

THE *RANGITOKI* (RANGITOKI) BARK-CLOTH PIECE: A NEWLY RECOGNIZED *RONGORONGO* FRAGMENT FROM EASTER ISLAND

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The *Rangitoki fragment*, here described in the literature for the first time, consists of a piece of bark-cloth collected on Easter Island in March 1869 that has painted on its surface a short *rongorongo* (RR) sequence of glyphs. Analysis of the historiography and inscription of the *Rangitoki fragment* suggests that it is, most likely, a genuine relic of the *rongorongo* tradition on Easter Island and thus represents an authentic addition to the known corpus of RR inscriptions.

Keywords: bark-cloth, corpus, genuine artifact, Rapa Nui, Rangitoki, *Rangitoki fragment*, relic, *rongorongo* script

Introduction

In a publication of 1971, the German ethnologist and epigrapher Thomas S. Barthel commented, among many other things, on the technical features related to the production of *rongorongo* (RR) artifacts.¹ Besides their possible thematic content; the dimensional size of objects; directionality (left-to-right) and writing method (essentially, *reverse boustrophedon*), and assumed stages during the writing / carving process, Barthel expresses his concern about the material media used to record inscriptions. While *wood* is by and large the basic medium, “*It appears from the account of a calabash, which has unfortunately*

¹ BARTHEL, T. S. *Pre-contact Writing in Oceania*, pp. 1167–1169.

disappeared, that other materials were also inscribed. On the other hand we have no proof that rongo-rongo texts were possibly painted in color on bark-cloth".² The said "calabash" is first reported in William J. Thomson,³ namely, "Calabash – Very old specimen obtained from an ancient tomb, covered with hieroglyphics similar to those found on the incised tablets."⁴ Related problems and details regarding the description, classification, and authenticity of the extant RR corpus are found in Dalton; Piotrowski; Métraux; Imbelloni; Barthel; van Hoorebeeck; Pozdniakov; Fischer; Melka; Horley; and Wiczorek.⁵ It is explicitly admitted against this backdrop that the situation of *rongorongo* studies would greatly benefit from the expansion of the corpus with genuine inscriptions. Given the conventional use of RR on wooden pieces, the appearance and documentation of new, other-than-wood artifacts might strike many as a hardly believable standalone fact, or as another attention-grabbing report (being spurious, at worst). Scholars and enthusiasts with long enough memories are aware that original pre-missionary objects have had – over time – considerable international market value. Given the notable scarcity of *rongorongo* artifacts, the value is *priceless* in their case. Steven Roger Fischer, in treating artifacts "...produced after the cessation of traditional rongorongo

² Ibid. *Pre-contact Writing in Oceania*, p. 1169. ROUTLEDGE, K. *The Mystery of Easter Island*, p. 244, has a curious suggestion regarding the origin of the script, saying that "...the original symbols...brought to the island [= Rapa Nui] by the first-comers...were on 'paper'..." It may be inferred that Mrs. SCORESBY ROUTLEDGE was referring to the 'paper' derived from the paper mulberry tree (*Broussonetia papyrifera*), hence identified as *mahute* (= bark-cloth).

³ THOMSON, W. J. *Te Pito te Henua, or Easter Island*, p. 535.

⁴ cf. also BARTHEL, T. S. *Grundlagen zur Entzifferung der Osterinselschrift*, p. 36; VAN HOOREBEECK, A. *La Vérité sur l'île de Pâques*, p. 272; DAVIS-DRAKE, A. *A Layperson's Guide to rongorongo*, p. 13.

⁵ See DALTON, O. M. *On an Inscribed Wooden Tablet from Easter Island (Rapa Nui) in the British Museum*; PIOTROWSKI, A. *Deux Tablettes, avec les Marques Gravées de l'île de Pâques*; MÉTRAUX, A. *Two Easter Island Tablets in the Bernice P. Bishop Museum, Ethnology of Easter Island*; IMBELLONI, J. *Las 'Tabletas Parlantes' de Pascua, Monumentos de un Sistema Gráfico Indo-oceánico* [The 'Talking Tablets' of Easter Island, Monuments of an Indo-Oceanic Graphic System]; BARTHEL, T. S. *Grundlagen...*; VAN HOOREBEECK, A. *La Vérité sur l'île de Pâques*; POZDNIAKOV, K. *Les Bases du Déchiffrement de l'Écriture de l'Île de Pâques*; FISCHER, S. R. *Rongorongo: The Easter Island Script, History, Traditions, Texts*; MELKA, T. S. *The Corpus Problem in the Rongorongo Studies; A Developmental Continuum for the rongorongo Script of Easter Island*; HORLEY, P. *Rongorongo Tablet from the Ethnological Museum, Berlin*; *The Large rongorongo Tablet from the Collections of the Smithsonian Institution, Washington, D.C.*; WIECZOREK, R. M. *Naming the rongorongo Artifacts*.

production in 1865...,” underscores that they “...are considered... [by Fischer] to be epigonous and unauthentic”.⁶ As a number of public museums and private collections all over the world treasure objects fitting this characteristic,⁷ we suggest Fischer is correct in stating, “It cannot be forgotten that in the not too distant future these products, too, will hold a substantial artistic value”.⁸

We wish to present, at this point, a RR inscription found on a piece of bark-cloth, apparently a remainder of a “loincloth” (= *hami*),⁹ or “skirt,” of a female person from early post-missionary Easter Island (after 1864). Whether or not scholars take issue with the initial assessment of the piece, it may be of interest to refer, first, to John Macmillan Brown.¹⁰ He reports that, in ancient times, common people wore bark-cloth items of clothing “undyed and white...”, but “the gallants and superior people generally had it dyed yellow with the colouring from the turmeric root” (= *Curcuma longa*).¹¹ Decades later, Adrienne L. Kaeppler reveals that paramount figures and individuals of families of noble status wore bark-cloth cloaks; bark-cloth headpieces were also accessories indicating their high-status.¹² Bark-cloth or tapa – *mahute* in the Rapanui language – was made from the paper mulberry tree (*Broussonetia papyrifera*), a small tree of the mulberry family (*Moraceae*), which was formerly more abundant on the island.¹³ Despite its invasive nature, the substance was generally rare not only on account of the dryness of the porous soil and the strong winds, but also due to the high demand for clothing and its

⁶ FISCHER, S. R. *Rongorongo...*, p. 509.

⁷ cf. BARTHEL, T. S. *Grundlagen...*, pp. 33–35; VAN HOOREBEECK, A. *La Vérité sur l'île de Pâques*, pp. 255–270.

⁸ FISCHER, S. R. *Rongorongo...*, pp. 509–510. Tourist art and the souvenir practice(s) still flourish in Rapa Nui in our time, contributing to the production of artifacts covered with fake RR signs. Despite the non-authenticity, it remains to be seen how future generations will weigh up their cultural or economic value.

⁹ See e.g. ENGLERT, S. *La Tierra de Hotu Matu'a* [The Land of Hotu Matu'a], p. 435, “hami paño que cubre las partes pudendas, taparrabos, calzón de baño [a piece of cloth that covers the genitals, underwear, bathing suit].” The entry *hami* is applied in a generic manner in ENGLERT, S. *La Tierra de Hotu Matu'a* [The Land of Hotu Matu'a]; there is no specification on a gender-based use or on its raw material, i.e. if made of vegetal fiber or bark-cloth.

¹⁰ BROWN, J. M. *The Riddle of the Pