Schoch, 2020a, p. 491, fn. 14). This piece once resided in a San Diego (California) estate; it may date to the late 1850s – early 1860s or shortly thereafter (Melka and Schoch, 2020a). Overall length of the wooden tablet is approximately 16.7 cm. Photograph © by R. M. Schoch, taken with the permission of the anonymous owner.

However, certain limitations in our knowledge continue to persist. The inventory of the "Corpus Inscriptionum Paschalis Insulae" comprises only an accidental fraction of what there was in the Rapanui's dwellings at the arrival of the missionaries. Bold optimists dream of tracking down secret caves in which wooden tablets, well wrapped and protected by dry storage, await the modern discoverer. One can also nourish the secret hope that past travellers' undiscovered legacies might include *rongorongo* tablets. For the time

> being let us content ourselves with the maximal evaluation of what is available. (Thomas S. Barthel, 1993, p. 174)

S. R. Fischer (initially in 1993, and later in 1997), anticipating that Barthel's catalog (1958) of the alphabetically coded *rongorongo* artifacts (→ A • B • C … Y • X • Z) was doomed to "failure" in case "new *rongorongo* text[s]… were to appear,"[11] presents his own brand of catalog in which the texts follow an orderly progression → RR 1, RR 2, RR 3… up to RR 23, RR 24, RR 25, and highlights, "I have preferred numbers in the event—unlikely as it may be—that more authentic *rongorongo* artefacts may be discovered in the future" (Fischer, 1997, p. 649).

For reasons not hard to guess, the author is open to both possibilities: on the one hand, to a rigidly closed RR corpus, and, on the other (= the optimistic view), to an expandable corpus due to "good luck" new findings. M. de Laat (2009, p. 4), another researcher caught up in the decipherment of RR signs, conveys again the problem,

> Another obstacle for the decipherment of *rongorongo*, and probably the most severe one, is formed by the fact that the amount of the text material is very limited. There are only 11 surviving objects which have texts consisting of more than 300 signs. Barthel [= 1958, p. 165] estimates a grand total of only 12,000 signs. As three of the longer texts [= the "Great Tradition" texts] are basically the same, and other tablets share a number of passages as well, the available material is even further reduced.

A logical deduction at this moment is that enlarging strategies concerning the current corpus would have to primarily tap into private collections, still holding a great potential for new discoveries.

How large a corpus the RR script should have in order to claim or defend any viable proposal is difficult to say. We should consider practical matters (e.g., allographic observations; falsification / revision of a hypothesis; segmentation issues; study of glyphic transpositions; inspection of a particular subset related to a specific genre, etc.), though as things stand, it should be acknowledged that size definitely matters in the *rongorongo* studies.[12] In contrast to modern corpora that are open to periodic updates and additions, the RR sample corpus has been (until recently)[13] static or on the point of being "closed" (Melka, 2009). Without the benefit of enriching it, the RR records would most likely remain

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11. Wieczorek (2013, p. 5).

12. Guy (2006, p. 65) in analyzing the values of a number of glyphs within the "Lunar Calendar," advises, "The accumulation of hypotheses in the foregoing discussion demonstrates how unlikely it is that *Rongorongo* script will ever be fully deciphered. Each hypothesis has to be verified and for that a much larger corpus is needed than what we have".

13. Here we refer to the "*Rangitoki* bark-cloth fragment" and the "*San Diego* Tablet" mentioned earlier.

an incomplete representation of the former activity of the Rapanui people as reported by Eyraud (1866; cf. Thomson, 1891; Routledge, 1919). Present-day experts of corpus linguistics would otherwise draw attention to them as being unrepresentative and unbalanced (cf. Biber, 1993; McEnery and Wilson, 2001; Hunston, 2002), impacting, as a result, the validity of *rongorongo* studies.

At this stage, the current authors are pleased to introduce into the *rongorongo* literature the "Sacred Amulet from Easter Island—1885/6—," documenting and illustrating it.

In the future, it may be the case that other studies will concentrate on particular features, and contribute accordingly to the better understanding and interpretation of "EISA".

2. Background

In March 2019 one of the authors (RMS) was contacted by a Canada-based antiques dealer with whom he is acquainted regarding a "collector in Hawai'i" who had a wooden "Easter Island Sacred Amulet" that was "collected in 1885" bearing "various strange symbols of creatures". Neither the dealer nor the Hawaiian collector associated the symbols on the object with *rongorongo*-like glyphs. The Hawaiian collector wanted to part with this item in order to be able to acquire some Marquesas Island artifacts in the possession of the dealer. Apparently the two men traded various items, including "EISA"; subsequently RMS was able to acquire access to "EISA" for the purpose of scholarly study (the object is currently stored in an undisclosed location).

According to the information obtained by the antiques dealer, the Hawaiian collector acquired "EISA" in London in 1985 from an English collector who stated that the artifact had previously been owned by the English anthropologist and eminent collector Harry Geoffrey Beasley (1881–1939), also known for establishing with his wife, Irene, the Cranmore Ethnographic Museum in Chislehurst in Kent (see Waterfield, 2006, pp. 78–91, and Carreau, 2010, p. 42). Reportedly the artifact was originally collected by an "Irish missionary" during a visit to Easter Island in 1885 (or in 1886, depending on how one interprets the date on the paper label, see Fig. 3). Pursuing the Beasley connection, we discover that he made "extensive acquisitions from the London headquarters of the Melanesian Mission and the London Missionary Society" (ibid., p. 44)—hence, aside from the British dealers and auction houses, it can be speculated that possibly "EISA" was acquired from one of these institutions.

Ultimately, his large collection of ethnographic material (10,000-plus objects from all over the world) "...was dispersed after Beasley's death (1939), the bulk of it being donated to six British museums between 1941

and 1955" (Carreau, 2010, p. 41).[14] In the intervening years between the Irish missionary's and H. G. Beasley's acquisition of the piece, we cannot dismiss another shift in ownership. Similar gaps are noticed after Beasley passed away: did "EISA" end up in the hands of another anonymous person (?) / or in an institution (?)[15] before reaching the English collector (= responsible for its sale in 1985)? Without hard evidence, however, readers should consider the above suggestions until proven or rejected.

As a parenthesis at this point: several consulted travelers' and ethnographic sources reveal that the post-1864 Easter Islanders were actually too happy to please or cajole outsiders by improvising chants, releasing information about the "old times," or by exchanging their *rongorongo*-inscribed artifacts for money and other useful bits and pieces—clothes, hats, hand-held weapons, glass bottles, metal utensils, and so forth. As a result, more than one scholar may come to be suspicious of items sold / traded on the antiquities market with no verifiable point of origin. In addition, a number of travelers and scholars alike have admitted to having been duped by the ingenuity of the natives in creating and selling such items.[16] In theory, we may not know with surgical precision if "EISA" was made to oblige the anonymous Irish missionary's quest for artifacts (therein, being a "knock off replica" in the last two decades of the nineteenth century), or if it came up by accident during the missionary's visit on Easter Island (→ a crude specimen of the late nineteenth century deriving from the original RR tradition). Amid the "high hopes" and "muddled confusion"—typically shrouding the documentation of many RR artifacts and their contents (pre- and/or post-missionary; authentic and/or self-styled)—very few reports can be totally verifiable. Suffice to examine the notes given in Heyerdahl (1965), Fischer (1997), Kaeppler (2003), and Hooper (2006). Under the premises, the sort of information that should really be elicited in the case of "EISA" must concern the physical object itself; the structure of the glyphs; and its alleged function considering the socio-religious setting of Rapa Nui during the late nineteenth century. These suggested lines of investigation have a better chance of yielding some results than by doing nothing in this respect, or by sitting and splitting hairs a priori.

Hence, being well worth it, we proceed here with the first concern: the description of the physical object. The main body of the object is

14. Cf. also Hooper (2006, p. 72), "Beasley's collection was donated after his death in 1939 to major museums in Britain—the British Museum, Liverpool, Oxford, Cambridge and Edinburgh".

15. The missing Original Beasley Collection Number (= ID no.) assigned to "EISA" would have been helpful in this context.

16. Katherine Routledge (1919, p. 271) and Alfred Métraux (1957, p. 185), in true informative fashion, offer accounts on such practices.

composed of painted wood. Attached to the top is a tuft of hair (species not determined) and two short strings tied to pieces of bone (species not determined). The wooden portion of the object is approximately 17.5 centimeters in maximum length. It was engraved and scratched so as to carry some incised symbols or decoration, especially at the top. Around the bottom of the object there are various holes or indentations. These apparent holes may be from nails or screws that were subsequently broken, cut off, or removed from the object; if so, either portions of the screws appear to remain in the object or the holes were filled with some substance. Subsequently, the wooden object was painted with a whitish to light yellow paint. Upon the background of the whitish paint the *rongorongo*-like glyphs, which are the focus of this study, were painted using a deep brown to black paint.

The wood of the "EISA" object remains undetermined. The wood is covered with paint; to be able to observe directly the characteristics of the wood would necessitate removing some of the paint and patina and cutting into the wood, which would damage the object.

Furthermore, the species of wood does not substantially affect the evaluation of the object's age nor its authenticity. Prior to initial European contact in 1722, the Rapanui collected and valued driftwood which washed up on their shores. With European contact, wood and wooden objects of various types were acquired and utilized by the Rapanui. Relative to possible sources for the hair and bone, while in pre-contact times human hair and bone were sometimes used to create objects—for instance, various fishhooks and harpoon heads were made of human bone;[17] the *rongorongo* tablet known as *Échancrée* (Barthel, 1958, pp. 18–20 → "text D" / Fischer, 1997, pp. 419–422 → "RR 3") was originally wrapped with a cord made of human hair (Orliac and Orliac, 2008, pp. 257–259)—large domestic mammals such as horses (*Equus caballus*), cows (*Bos taurus*), sheep (*Ovis aries*), and pigs (*Sus scrofa*) were brought to Easter Island after initial European contact (Ayres, Saleeby, and Levy, 2000). Distilling information from the greater Polynesian cultural family, Wallin and Martinsson-Wallin (2001, p. 8) draw a passage from Harry Geoffrey Beasley's book *Pacific Island Records: Fish Hooks*, which would seem to correspond to the ancient Rapanui's practice, too: "In many parts of Polynesia human bones had a high value, because they were supposed to contain *mana*, making them powerful materials from which to fashion tools" (Beasley, 1928, p. 50).

17. Descriptions and illustrations are found, e.g., in *Te Pito te Henua, or Easter Island* (W. J. Thomson, 1891, Plate LVIII, Fig. 1, Fig. 2); *The Riddle of the Pacific* (J. Macmillan Brown, 1979, pp. 188–189); *La Tierra de Hotu Matu'a…* [The Land of Hotu Matu'a…] (S. Englert, 1948, pp. 259–260); *Voyage vers l'Île Mystérieuse. De la Polynésie à l'Île de Pâques* (Maiani and Quer, 1996), and in *The "Fish" for the Gods* (Wallin and Martinsson-Wallin, 2001, p. 8).

(As a side note, RMS has observed that many modern collectors of "tribal artifacts" often like to claim that bone objects in their possession are made from "human bone" without an adequate basis for such an attribution.)

3. The "Text" of "EISA," and its Implications for the Existing Corpus

Despite the modest size of the collection of *rongorongo* glyphs on its surface, "EISA" is a valuable source for study for a number of reasons, to be discussed in the present section and the next one, Discussion.

The structuring of this section into a number of specific tasks is conducive to a methodical plan and a better grasp by the readers.

The first task (1a, b) is to register the total number of signs—identifiable or not—and cluster them as *rongorongo*- or geometric-like ("ornamental"). By "*rongorongo*"-like are understood the painted glyphs that replicate original renditions / shapes comparable to those on the tablets of the agreed upon corpus (e.g., "Tahua," "Aruku Kurenga," "Mamari"), or that mimic to a greater or lesser extent those designs / shapes. The next task along the line is (2a) *preprocessing*, as known in the technical parlance. This task implies *unscrambling* the collection of scattered glyphs—in this sense "unscramble" would mean to "normalize" them as if organizing the glyphs into a more convenient and linear form,[18] similar to what the majority of English-speaking readers would perceive as a text. The choice of words is of convenience at this time, since we do not currently know if the original author (i.e., painter / scribe) chose them haphazardly, or if they represent a sample of knowledge (whether linguistically or not coded) out of a larger body, consistent with the ancient, deeply rooted Rapanui / Polynesian traditions. At a later substage (2b), the "normalization" (= linearization) facilitates as well comparing it with other portions of *rongorongo* glyphs found in the corpus. Given the retrieval of similar fragments, an explanation is expected for such "parallels" (stage 3). Here we have to exploit the previous idea that if a newly discovered "text" or "collection of RR signs" creatively repeats (briefly or at length) the sequences found in the canonical corpus, then, we have to decide on their odds of being *genuine* or *imitative* (cf. Imbelloni, 1951; Barthel, 1963; Pozdniakov, 1996; Fischer, 1997; Wieczorek, 2013; Melka, 2017; Schoch and Melka, 2019; 2020b; Melka and Schoch, 2020a,b).

(1a) *There are twelve (12) glyphs that bear slight or large similarity with RR glyphs*. Out of these, four (4) glyphs are identified in Fig. 4(a) as [# 2, → /53^2/

18. Terms are based on Jurafsky and Martin (2018, p. 10).

, a variant of Barthel's coding number /52/],[19] [# 3, → /41/], [# 4, → /380/], [# 5, → /22/]. One glyph [# 1] resembling a "flying creature" / "diving wings"[20] → (Fig. 9) is not explicitly identified, though, at first glance, it purports to be painted after a glyph of the /600/ "bird"-like series, perhaps. Taking the above descriptions into account regarding this obscure glyph /?/—being a "flying creature" / "diving wings"—it strikes us that this glyph may represent schematically a diving frigate bird where it is diving "head-up"; that is, it is diving toward the top of the "EISA" object (see, e.g., a frigate bird in "diving stance" in Horley and Lee, 2012, p. 15, Figure 12g).[21] However, the iconographic association of this glyph with a "flying creature" or "diving wings" may also be called into question. Hence, in aiming at another solution we may entertain it as a variation of glyph /33/ (see a realization on the "Small Santiago Tablet" [G*v*1] →). Consider that glyphic shapes of the type /33/ appear to be related to those of the type /32/ (for a number of occurrences of /32/ across the *rongorongo* corpus, cf. Melka and Schoch, 2020a, p. 517). Furthermore, the singular glyph-form /32/ revealed on the "*San Diego* Tablet" (ibid., Figure 14, pp. 528, and 530) shows again that *rongorongo* scribes or copyists never ran out of creative impulses or spontaneity. In Fig. 4(b) there are two identifiable glyphs: [# 6, a "look-alike" of /660/ , a variation of /670/] and [# 7, → /152/]; some discussion of # /660/ and/versus # /670/ will be given below. In Fig. 4(c), image search provides glyphs [# 8, → /44[1]?/]; matrix-glyph [# 9, → /700/]; and variant-glyph [# 10, → /700[2]/]. Further visual query reveals in Fig. 4(d) glyph [# 11, → /280/] and the scribal variant [# 12, → /19/].

(1b) As for the simple geometric-like symbols, such as the plus-shaped (+), x-shaped (x), and asterisk-like (⁎) symbols, the sequence amounts in numeric terms to approximately (as some may be obscured or painted over) <2—6—5> relative to the views seen in Fig. 4 (not counting any such symbol twice, as there is overlap among the photos).

Apparently, one may think the foregoing suggests a sense of adornment—mere decorative patterns according to the whims of the original author. Nonetheless, these signs, especially those that resemble the "asterisks," could have been a *mimicry* or a *recollection* of the "starred

19. The superscript at /53[2]/ indicates the listing of variants following "Formentafel 1 (*Kennziffern 1–99*)" [Sign form plates 1 (Reference index numbers 1–99)] in Barthel (1958). The superscript pattern is similarly used in the other glyphs examined below.

20. We thank Gordon Berthin for his comments regarding this obscure glyph—suggesting alternatively that it is a variation of glyph /33/—and for coining the moniker "diving wings" to describe it.

21. Cf. the comment of Horley and Lee (2012, p. 17) where they assert, "Despite the head-up depiction, all the frigate birds shown in Rapa Nui rock art are actually in a diving stance, thus highlighting their predatory qualities".

disk" / "sun" glyph /8/, part of the trigrams /8.78.711/ along the cells B1—B7 (see Fig. 10; cf. Butinov and Knorozov, 1957, p. 10;[22] Facchetti, 2002, p. 204; Robinson, 2002, p. 237). (2a) Regarding a "normalization" and linearization of the text, there are many unknowns involved. With which glyph does one begin? Is it to be read from right to left? From top to bottom? Or in some other discursive manner? A possible preliminary "normalization" / linearization of the "text" is: /?/—/53^2/—/41/—/380/—/22/—/660 (= 670)/—/152/—/44?/—/700/—/700^2/—/280/—/V19/; another possibility (beginning with /380/[23]—and "reading" from left to right and from bottom-to-top to top-to-bottom repeatedly) is: /380/—/53^2/—/?/—/41/—/22/—/660 (= 670)/—/152/—/44?/—/700/—/700^2/—/V19/—/280/.

FIGURE 9. The "diving wings" glyph-form (most likely, shaped after a frigate bird) as it appears on "EISA". Photograph © by R. M. Schoch, taken with the permission of the anonymous owner.

22. The original observation of the sequence within the "lunar calendar" per Butinov and Knorozov (1957) is "On the Kohau-o-te-ranga tablet combination 1 (Table III) ["Combination 1" = /390.41-378y-670-8.78.711/; *our note*] is repeated seven times..." The Kohau-o-te-ranga tablet is another designation for tablet "Mamari," meaning, "Tablet of the Vanquished" (Fischer, 1997, p. 416). The name is reported in Routledge (1919, p. 249), relating the provenance and ownership of said artifact to the ‘*ariki mau* Nga‘ara. The title ‘*ariki mau* should be roughly interpreted as "paramount / great chief"; cf. Fischer (2005, pp. 21–22).

23. Regarding the /380/ glyph (the "sitting man," mostly in conjunction with assorted glyphic affixes) → it could serve as a "delimiter" in various contexts, introducing the next chunk of text / chant... and also it may have other meanings in other contexts (the list-like texts I*a*, T*a*, G*v*, for instance).

(2b) Given the re-occurrence of the "full moon" glyph /152/—a confirmed *hapax* in the corpus prior to its "re-discovery" on "EISA" and an integral part of the so-called "Lunar Calendar"—it is natural to start with this known-relevant section (Fig. 10). An in-depth discussion or revision of the "LC" is beyond the scope of the present article. Readers may direct themselves at leisure to Barthel (1958); Guy (1990); Facchetti (2002); Robinson (2002); Berthin and Berthin (2006); Ávila Fuentealba (2007, pp. 82–83); Sproat (2010); and Horley (2011),[24] and see for themselves the agreeing and contrasting points among the authors.

Although the positional evidence across the "Lunar Calendar" is larger and much more orderly arranged, we observe that a good number of "EISA" signs also occur within the confines of "Lunar Calendar" (C*a*6—C*a*9 [= C*r*6—C*r*9]); cf. Guy (1990). This tendency is too strange to be a coincidence or to be misled by chance resemblance. To put it simply, there seems some positive association between the "Lunar Calendar" and "EISA," marginal as it may appear initially.

Specifically, glyphs /380/, /41/, /660 (= 670)/, /152/, /44?/, /700/, /V700/, /280/, and possibly /53/,—since it has been observed to interchange places with "feather" glyph /3/ attested on C*a* (= C*r*) (first glyph at cell 23, in the juxtaposition /3.40^{1}/; Fig. 10)—are under focus. Some of the "EISA" glyphs are not visibly matching those of the "LC" (appearing to be sloppily painted, as a result of the "paint-brush" used and the convex topology—consider the elongated gourd-like surface of the object—, or due to the idiosyncratic style of the author).

Following the progressive left-to-right order of glyphs along the "Lunar Calendar" (C*a*6—C*a*9 [C*r*6—C*r*9]), we attempt to correlate those with their "counterparts" found on "EISA" in order to better visualize them sequentially. Recall that Barthel's (1958) coding as any coding system associated with unknown symbols is *a judgement call* (Sproat, 2007), subject to close scrutiny by researchers (as it should be).

We obtain therein the tentative "matching" sequence (blue employed for "EISA"'s painted glyphs): /315y/  ≈ /380/ (both of the /300/-class in Barthel, 1958); "crescent"-shaped glyph /41/  = /41/; /V631b/[25]  ≈ /660 (=670)/; /152/ = /152/; /78.40^{1}/  ≈ /44^{1}/  (element /78/ at cell 12, juxtaposed at the lower section of "waxing moon" glyph /40^{1}/,

24. For other Polynesian lunar-based calendars, see also Stimson (1928); Williams (1928); Hiroa (1938, pp. 403–411); Roberts, Weko, and Clarke (2006). Almanac-type and astronomical records are also commonly found in other ancient cultures, see Gossen (1974); Schmandt-Besserat (1994, p. 304); Coe and Kerr (1997, p. 169, Figure 76); Corliss (2005); Meller (2007, pp. 188–189); Wang (2007, p. 241); Belmonte Avilés (2008); Boone (2009, pp. 63–69).

25. The modifications follow Guy (1990, p. 135). T. S. Barthel (1958, p. 51) simply offers /V670/ or /670/ for the "bird"-like symbols, with the mirror-image glyph rendered as /V670y/.

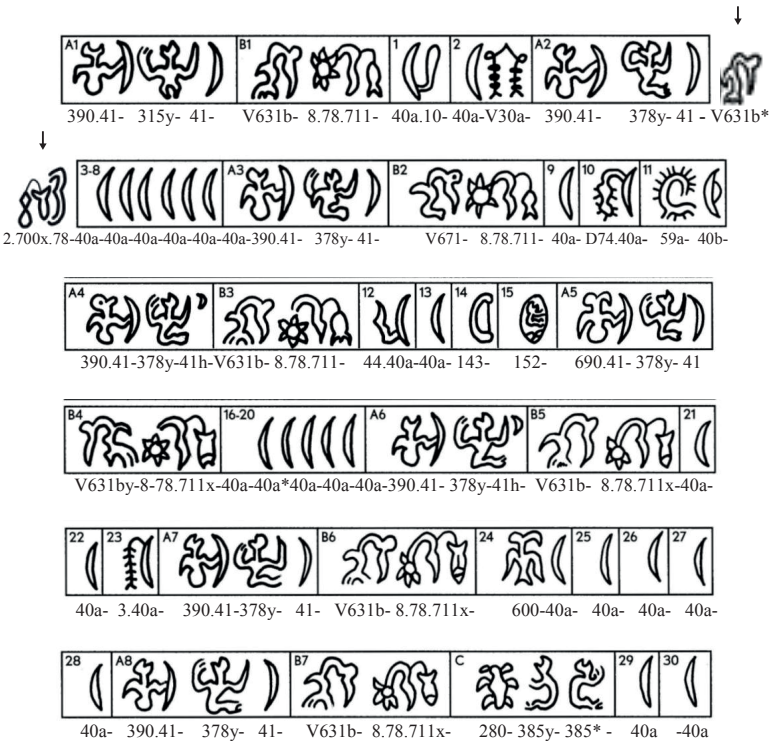

FIGURE 10. The "Lunar Calendar" on tablet "Mamari" (C*a*6—C*a*9 [= C*r*6—C*r*9]). Original coding is of Barthel (1958, p. 51); amended coding as applied here is after J. Guy (1990, p. 136). The only exemption to Guy's (1990) amendment is code number /44/ (cell 12; cf. also Figs. 2b, 2c), left as said at first by Barthel. The calendar design is found at Robinson (2002, p. 236) and Brookman (2007); another calendaric arrangement is available at Anonymous (2005b). As readers may well notice, the trigram /2.700x.78/ is added at the beginning of Line 7 (→ C*a*7 [= C*r*7]; cf. cells 3–8). Barthel's (1958, Tafel „Mamari" Ca 1—Ca 7) tracings, Guy's (1990) illustration, and subsequent duplications of the "Lunar Calendar" fail to make it clear; in all probability, because it is on the bevelled edge of the tablet and most photographs don't show it. However, *rongorongo* scholars such as Fischer (1997, p. 414, RR 2a7) [→ ], and even more notably Horley (2011, p. 22, Figure 3, C*a*6–7 II) [→ ], include the trigram at the beginning of line 7 of the "Mamari" tablet. Trigram /2.700x.78/ is preceded by a "sleeping bird" glyph /V631b/ (equally missing in Barthel, 1958, Guy, 1990, and later duplicates), traced otherwise in Fischer (1997, p. 414, RR 2a6) as  , and in Horley (2011, p. 22, Figure 3, C*a*6–7, II) as  . Taken in whole, the newly added glyphs seem to be a variant realization of the "group separator" /V631b-8.78.711/ (discussed below). In our opinion, /V631b-2.700x.78/ is part of the *rongorongo* "Lunar Calendar" and it ought to be shown in any comprehensive review, for the sake of epigraphic thoroughness. The current partition in six horizontal blocks and the attached numeric coding is made by the present authors for evaluation purposes.

is usually appended in the upper section of the "starred disk" / "sun" glyph /8/ along the cells B1-B7 in Fig. 10). Yet, the painted glyph on "EISA" appears to be a mirror image of variant glyph /44[1]/ per Barthel (1958). In his article, Jacques Guy (1990, p. 135; cf. Horley, 2011, p. 30, footnote 2) transcribes the glyph related to "night 11, 'Maure'" as /78/ vs. Barthel's (1958) coding /44/. Further ahead, Guy (1990, p. 144) suggests that "...glyph 78 could serve here the same function as in groups 8.78.711 and 8.78.711x..." (subscript "x" stands for an "inverted sign" in Barthel's 1958 alphanumeric code). While the original shape differs somewhat either from glyph /78/ or /44/ (see Fig. 2b, c, under "red arrow" (first arrow from the left) symbol ↓, and Horley, 2011, p. 30, footnote 2), this is unsurprising. With the *rongorongo* system being in *a state of flux* (cf. Melka, 2014), scribal variants abound here on tablet "Mamari" or elsewhere; see Anonymous (2005a); Harris and Melka (2011a); Melka (2017). The remark does not mean that trained and semi-trained scribes had no grasp of priorities when creating or copying texts, rather it points to the clear individuality and resourcefulness in the process. Better still, the crudely painted mirror image of /44[1]/ appearing on "EISA," might hint at Barthel's original transcription as # /44/.[26]

Next, we consider the "hanging fish" glyph /711/ and /711x/ = /V700/ (a "one-eyed fish"-shaped variant painted on "EISA"); compare this with the "fish"-shaped variant /700[2]/ = /700[2]/. Now that mention has been made of these glyphs, the comparison would be "eased" if we consider that the C*a* (= C*r*)-"calendar" depicts two kinds of spatial orientation for the "hanging fish" glyphs: "fish up" /711/ for "waxing moon," and "fish down" /711x/ for "waning moon" (see Guy, 1990, pp. 140–141). These distinctive and cleverly conceived logograms are missing on "EISA," due perhaps to the reduced space and/or the inclination of the painter / scribe to establish tacitly their orientation and relationship with the rest of the signs. The clear similarity between the "sea turtle"-like /280/ (cf. cell C, Fig. 10) and /280/ , a recognizably pictorial-like sign on "EISA,"[27] is, at this point, unassailable.

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26. In Barthel (1963, p. 430) glyph /44/ is "read" as "kava" [the shrub *Piper methysticum*], an inexistent (or unreferenced [?]) ginger species in explorers' pre-1864 observations regarding the island (cf. Thomson, 1891, p. 464; Lehmann, 1907, p. 260; Gusinde, 1922, p. 326; Métraux, 1940, p. 159; Heyerdahl, 1965, p. 381; Fischer, 1994, p. 430). T. S. Barthel, possibly, wanted via this "reading" to trace back the origin of *rongorongo* to extra insular sources, falling within the Polynesian orbit nevertheless. Consider that the "reading" in question dates back to Metoro's chants; see especially Métraux (1940, p. 397, Figure 56, # 18).

27. For assessments of the "*ho'onu*" glyph regarding the depicted lunar cycles: see Guy, 1990, p. 145; Berthin and Berthin, 2006, p. 95, Figure 5; Horley, 2011, p. 25, Figure 5, p. 36.

As noted earlier, "EISA's" glyph /53[2]/ might have a parallel in the "Lunar Calendar" in the single "garland" glyph /3/ (cf. cell 23). T. S. Melka (2013, p. 127; cf. ibid. cross-references) comments on the exchange of "delimiters" /1.53/ and /1.52/ as scribal variants on the "Tahua" tablet. On the other hand, "delimiter" /1.52/ has been observed to surrogate the "standard" delimiter /380.1/, or /380.1/ plus suffix-glyph /3/ (cf., e.g., tablet "G*r*" in Barthel, 1958). Furthermore, Guy (1990, p. 144) notes that glyph /3/ occurs very frequently in glyphic ligatures (= juxtapositions / compounds) reserved for gods (= deities), chiefs, and treasured objects. We show interest in fully supporting his statement, especially in view of Routledge's report (1919, pp. 245–246) about the valued presence of *feather ornaments* during the ritual chanting ceremonies.

At present, our attention is returned to glyph /660/ as one of the most iconic figures in the "EISA" collection. This glyph stands most assuredly for the matrix-glyph /670/ (Fig. 11). Barthel (1958, p. 315) identified in their "sunken / slanted bird-head(s)" the notions "sleeping, death" (*moe*, in Rapanui language). In a follow-up study, Barthel (1963, pp. 407–408) restates that /660/ stands for "schlafenden Vogel" (manu moe) [sleeping bird]. He explains the key meaning of "sleep" (*moe*) as linked with "dream" and "death," with the element *manu* ("bird") indicating among Polynesians "phantasmal entities".[28] On page 435, Barthel (ibid.) tags # /660/ under "schlafenden Vogel" [sleeping bird], and correlates it with "Seele?" [soul?]; while # /670/ has the tag "moe" "Schlafen" [sleep, sleeping]. It's no secret that in the early period of the RR investigation (in the mid-1950s) T. S. Barthel relied in large measure on Metoro's chants (see Barthel, 1958, 1963, 1972; cf. Imbelloni, 1951; Bianco, 1976, pp. 18–19; Fischer, 1997, pp. 47–57, 227–229; Guy, 1999), their full veracity being dubious, at best. On top, he (Barthel, 1958) applied syncretic deductions regarding the Easter Island's ancient culture and other Polynesian-related ones[29] with the aim of achieving the long-awaited decipherment.[30] In order to cross-check these deductions con-

28. We would like to direct attention to Craig (2004, p. 65) for a comparison with Barthel's stated readings (ibid. 1958, 1963), "Birds are common in Polynesian myths perhaps because of their unique character of being able to fly through the heavens—something that most other living creatures cannot do. Because of this uniqueness, most birds are regarded as having a sacred nature, sacred enough to become the messengers of gods and, in many cases, incarnations of the gods themselves".

29. Cf. also Fischer (1997, p. 233).

30. J. B. M. Guy (1999, p. 129) is quite forthright in this context, "Il semble donc bien que Barthel, tout au désir de parvenir à un déchiffrement, a voulu croire que Métoro en avait la clef; et que ce besoin l'a amène à ne voir que ce qui servait ce dessein et à passer sous silence ou à présenter sous un autre jour tout ce qui le desservait. Ce désir de parvenir à un déchiffrement l'a poussé à une analyse sélective des textes de Métoro,

cerning glyphs /660/ • /670/, we might have to look into the repeated sequences /390.41-378y-41-V631b-8.78.711/ (Fig. 10). These sequences, strictu senso, are not a built-in part of the "moon calendar," rather than marking or separating the beginning and the end of the calendar and the beginning and the end of certain significant sequences such as the six and five nameless "kokore" nights (Guy, 1990, p. 138; cf. Horley, 2011, p. 22, Figure 3). Of special interest are here glyphs /V631b/  , /V671/  , and /V631by/  , all of them appearing as variants of matrix /670/. What is curious here is that the /670/-variants occur within "group separators" that deal with moon phases *in a state of change*, growing and diminishing, as recorded by the ancient Rapanui astronomers.[31] In this context, the "sleeping bird"-like glyph could have been suggestive of these phases, especially if the "diminishing" or "devoured" moon was perceived as entering in *a state of lethargy*, hence, *death*. We should also consider that *moon* is often associated cross-culturally with *sleep*, and its related states, *dreams* and *unconsciousness*. As it happens, the ancient Rapanui scribes experienced the same archetype and coordinated metaphorically through "sleep-like" symbols part of the moon phases.

As *rongorongo*-related studies are not straight-line journeys with convenient results for all the involved parties, we should attempt to bring at hand different glyphic sequences to support the hypothesis /660/ = /670/ (see Figs. 11 and 12). Yet, in view of space constraints, various sequences might have to be located through Barthel's (1958) conventions, along with other useful scholarly references.

For the configuration of glyph /670/ and its scribal variants, we may have to quote a formula-like sequence that appears in several environments (see especially K. Pozdniakov, 1996, p. 295, Fig. 3; R. W. Sproat, 2003; F. Ávila Fuentealba, 2007, p. 44, Figura 40; T. S. Melka, 2007; P. Horley, 2007, p. 28, Figure 3, iv; Horley, 2010, p. 53, Figure 9), plus the "Mamari" tablet, C*b*2 (= C*v*2), cf. Fig. 12. The recoding of glyph /630/—on C*b*2 (cf. Barthel, 1958, p. 52)—into /631/  is performed after CEIPP (Anonymous, 2005a). This goes to show again that bias in Barthel's notation can be eluded through the independent structural-visual comparison of sequences. Other details such as those on A*b*4 • C*b*2 (= C*v*2) • C*b*4 (= C*v*4) • H*r*4 • P*r*4 • Q*r*4, provide compelling sup-

sans relever les contradictions" [So it does seem that Barthel, driven intensely by the desire to reach a decipherment, wanted to believe that Metoro had the key; and that the need led him to see only what served his purpose and to hush or to show under a different light all that contradicted him. This desire to reach a decipherment drove him (= Barthel) to a selective analysis of the Metoro's texts, without revealing the disagreements].

31. See also W. Liller (1993, p. 36) for astronomical petroglyphs possibly addressing moon calendars (in particular, the so-called *Papa Mahina* "Moon Rock" near Ahu Ra'ai, Easter Island).

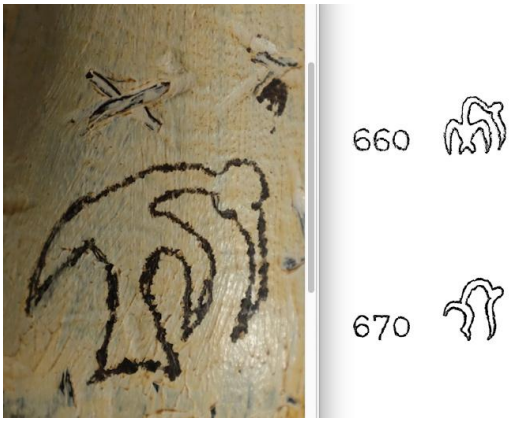


FIGURE 11. The "bird"-like painted sign on "EISA" as contrasted with glyphs /660/ and /670/ in Barthel's coding (Sign-form plate 7 - Reference index numbers 600–699 in *Grundlagen*..., 1958). While it is evident that the glyph preserves its relationship to the natural referent (i.e., a flying life-form), the conveyable meaning is not strictly restrained univocally; various instances of early pictorial-like scripts or modern systems endorse such a statement (cf. Houston, 2004a; Sproat, 2013, pp. 14–17). © Photograph of the leftward section by R. M. Schoch, with the permission of the anonymous owner.

port for the variability of glyph /670/ along a fixed formulaic set (see C*b*2 [= C*v*2] in Fig. 12). The formula-like string attains its most explicit form on C*b*4 (= C*v*4) (see Harris and Melka, 2011a, p. 140), where the "sleeping bird" glyph features the code number /670/ . Otherwise, on C*b*2 (= C*v*2) • A*b*4,[32] the aforesaid "bird"-like glyph obtains numbers /660/ and /680/ . Next, the H*r*4 • P*r*4 • Q*r*4 strings are positively building upon the C*b*4 (= C*v*4) formula set, though in a fairly condensed manner (Fig. 12). The "sleeping bird" glyph is not there, and the ancient chanter had to count on the "fish"- and other "bird"-like glyphs (with or without "excrescences") in order to retrieve their meaning. RR corpus has many examples where the material reduction within the sequences (= ellipsis) does not hide from view their association with the more complete ones.

If researchers from a different era and sundry geographic locations can advocate (to some extent) to their similarity, for the former *rongorongo* masters, we trust, it may have been a matter of simple routine.

For a more diverse approach, we may explore the /670/ glyph-shapes in the following nearly-parallel sequences (Fig. 13). Without wrenching a translation out of them and (without) claiming traces of "lunar

32. For further discussion on A*b*4, refer to Melka (2016, pp. 229–230, Figure 6).

"Mamari" tablet, C*b*2 (= C*v*2)

380.1- 67.10f- 67- 730- 670- 1-631- 571-700- 380.1-

"Tahua" tablet, A*b*4

1.52- 680- 65-600.65-600.65

"Mamari" tablet, C*b*2 (= C*v*2)

380.1- 600.64- 400-64-660y-64h-660-

"Mamari" tablet, C*b*4

380.1- 605.700x-605.700x-605.700x-670

"Great Santiago" tablet, H*r*4

600:701- 600 -600.711

"Great St. Petersburg" tablet, P*r*4

600:701- 600 -400-710

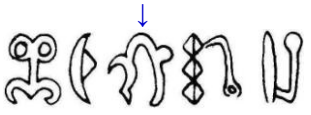
"Small St. Petersburg" tablet, Q*r*4

600:701-600s-600-710

FIGURE 12. Glyphic strings from the *rongorongo* corpus deal with "bird"-like glyph /670/ [for the more RR-demanding readers, it is recommended the careful perusal of the "Great Tradition" tablets (cf. Barthel, 1958), plus "Tahua" and "Small Washington," in search of allomorphic instances of glyph /670/ (cf. Ross, 1940; Kudrjavtsev, 1949; Guy, 1985; 2006; Pozdniakov, 1996)], the variability of the glyphic material, and the individuality of each pre-missionary hand. In the case of strings H*r*4 • P*r*4 • Q*r*4, the past scribal experience was called on to restore the missing glyphs, such as they appear on C*b*4 (= C*v*4), C*b*2 (= C*v*2), and A*b*4. The symbol "↓" points at # /670/ and its professed variants. Coding, marked in blue, stands for "delimiters," used for parsing the flow of glyphs according to specific chunks of texts. [For readers perusing the black-and-white version of this article, the "delimiters" marked in blue are /1.52/ and /380.1/].

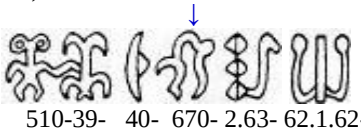
calendars," it is interesting, however, to notice the presence of the collocation /40-670/ ("crescent"-like—"sleeping bird"-like glyphs) along tablets E*v*6 • S*a*4 • G*r*1• K*r*1–2.[33] We should not fail to remember that RR-like signs /41 (≈ 40)/ and /660 (= 670)/ are also found on the painted surface of the "Sacred Amulet from Easter Island" artifact.

"Keiti" tablet, E*v*6



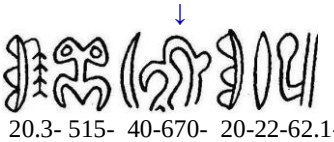
515- 40- 670- 2.108a?-22.62-

"Great Washington" tablet, S*a*4



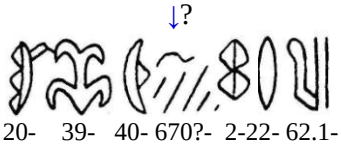
510-39- 40- 670- 2.63- 62.1.62-

"Small Santiago" tablet, G*r*1



20.3- 515- 40-670- 20-22-62.1-

"London" tablet, K*r*1–2



20- 39- 40- 670?- 2-22- 62.1-

FIGURE 13. Comparison of four *rongorongo* strings (cf. Ávila Fuentealba, 2007, p. 46). Fused glyphs /515/ on E*v*6 and G*r*1 are in effect the individual glyphs /510-39/, as visibly shown on S*a*4. Inclusion of #/670?/ on K*r*1–2 is done by the present authors, in a hypothetical analogy with the rest of the sequences. The last compounded glyph—rendered in various forms in each sequence, /22.62/; /62.1.62/; /62.1/—apparently denotes a "textual delimiter".

(3) *Possible explanations*: The first question that strikes our mind is: how often it might be expected that a hapax, i.e., glyph /152/  , may re-

33. M. Harris in Harris and Melka (2011b, p. 255) presented in Table 7 a term-to-term similarity analysis using LSA (= Latent Semantic Analysis) applied to the whole corpus. Findings revealed that glyph /670/ favors among the first few ranks: glyph /2/ and the "moon" glyph /40/ in line with previous observations of these glyphs on the "Mamari" and "Keiti" tablets.

appear ca. 150 years later by chance on another artifact since the acquisition of the original "Mamari"-tablet (end of 1869 or beginning of 1870, see Fischer, 1997, p. 417)? The "re-appearance" of /152/ should be of course envisioned in its context of regular associations with the other glyphs arguing for a Polynesian-type "lunar calendar". On the flip side, we have to mention the occurrence of glyph /152/ in the company of the compounded form /690.41/ on an obscure "tablet," reproduced by Francis Mazière (1968, p. 64, facing). The writer (1968, p. 64, facing) provides a caption for the poorly illuminated image which reads "A toromiro tablet covered with signs or ideographs. The writing, which remains a disturbing archaeological problem, is read by holding the tablet horizontally and turning it after each line". The examination of what is traceable from the "...signs or ideographs" reveals that this "inscription" bears entire sequences and loose glyphs from tablets "Mamari" • "Keiti" • "Tahua" • "Aruku Kurenga" • "Small Santiago," and perhaps from other ones. The fact is the *rongorongo* genres / sub-genres appearing in the authentic inscriptions (e.g., astronomical calculations, list-like formulations, etc.) are so badly and nonsensically mixed up in Mazière's "tablet" that they defeat their purpose. Specifically, glyph /152/ which occurs strictly within "lunar calendars" so far (cf. "Mamari" and "EISA"), besides the compound /690.41/ , is combined indiscriminately with many other borrowed non-"lunar calendaric" glyphs. The observations can only lead to the conclusion: this mishmash tablet is the work of a forger.[34] The other issue here is *if* we have an attempt at trickery for lucrative purposes or an honest imitation for artistic ones. We are not picking sides at this time. Yet, for those people who are not careful while assessing the authenticity of many "*rongorongo*" artifacts we may cite the serious allegations of Grant McCall (2010, p. 49) against Mazière, "Amongst many items he acquired during his sojourn, were some skeletons from caves and other burial places, as well as commissioning a number of carvings that he sold as genuine ancient pieces".

And to return to the question on the frequency of re-appearance of glyph /152/ , in any newly discovered *rongorongo*-related context: since the corpus is randomly collected and there is no accord on the fixed number of glyphs, we may not obtain exact figures as to the statistical calculations. A first estimation, however, tends to be close to *very, very seldom*. The curiosity of a present-day researcher is further piqued by the

34. A. van Hoorebeeck (1979, p. 268), while admitting some perplexity on his part, refers to the Belgian researcher Jean Bianco, who assured him that various "sign groups" on this tablet are "extracted from well-known [= authentic] tablets, especially from 'Tahua,' 'Mamari,' and 'Aruku Kurenga'". We would contend that Bianco's assessment sends up equally a red flag as to the authenticity of the "Mazière tablet". For our part, we have stated previously (Schoch and Melka, 2020b) that, in our assessment, this tablet is dubious.

fact that this *hapax disgraphomenon* V(2, N) at present, i.e., /152/, is accompanied by a cluster of glyphs that finds more than a partial "match" in the "Lunar Calendar". These two simple facts suggest that "EISA"'s mixed glyphs are neither arbitrarily nor awkwardly chosen and painted, contra the combinations on Mazière's tablet (1968, p. 64, facing). Quite the opposite, they imply a conscious selection process among the hundreds of available RR signs that the author went through, whether in pre- or post-missionary times. It is presumable, even plausible, that the author knew how to connect mentally the apparently unordered glyphs, intuit the specific function of each glyph, their interaction along the "text," plus the expected effects.[35]

Now we move on to a series of authors who comment on the practices of Old Rapanui regarding the observation(s) of time and heavens. Carl E. Meinicke (1876, cited in William Churchill, 1912, p. 336), has a pithy formulation on such activities, "Sie kennen eine Art Chronologie und bestimmen die Monate nach dem Mondsumlauf [They (= Rapanui) know of a type of chronology and order the months according to moon cycles]". Wilhelm Geiseler (1995, p. 58), in command of the warship *Hyäne*, says in this respect, "In Rapanui the designation of time is according to the various seasons of fruit ripening, i.e., their harvesting and their consumption, etc.". Carlos Charlin Ojeda (1947, p. 80) in describing a great number of caves found on Easter Island, distinguishes one called by the name "Ana Ui-hetúu,"[36] "caverna desde donde se miraban las estrellas [cavern where the stars were seen]". This site located on the western coast of the island, near Ahu Okahu, would be known in scientific terms as the "cavern of the astronomical observatory". The most obvious use of the place, according to Ojeda (ibid., p. 80), had to do with prophylactic magic,

> La obligación más importante de estos astrónomos-sacerdotes era prevenir a los isleños de las influencias, benéficas o nefastas, de los astros y planetas. Así, 'Matamea' (Marte), o la constelación 'Tautoru' (Orión),[37] o una estrella 'Pau', que aparece entre Octubre y Noviembre, cuando coincidían, provocaban una enorme alarma por el significado desastroso de este acontec-

35. As it happens very often with particular epigraphic and archaeological samples and in broader relatable contexts, the original scribes / creators / artisans did not arrange or produce the artifacts (inscribed or not) for the convenience of future researchers / scientists. Although we may have a general idea on the meaning of an inscribed artifact, the exact nuances, the full symbolism, and extra meanings (e.g., esoteric or sexual) will remain hardly recognizable.

36. The information of Carlos Charlin Ojeda (1947, p. 80) is mostly based on the earlier report of Alfred Métraux (1940, pp. 52–53).

37. Englert (1948, p. 506) includes also the entry "*Tui* Orión (constelación astral)" [*Tui* Orion (stellar constellation)].

imiento: muertes, destrucción de los productos agrícolas, y malos frutos en la pesca".[38]

Similarly, William Liller (1993, p. 5), in noting the importance of the movements of celestial bodies, pauses and tells us that ancient islanders planted their crops according to the phase of the moon (as some of us still do today) and feared for their well-being when Mars grew bright. Next, Giulio Magli also comments on the keen observation of the heavens and celestial bodies by the ancient Rapanui (Magli, 2009, pp. 249–251).

This report would be even more sensible if one considers that pre-contact Rapanui descended from great navigators who charted their ocean routes following the stars (cf. Buck, 1938; Englert, 1948; Äkerblom, 1968; Lewis, 1972). As they settled on their new home, they were faced with a sub-tropical climate characterized by seasonal changes which had to be closely monitored. Their successful subsistence may have depended on the seasonal patterns of planting as well as on those linked with the arrival of various species of fishes, birds, and turtles (Liller, 1993). A monthly calendar that recorded the orbit of the moon by adjusting days and nights—the moon's cycle being in misalignment with the night-day cycle as well as the yearly cycle—was a requisite device to keep it aligned with the local seasons; such adeptness is shown on the "Lunar Calendar" of tablet "Mamari" (see Sproat, 2010, p. 126; cf. Englert, 1948, pp. 311–312).

By analogy, the "organized glyphic chaos" on "EISA" could have been a miniaturized version of the well-structured information on Mamari's calendar.[39] Through magical operations, it was intended to grant "favors," "control," or some "divinatory scope" to the owner over phenomena and staple commodities that concerned directly his / her (?) life: cropping and harvesting seasons; bird and fish migrations, and so forth. Although on a lesser—and a much more private—scale, it would seem that "EISA" performed along similar lines as "Mamari"'s Lunar Calendar. This hypothesis will receive further attention in Section 4, Discussion.

38. [The most important duty of these priest-astronomers was to intervene for the islanders relative to the influences, beneficial or ill-omened, of the stars and planets. Thus, 'Matamea' (= Mars), or the constellation 'Tautoru' (= Belt of Orion), or a star 'Pau', that appears between October and November, when in conjunction, caused a heightened alarm due to the disastrous significance of this event: deaths, destruction of agricultural crops, and poor catch during fishing].

39. Or based on some similarly inscribed "calendar" elsewhere, lost or unknown to present-day scholarship.

4. Discussion

Attempts to determine the nature of the glyphs on "EISA" warrants an extension to Section 3. Since there is no a priori knowledge about the existence of the artifact or its painted brief message, different working lines are in order: the most plausible one will endure, with the questionable ones discarded in due course. A number of possibly (or not) script-like properties related to "EISA" will assist us in achieving more informed estimations (see detailed discussion in Sproat, 2013; 2014; and Melka, 2017). At the outset, we treat the general layout of the glyphs, as it may yield relevant information to the meaning of the artifact itself. The layout (= spatial orientation) of the "EISA" glyphs clearly cancels out the feature of linearity as observed in the *rongorongo* tablets,[40] or in other real-world written documents. Linearity, i.e., a meaningful concatenation of signs / letters / characters across texts, is a major aspect that describes writing systems (cf. Friedrich, 1971; Harris, 1986; DeFrancis, 1989; Gaur, 1994; Daniels and Bright, 1996; Sproat, 2000; Houston, 2004a; Rogers, 2005, p. 9).[41] We also know linearity does not compulsorily stand for a one-dimensional arrangement of signs from left-to-right as in the Roman-based English writing system. Many speech-related inscriptions show contiguous arrangements from right-to-left; top-to-bottom; bottom-to-top; in a circle; or even more exotic forms, such as spiral sequencing of signs.[42] However, given the distributional frame of *rongorongo*-like signs on "EISA" with their proven absence of a contiguous alignment, these signs can barely be viewed as an exotic literary experimentation.[43] In point of fact, what we may have here is a "bag-of-glyphs"—comparable to a bag-of-words, that is, an unordered set of words with their position ignored (cf. Jurafsky and Martin, 2018). An

40. An object with a non-linear arrangement of *rongorongo* glyphs is the "*New York* Birdman (*tangata manu*)," a wooden statuette that has a number of scattered glyphs (*ca.* 35–40) grouped in seven discrete blocks (cf. Métraux, 1940, p. 256; Barthel, 1958, p. 33; Fischer, 1997, pp. 506–508; Kjellgren, 2001, p. 46, Plate 4 Birdman Figure [*tangata manu*]; Lelièvre et al., 2010, p. 135). Despite the absence of linearity, the artifact is indexed to date along with the other artifacts in the canonical corpus of RR inscriptions. Researchers generally acknowledge that the "Birdman" glyphs are difficult to read. They were just traced out in preliminary fashion but never deep-etched via a "shark-tooth". A revision may be due in this case, in order to glean its current status.

41. "All writing has an underlying linear organization: that is, symbols follow each other in some sort of predictable order" (Rogers, 2005, p. 9).

42. Cf. Gelb and Whiting, 1975, p. 101; Godart and Olivier, 1982, pp. 152–153; Gaur, 1987, Gaur, 1994, p. 166; Damerow, 1996, pp. 217–218; Fischer, 1997, p. 351; Sproat, 2000, pp. 56–60; Krämer, 2003; Houston, 2004a,b; Jannot, 2005, pp. 36–37; Rogers, 2005, pp. 9–10; Massarelli, 2014; and Fig. 14 herein.

43. The works of Gaur (1994); Bantock (2000); Albright (2000); Harris (2001) include a number of such experimentations.

attempt to unscramble and reference them to a practical setting derived from the relationships of the rotation periods of heavenly bodies ("Lunar Calendar" on C*a*6—C*a*9 [= C*r*6—C*r*9]) was previously described in Section 3.

FIGURE 14. This Egyptian hieroglyphic arrangement follows a top-to-bottom pattern. From a passageway leading to the burial chamber in the tomb of Ramesses III (Userma'atre'meryamun) (1194–1163 BCE), second ruler of the Twentieth Dynasty (1196–1070 BCE), Valley of the Kings, west bank of the Nile, across from Thebes (Luxor) on the east bank of the Nile. [Note that the exact dates of the reigns and dynasties are disputed.] © Photograph taken by R. M. Schoch during the summer of 2019.

We are very much aware that even the narrative picture stories (for children or adults) are based on a sequential progression abiding by a regulated order. Although pictures per se are freed from speech, we have to follow their directionality so as to make an immediate or a reasonable mental translation.

Of further note is the unexploited painted surface on "EISA". Research has shown that RR scribes "...took advantage of every centimeter of free space" during the writing process (Harris and Melka, 2011a, p. 126, Fig. 2), at least where the indisputably pre-missionary extant

tablets are concerned (Métraux, 1957, p. 204;[44] Michelot and Michelot, 1979, p. 58;[45] Fischer in Dederen and Fischer, 1993, p. 182;[46] Melka in Harris and Melka, 2011a, p. 125[47]). The fact that this characteristic feature is absent on "EISA" may have to do with the unusual ellipsoidal shape of the object, or the painter's choice to map glyphs out in his own terms after the "Lunar Calendar". In consequence, the "EISA" glyphs may appear quite random-looking to a twenty-first century viewer; yet, we assume that their true spatial relationships were recognizable to the original painter / owner of the artifact.

Another observation is that "EISA," unlike the canonical RR tablets ("Mamari" included), does not consistently show repetitive signs or sign-groups. The presence of the "fish"-shaped glyphs is the only real exception, if the "geometric"-like signs are confidently ruled out as *decorative*.[48] This raises again the question of whether we should consider the "EISA" text based on linguistic patterns (or not). This brings us to another observed trait: the much reduced number of featured signs on "EISA".

The brevity of "text" is another stumbling-block related to the said lack of repetition.[49] Otherwise, for a prudent judgment that a symbol system is writing, the number of signs is important (cf. the "infamous" corpus problem in RR, as noted regularly by past and present scholars). If the "EISA" signs were studied in isolation, i.e., the reference frame of the "Lunar Calendar" or any other genuine chunk of *rongorongo* text was unavailable, it would have been considerably less easy to argue about their *meaning* and *structural relationships*. Twelve (12) identifiable *rongorongo* glyphs do not offer much leeway for a controlled interpretation, let alone a decipherment. At which point we should recollect again the markedly spatial distribution of the "EISA" glyphs. In principle, this pattern hints

44. "Whatever the shape and size of these pieces of wood, they are invariably covered with signs on both sides, without the slightest space being wasted".

45. "...les graveurs voulaient utiliser au maximum toute la surface disponible de cette matière si rare" [...the etchers (= scribes) wanted to use to the greatest extent all the available surface of such a rare material].

46. "...each scribe apparently strove to exploit the greatest possible amount of the precious wood".

47. "...*rongorongo* artefacts were carved far and wide, with scribes filling purposefully every available spot with signs (Figure 2)...".

48. However, it may not have been the case that they were merely decorative. For all we know, the exact placement of these "geometric"-like signs may have been very meaningful to the creator and to the user of the "EISA" artifact, perhaps representing "stars" or "planets" in the night sky.

49. Similar concerns were raised earlier by Sproat (2014, p. 469), advocating that statistical measures show a negative correlation between the repetition measure of linguistic / non-linguistic units and the mean text length. Or to put it in layman's terms, "...the shorter the text, the less chance there is for repetition".

at other symbolic / decorative arrangements that do not express linguistic information, strictly speaking (tessellated pavements, woodcarving, tiling, carpet patterns, and geometric ornamental designs, cf. Jones, 1856; the Vinča "religious" symbols, cf. Winn, 1981; tilings and tessellations, cf. Grünbaum and Shepherd, 1987; the rock carving surfaces at Nämforsen, Sweden, cf. Tilley, 1991; body painting among the Xavante people, Brasil, cf. Polo Müller, 1992; rock art from Cave of the Hands—province of Santa Cruz, Argentina, cf. Gradín, Aschero, and Aguerre, 1976; Wang et al., 2010).

The hitherto script-like properties of "EISA" are not especially favorable to the "linguistic hypothesis" of its contents. Another scholar (not affiliated with the present authors) might even say that whoever painted the glyphs did not mean to convey speech at all, i.e., phonological information.

Our main objective is not to strictly speculate about the encoded degree of speech (substantial, marginal, or zero), but to seek clues about the function that "EISA" might have served in the past. It is evident that symbols / paintings (devoid of speech), or characters / syllables / words (tied to speech) do not occur isolated from a socio-cultural context because if so, then they would have no meaning. Logically, any particular symbolic scene or a piece of text is the outcome of one or more specific artists / writers, in a specific individual style / dialect of a specific language, at a specific time, in a specific place, for a specific function, to rephrase thoughts of Tilley (1991) and Jurafsky and Martin (2018).

4.1. Possible Function of the "EISA" Artifact

While the painted glyphic content of "EISA" suggests (cum grano salis) a compacted and personal version of the "LC" (C*a*6—C*a*9 [= C*r*6—C*r*9]), we should explore if the artifact itself (shape, applied paint, elements such as the tied hair tuft and bone pieces) provides a context in some implicit or explicit way for further elucidation. "Context" is understood in this sense, as someone's construction, the conceptual environment of a text, the situation in which it plays a role (see Krippendorff, 2004, p. 33). As a parenthesis, it is also worth quoting John Chadwick (2000, p. 26) regarding methodological issues in deciphering, "A cool judgement is also needed to discriminate between what a text is likely or unlikely to *contain*". Furthermore, we admit that distinguishing between the properties inherent in the artifact and those that are part of the act of interpretation,[50] is by no means easy (cf. Elkins, 1996).

Despite having a wooden body, the configuration of "EISA" is reminiscent of a gourd-shaped or bottle-shaped object. Whether this was

50. In this respect, by RMS and TSM.

merely accidental or planned in advance by the original artist / owner, it remains to be seen. Gourds (*hue* in Rapanui language)—pertaining to the species *Lagenaria siceraria*[51] - have been traditionally planted and used together with other basic cultigens on Old Rapa Nui. Legend has it that gourds were brought to the island by the celebrated navigator and chief Hotu Matu'a (see the chapter *The Voyage of Hotu Matua*, in Barthel, 1978). Although one has trouble adjusting to the ancient Rapanui legends / chants and obtaining clear facts, also due to reinterpretations and possible linguistic contamination over the years (cf. "Rapanui Manuscript E," ibid.), they are still culturally worthy of studying. A case in point is the account of *ipu ŋutu* (Schnabelkürbis = beaked calabash) and *hue* (Flaschenkürbis = bottle gourd), with the term *ipu ŋutu* used instead of the real *hue*. Barthel is inclined to explain this by virtue of the name which describes the function of bottle gourds (as indispensable receptacles in the Old island culture).[52] A striking parallel comes from Thomson (1891, p. 535): in his report[53] about the gourd-vessels he collected (one, now lost, which presumably carried *rongorongo* inscriptions), he talks of the "calabash" called *Tata* and used chiefly in boats for bailing. Said object, according to the National Museum of Natural History Smithsonian's database (2014), corresponds to the access number "E129758-0 Gourd" and is indeed a "beaked calabash," being, however, of the *Lagenaria* sp. As it turns out, Thomson (ibid., p. 535) describes the second listed item called *Epu Moa*: "Known as the fowl gourd, and a superstition ascribes a beneficial influence over the chicken fed and watered from it".[54] In the NMNH Smithsonian's database (2014) it has the access code "E-129757 Gourd". What is of certain bearing for our investigation is the fact that not unlike the "engraved skulls" (or other material supports),[55] even particular gourds seem to have had propitiatory effects on the wellbeing and multiplication of chickens. There are several accounts that bear out the effect and use of magic in ancient

51. In Métraux (1940, p. 157) and Barthel (1978, p. 133) one finds also the Latin denomination *Lagenaria vulgaris*.

52. Barthel (ibid., p. 133). Englert (1948, p. 456) offers also the entry "kaha" in his "*Diccionario Rapanui–Español*" "calabaza, calabacina (que se usaba como vasija de agua) [calabash, vessel (formerly used as a water jar)]".

53. Similarly, in the report of George H. Cooke (1899, p. 722) concerning the "NAMES OF SOME OF THE RAPA NUI PLANTS" he gives for "hue" the translation "gourd-vine". George H. Cooke, it must be remembered, was the ship's surgeon on-board the U.S.S. *Mohican* vessel which visited Easter Island in 1886.

54. See also Métraux (1940, p. 157), "Gourds were of two kinds. The round ones were used as containers for small things and the elongated ones were for water".

55. On the supernatural power known as *mana*, superstitions and outright taboos reigning among the Old Rapanui, see Thomson (1891); Lehmann (1907); Routledge (1919); Métraux (1940); Englert (1948); Barthel (1958); Fischer (1997); Mordo (2002).

times. Whether *kai kai* chants[56] or *rongorongo* glyphs, they were endowed with *mana* which could cause helpful or destructive results in accordance with the wish of the supplicant / imprecator / chanter. Alfred Métraux (1957, p. 186) mentions with regard to string figures and their correlated chants,

> These chants dealt with all the circumstances of life, love and death. A great number of them were spells that had the power to save people in danger and to multiply plants and animals. Others were panegyrics addressed to chiefs on solemn occasions.

Thor Heyerdahl (1965, p. 366) reported that "Most of the Easter Islanders still believed that their ancestors performed supernatural activities through contact with 'devils', and that the *rongo rongo* was provided with inherent *mana*". In the same spirit, other by-products related to the accounts and speculations on "gourds" are: the "calabash... covered with hieroglyphics similar to those found on the incised tablets" (cf. Thomson, 1891, p. 535; Melka, 2017), and Barthel's (1978, p. 133) logographic assignments, "In the *Rongorongo* script there is one grapheme for calabash" (*ipu*, Rongorongo sign 74 ) and another one for bottle gourd (*hue*, Rongorongo sign 124 ),[57] meaning a climbing plant that bears fruit". As the whereabouts of Thomson's inscribed calabash are long-lost,[58] and the word-based values allocated by Barthel do not generally replicate over the corpus, we cannot take either of the cited sources beyond a heuristic platform.

All these circumstantial premises, strewn prima facie among the many Easter Island-related publications, suggest that "EISA" may have been conceived as some kind of private device with painted signs working out as a propitious omen. Whether its *mana* was channeled toward a good harvesting or the multiplication of chickens, we claim no explicit authority on the matter. But in each of the cases or in another background that involves pre-modern religious practices, the hypothesis deserves close attention. The "amulets" in use in ancient societies and communities (as the paper label of "EISA" also suggests) are described as fulfilling two broad functions: "apotropaic," meaning the warding off (of evil forces), and "talismanic"-like, i.e., by imbuing or "charming" the bearer / wearer with favor and fortune (Kotansky, 2019, p. 507,

56. Barthel (1958, p. 325).

57. The outward shape of glyph /124/ is more likely to depict the *poporo* (*Solanum nigrum*) berries; cf. Métraux (1940, p. 160). The accompanying images do not appear in Barthel's (1978) work; they are extracted from his *Grundlagen*... (1958), and inserted by the current authors for the sake of clarity.

58. We considered and dismissed the idea that Thomson's inscribed calabash might actually be the "EISA" artifact as we believe that Thomson would surely have been able to distinguish between a genuine calabash and a wooden object that is vaguely gourd-shaped.

note 1). The second function in Kotansky (2019) appears to fit conceptually with the recently located artifact from Easter Island (= "EISA"), or with the pre-missionary receptacle-like object illustrated in Fig. 5. If "EISA"'s painted message suggests something like a personalized "calendar" (analogous to the neatly arranged "Lunar Calendar" on "Mamari"), this working line requires serious consideration. R. W. Sproat (2010, p. 126) points out that "a calendar clearly represents a kind of list, and the *Mamari* calendar... represented a fairly sophisticated symbolic representation of an algorithm for maintaining the lunar calendar". Lists are reassuring and tangible reminders of matters concerning directly the welfare and functioning of an individual or a group (cf. in a general context, Belknap, 2004). In this picture, M. Hyman (2006, p. 245), in opposition to the idea that listed formulations may be elementary, naïve, and underrepresented linguistic samples, states,

> Yet less clearly linguistic instances of writing—calendars, tables of sines and cosines, architectural plans, recipes for foods and drugs, mathematical formulae, coins and bank-notes, charts for navigation, computer programs—reflect highly sophisticated intellectual activity and serve as indispensable bearers of culture.

Nonetheless, we should keep in mind that listed items have involved (or not) true writing during the recorded history of humankind. While this intriguing topic is beyond this article's focus, we should constrain ourselves to the extent and mechanisms of the classical *rongorongo* script and encourage solutions from an indigenous perspective prior to 1864, or an early post-1864 one.[59] Lists (and "lunar-based calendars," thereof) are formalized cut-outs of a wider and deeper lore / knowledge that they represent, and they come in different formats, materials, sizes, and colors.[60] It seems the "Mamari lunar calendar" and "EISA" fit in part or in whole under these premises.

In attempting to define an acceptable context, we must pay heed to other hints, too. On the condition that the label was indeed made in or around 1885/6, it clearly shows that the collector or purchaser related it to a "Sacred Amulet". As such, rather than an object simply made and /

59. Specifically, it may well be that we are dealing in "EISA"'s case with an object used for propitiation and/or divination in accordance with practical and religious-like scenarios fitting the spirit of the time. For those letting their imaginations run wild, the "encoded message" could have expressed, e.g., the escape velocity of a body from the gravity of the Earth and its trajectory to the Moon. Depending on one's bias- and fantasy-level, other interpretations are likely to be found, see especially Lee's (1999) "The Nutcase Chronicles".

60. "Lists consist of arrangements of entries and have been used for varied purposes throughout history. Lists enumerate, account, remind, memorialize, order. Lists take a number of sizes, shapes and functions, ranging from directories and historical records to edicts and instructions" (Belknap, 2004, p. 6).

or decorated for trade,[61] it seems that "EISA" owed allegiance to its basic function. The hair tuft and bones tied to it are not something, for instance, that we would expect of an object typically made for trade; rather, they are fitting of a genuine amulet (perhaps imparting their *mana* to the piece). The understanding is that items made explicitly for exchange tended to be copies of the conventional wooden statuettes (*moʻai kavakava*, *moʻai tangata*, *moʻai moko*, *moʻai tangata manu*, and so forth; cf. Geiseler, 1995, p. 66; Balfour, 1917, pp. 359–361; Métraux, 1940, pp. 250–251; Fischer, 2005, p. 75; Hooper, 2006, pp. 145–147, Wieczorek, 2016b, p. 13). However, we can speculate that items (including "sacred objects") made for other purposes initially were in fact traded, especially after the introduction of Christianity—at which time they may have lost their meaning and licit "sacredness," in any case for some Rapanui in need.

4.2. Pre- or Post-missionary Provenance?

Much of what is considered "rational" in our current fact-gathering and subsequent analysis, must rely on the authenticity of the painted relic,[62] the interaction of the studied variables, and the credibility of consulted bibliographic sources. Since the variables should be supported, it is necessary to direct our attention upon another one, namely, the time-frame of the artifact. The insights gained are relevant to our discussion. It is also worth noting that, up to this point, no single interpretation of *rongorongo* sequences is widely agreed upon by the international researchers, with the exception, perhaps, of the "Lunar Calendar" on "Mamari". The body of speculations is rich enough to fuel entire multi-volume series. Yet, the misleading theories and/or decipherments help us acknowledge the cognitive limitations in facing unknown objects and phenomena. They, similarly, point to the design of a step-by-step process, where any small piece of hard evidence (among the many letdowns) may aid to a broader envisioning and understanding. The time-frame is one of those pieces of evidence that could convey a sounder interpretation of "EISA". Regarding the age of "EISA," close inspection of the paper label instills confidence that it was attached to the object by either the original collector of "EISA," or by an early subsequent owner. We have no reason to doubt the verisimilitude of the statement on the label, namely that the object came from Easter Island in 1885 or 1886. And more to the point, "EISA" is no later in date than 1885/6. Arguably, it might have

61. See in a general context, Fischer (1997, p. 509).

62. In formal terms, providing that "EISA"'s original post-1864 function was firmly rooted in the earlier cultural substratum, and was not deliberately made for trade or sale.

been made earlier than its collection date, but based on careful inspection of the object, we doubt that it was created earlier than perhaps a quarter century prior to the time of collection. The wooden object that forms the "body" of "EISA" may have been some sort of discarded European object, and the paint on "EISA" has the appearance of what, in the vernacular of modern collectors, is referred to as "European trade paint". Based on his experience studying various Easter Island objects found in a number of collections (private and public), the "instinct" of RMS is that "EISA" in its present (final) form most likely dates to the period roughly spanning the 1860s to 1885/6.

Assuming that "EISA" took its final form, as we see it today, shortly before being collected in 1885/6, this would place it in the early post-missionary period (circa 1870s to mid-1880s), just prior to the annexation of Easter Island by Chile in 1888. Is the *rongorongo* "inscription" painted on its surface compatible with such a time-frame? Here it is worth noting S. R. Fischer's (1997, p. 10) perceptive comments regarding the possible survival of knowledge during this turbulent time in the island's history:

> [...] it is probable that most *rongorongo* experts and some *rongorongo* pupils actually escaped the devastating 1862–63 labour raids. Further, it is even possible that a few *rongorongo* experts and pupils survived the pandemics that followed. Notwithstanding, what knowledge of script type and function was preserved after this in the 1870s and 1880s constituted a minimal bequest which the next generation wasted through loss, contamination, and invention.

Thus, Fischer suggests that some of the *rongorongo* experts survived with their knowledge into the 1870s and 1880s; "EISA" may be a product of the survival of such knowledge during this period. It is plausible to assume that either the person behind "EISA" had some degree of familiarity with RR, or s/he copied (remembered) signs—especially in consideration of # /152/—from somewhere. This should not be a surprise, as we think that a number of indigenous people still equated the full moon (*O*)*motobi* with the visualization of the "Old woman / man" cooking in the "earth-oven," as Sebastian Englert reports (1948, p. 165). Furthermore, the idea of objects imbued with "supernatural power" for obtaining favors finds another candidate in one of the inherited tablets, the one known as the "Échancrée,"

> The *Échancrée*, probably because of its propitiatory virtues, was summarily transformed into a fishing-line spool before being enveloped in long tresses of sacred hair that were given to Mgr Tepano (figure 197).
>
> (Orliac and Orliac, 2008, p. 248; cf. Fischer, 1997, p. 22)

This post-1864 act implies that a larger number of fish could have been caught given the "magic power" that permeated this recycled

tablet.[63] Whether in the case of "EISA" or "Échancrée" (or of other objects and personages, for that matter),[64] we should consider how they follow a pattern. These coincidences make us think there is more than meets the eye: magic thinking was ever-present and holding a grip in ancient Rapa Nui, and though in rapid decline,[65] it was still in occasional use in the early post-missionary years.

4.3. A Plausible Classification?

The last area of discussion pertains to the classification of artifacts such as the "EISA". An artifact may be ethnographically interesting, or it may be epigraphically interesting, or both, or neither. Because matters of ethnographic provenance and epigraphic insight are each focuses of the article, the table[66] below organizes the various possible scenarios.

There are a number of categories and combinations that can be considered here. With respect to ethnographic artifacts there are various possibilities. The first one is pre-tourism artifacts that were manufactured on pre-missionary Easter Island before the time of mass contact with Europeans / North Americans (that is, before circa the mid 1860s). These artifacts are valuable from the point of view of recording the Island's cultural history. Another category is artifacts that were manufac-

63. See also W. Hough's (1889, p. 886) short description of charm-stones, "Rude, unshapen (= unshaped) stones were distinguished by the natives as gods of three varieties. These are the fish god in general, called Mea Ika; the bonito's god, called Mea Kahi; and the fowl god, called Mea Moa. The gods were never common, and were possessed by clans or communities, and never by individuals. They were moved about from place to place as they were needed"; W. J. Thomson's (1891, p. 470) subsection "Superstitions," "Fishhooks were made of bones of deceased fishermen, which were thought to exert a mysterious influence over the denizens of the deep. Fishermen were always provided with the stone god that was supposed to be emblematic of the spirit having cognizance of the fish," and J. Macmillan Brown's (1979, pp. 190–191) subsection "Sorcery and Fishing" regarding the use of *mana* charm-stones to secure a successful catch. Otherwise, J. Golson (1965, pp. 62–69), enlists the one-piece and two-pieces fish-hooks (made of stone and bone) recovered from different sites on Easter Island (cf. Heyerdahl and Ferdon, 1961), whereas William Ayres (1979) reports on the fishing techniques and implements used traditionally on Easter Island.

64. See W. Hough (1889, pp. 885–886); W. J. Thomson (1891, p. 470); O. M. Dalton (1904, p. 6); W. Knoche (1914, p. 346); J. Macmillan Brown (1979, pp. 126–128, 134); S. Englert (1948, pp. 267–268); A. Métraux (1957, pp. 88–90, 125–127, 139–143); S. R. Fischer (1997, pp. 331–332); C. Mordo (2002, pp. 73–74); and Harris and Melka (2011b, pp. 264–265).

65. See, e.g., Métraux (1957, p. 127), "The disappearance of a large proportion of the priesthood during the slave-raid of 1862 would explain this sharp break in religious tradition and forgetfulness of the ancient cults".

66. This table is modified from one that Gordon Berthin originally suggested to us; he deserves credit for its inception, but is not responsible for our version of the table.

tured during missionary or post-missionary times as tourist goods, in which case, they are often (but not always) of little ethnographic value when it comes to the study of pre-contact or pre-missionary Rapa Nui; however, they may be of use in comparative tests with items confirmed by scholarship as authentically ancient.

With respect to epigraphic artifacts bearing *rongorongo* or *rongorongo*-like inscriptions or signs, the most sought-after and valued are artifacts that can be demonstrated to have been made during pre-tourism / pre-missionary times inscribed with previously unknown glyph sequences (generally the longer, the more desirable); however, pre-missionary artifacts with glyph sequences that are similar or parallel to the known corpus are highly desirable and valuable epigraphically as well. Also of value epigraphically are artifacts from Easter Island bearing *rongorongo* or *rongorongo*-like inscriptions or signs that are post-missionary, but demonstrate on the part of the creator some genuine familiarity with *rongorongo* traditions, even if minimal or rudimentary, or which are copies of genuine pre-missionary *rongorongo* inscriptions that have since been lost (in analogy, there are no known copies of Plato's dialogues written in his own hand, but rather primarily copies that post-date Plato by over a millennium).

Placing a specific artifact into one of these categories is not always easy. For instance, whether or not "EISA" is a pre-tourist / pre-missionary item is unclear. Even though it was collected in post-missionary times, it is not impossible that it was manufactured in the early 1860s (or earlier) and thus is pre-missionary; however, this has yet to be demonstrated, and is a question that may be impossible to resolve with current information. We currently favor the "conservative" hypothesis that "EISA" dates to late missionary or early post-missionary times, circa late 1860s to early 1880s. More pertinent to the issues which are the focus of this paper, we have provided evidence that the creator of "EISA" minimally possessed some basic familiarity with the genuine *rongorongo* tradition. Thus, referring to Table 1, we consider "EISA" to be a valuable / heuristic epigraphic artifact.

5. Conclusions

The appearance of an unknown (and apparently puzzling) artifact from a different culture represents a challenge for the human cognitive abilities. The basic incongruity we may face is considering "EISA" or other parochial artifacts in our own twenty-first century terms.

Hampering not only analysis of "EISA" specifically, but a full understanding of *rongorongo* more generally, is the possibility that *rongorongo* is an "early script"; that is, a script in an early developmental stage. The *rongorongo* signs may not have corresponded to a spoken language pho-

TABLE 1. Categorization of newly discovered Rapanui-made artifacts, based on their ethnographic provenance and epigraphic validity

Epigraphic significance?	Pre-tourism provenance? [= pre-missionary]	Artifact utility
No epigraphic interest (does not bear a *rongorongo* inscription or is a modern tourist item, reproduction, artwork, or other object with *rongorongo*-like glyphs in imitation of, or inspired by, those found on genuine pre-missionary pieces as published in the modern literature)	No pre-tourist provenance	Of interest primarily to ethnographers and historians considering post-missionary / post-tourist Rapanui culture and Easter Island history
Valid and original (not previously known) *rongorongo* inscription, glyph, or collection of glyphs, created through and informed by genuine indigenous knowledge of *rongorongo* practices (not through familiarity with the modern literature on *rongorongo*) / Copy of an ancient *rongorongo* inscription that is not known otherwise	No pre-tourist provenance	A valuable / heuristic epigraphic artifact
No epigraphic interest (does not bear a *rongorongo* inscription)	Pre-tourist provenance	A valuable ethnographic artifact
Valid and original (not previously known) *rongorongo* inscription / A copy or a "reinterpretation" or a "paraphrase" of a previously known *rongorongo* inscription / A single *rongorongo* glyph or collection of glyphs	Pre-tourist provenance	Most valuable to both ethnographers and epigraphers

netically, word-by-word or syllable-by-syllable.[67] (Compounding the issue, the exact language that gave rise to the *rongorongo* script is still elusive, although it was presumably an ancient language spoken on Easter Island[68] which ultimately gave rise to the historically known language of the Rapanui; the island was first discovered by Europeans in 1722.) Information in an "early script" is communicated not so much by representing the intricacy of a language in detail and specific one-to-one correlations between the written and oral words, but rather through certain specific words, symbols, and other prompts serving as mnemonic devices; metaphorical allusions; homonymy; and other pictorial and semantic indicators.[69] Incident to the above lines, we must clarify that we are not framing *rongorongo* within a teleological model of script development, with *rongorongo* placed at the beginning and the "alphabet" format being the crowning of progression (cf. Moorhouse, 1946, p. 17; Gelb, 1963, pp. 190–205; Pulgram, 1976, p. 4, Table 1.1). Quite the opposite: as far as present evidence reveals to us, the adopted approach helps in avoiding the pitfalls that have plagued many suggested decipherments.

One possible strategy through which it is possible to deduce or even ascertain the nature of "EISA" is "by trial and error" (cf. Ross, 1940, p. 559), in proportion to its specific terms and context within the general socio-cultural setting of pre-missionary to early post-missionary Rapanui. Further objective revisions are welcome in this framework.

The meaning of "EISA" should be construed by accretion and relative to a particular context, in this case, to a lunar-based one and its firsthand use. The most consistent frame of reference for "EISA" is the "Lunar Calendar" on the "Mamari Tablet". Although we are not fully certain about the reliability of the comparison, the analysis shows that a good number of "EISA" signs are found within the "LC," especially in view of the case-sensitive glyph /152/, the centerpiece of said "calendar". Whether or not the glyphic portions (C*a*6—C*a*9 [= C*r*6—C*r*9] ≈ "EISA") are semantically compatible,[70] this is a question that cannot be answered bluntly. Readers should be informed too, that it is not our desire to multiply at all costs the lunar calendars in the *rongorongo* cor-

67. Be that as it may, we are eager to read new full translations from researchers who are inclined to "decipher" the *rongorongo* on a syllabic basis, e.g., of the Lunar Calendar on Tablet "Mamari" (cf. Barthel, 1958; Guy, 2006, pp. 63–65; Ávila Fuentealba, 2007, pp. 82–83, 147), or of the "lunar"-like sequences purportedly found on the "Keiti" Tablet (cf. Ávila Fuentealba, 2007, pp. 80, 87; Wieczorek, 2016a).

68. See especially Fischer (2013).

69. See, e.g., Sampson (1985, p. 38) for an assessment of such scripts, "Likewise, the relatively extreme incompleteness of some early scripts may not always be merely a flaw of immaturity; if a script is used only for highly specific purposes, so that much of any utterance is predictable from context…".

70. The adverb "semantically" is resorted to here in face of a number of absent criteria for qualifying the message on "EISA" as fully-fledged phonetic writing.

pus. Any claim regarding the glyphic contents of "EISA" is legitimate only under certain conditions: being the foremost ones, we acknowledge again, the authenticity of the artifact and the commonality of the "full moon" glyph /152/ with that of the "Mamari Tablet". The appearance of new material—i.e., "EISA," or any other potential artifact—raises hopes, however, for replicable research.

As for the core function of "EISA," one can speculate on the basis of the glyphic content and its general physical make-up. The painted "text" seems to be neither informative nor descriptive in nature. At its most basic level, the textual end seems performative: coaxing the artifact so as to achieve the desired outcome. In this vein, "EISA" might have been a personal appliance intended to propitiate the original owner on sustenance practices, or to exercise "divination" on matters of earthly existence.[71] Given the meager living conditions, "astronomy" and "magic"—as understood and ritualized by the Old Rapanui—were in high regard for the express purpose (among others) of achieving effects such as avoiding harmful influences, securing the multiplication of chickens, fishes, turtles, sea birds, or the protection / abundance of harvested plants. Performative writing is attested in different eras and geographical locations, and appears related to basic human needs, emotions, and instincts (see, e.g., Austin, 1962; Tambiah, 1968; Bodel, 2001, pp. 19–24; Page, 2004; Sproat, 2013, pp. 20, 38; Kotansky, 2019).

In light of the collected corpus, and the new pieces that are surfacing (or resurfacing),[72] it becomes clear that there is no such thing as a standard-issue *rongorongo* tablet or format, rather than a mixture of objects and supports intentionally or opportunistically chosen (or salvaged) to be inscribed, painted, scratched, and punched under distinct circumstances and for different purposes (cf. Melka, 2017). The latest artifacts (plus other potential ones which may be discovered in the future) can only be a part of the *rongorongo* story. Yet, taken as a whole they expand the opportunity to revisit and better understand the *rongorongo* practices. An extensive line of authors have commented upon the sacred and hierarchical scale of the tradition (e.g., Thomson, 1891, p. 514; Dalton, 1904, p. 6; Routledge, 1919, pp. 245–246; Brown, 1979, p. 74; Métraux, 1940, p. 395; Englert, 1948, p. 316; McCoy, 1979, p. 158; Fischer, 1997, p. 555). The media and formats used, plus the modifications, abridgments, and "re-editions" of "texts" through time, suggest however an activity beyond the core elite of the *rongorongo* scribes. Perhaps it is appropriate to reach M. de Laat's (2009, p. 219) thought,

71. Since Old Easter Islanders had "...numerous superstitions and resorted to charms, incantations... and amulets... (Thomson, 1891, p. 469)," the artifact known as "EISA," or the objects illustrated and commented upon in footnote 2 (v. *supra*) and Figs. 5 and 6 for that matter, would not be out of favor.

72. See Melka and Schoch (2020a,b) and Schoch and Melka (2019; 2020b).

> The fact that, at the time of the first mentioning by Eyraud in 1864, tablets were present in all the huts... also poses the intriguing problem how widely at one time literacy had spread beyond the cultural elite.

Several objects with fake RR signs have received a good deal of attention in the published literature.[73] A careful description and elucidation of "EISA" perhaps will assist in identifying what is *phony* or *half true* in a domain characterized by so much wishful thinking and where scholarly opinions may not sit easily together. Of course where one draws the boundary between *a fake post-1864 item* and *an authentic post-1864 item* depends upon the impartial analysis of the hitherto amassed evidence (at best), or acting on personal assumptions (at worst). Any misinterpretation may be especially bound to happen, due, for example, to the insufficiency of data about the links of the long chain of entities involved in "EISA"'s ownership: (1) the original indigenous painter; (2) the purported European collector / purchaser, i.e., the "Irish missionary"; (3) any potential subsequent owner (?); (4) the English anthropologist and collector Harry Geoffrey Beasley; (5) after HGB's decease in February 1939, any potential subsequent private owner (?) / or an institution (?); (6) the next anonymous English collector who sold the piece in 1985; (7) the Hawaiian buyer who traded "EISA" later with (8) the Canada-based antiques dealer.

Although most likely a post-missionary *rongorongo* product and standing for some sort of "pocket calendar" (to the best of our assessment), "EISA" is scientifically desirable in its own right. On the face of it, one would not expect that all knowledge of *rongorongo* would be absolutely and completely lost as the result of the Peruvian labor raids of 1862–1863, the coming of the first documented missionary in 1864, and the later missionary work (cf. Eyraud, 1866; Fischer, 1997, pp. 9–10). In this sense, "EISA"—collected during post-missionary times—records a personal effort to continue with the *rongorongo* tradition in approximately the last third of the nineteenth century.

The present authors would gladly agree to the further expansion of the corpus (whether related to the work of the original painter of the "EISA" glyphs or otherwise). The fixed-content "text" of "EISA," scattered and short as it appears, is an accidentally preserved trace of an unknown pre-twentieth-century Rapanui individual. Any comparison with similarly painted / written texts would have increased the chances to study stylistic features, e.g., morphological variation; to explore whether these kinds of painted "amulets" (in gourd-like shapes or not) were casually or systematically manufactured; to examine the material support of the new "texts," et cetera. By the same token, valuable

73. Cf. Métraux (1940); Imbelloni (1951); Barthel (1958); van Hoorebeeck (1979); Forment and Esen-Baur (1990); Fischer (1993); Schoch and Melka (2020b).

and distinctive as it historically is, the very concise "1885/6" note is not telling much about the identity of the first purchaser / collector, or the circumstances of "EISA"'s acquisition. In either case, we are conditioned in our search by what is physically accessible. Yet, in order to sustain the hope for further scientific investigation, one may wonder if additional genuine RR-inscribed pieces are still lying dormant somewhere among private and museum collections waiting to be discovered and evaluated.

Until recently, the *rongorongo* corpus has been relatively static, with the known and "accepted" texts limited to just over two dozen items (Barthel, 1958; Fischer, 1997). Our research has included bringing additional pieces from Easter Island bearing *rongorongo* signs and sequences from the late pre-missionary to early post-missionary period, circa 1860s to 1880s, to the attention of interested scholars. In addition to the "Sacred Amulet from Easter Island," described herein, we have documented the "*Rangitoki* bark-cloth fragment" (Fig. 7 above, collected on Easter Island in March 1869; Schoch and Melka, 2019; Schoch and Melka, 2020b) and the "*San Diego* Tablet" (Fig. 8 above, possibly dating to the circa late 1850s – early 1860s or shortly thereafter; Melka and Schoch, 2020a). Here we wish to express the conviction and hope that these "newly unveiled" artifacts, and, possibly, future items that may come to light, will aid researchers in their studies of the *rongorongo* script.

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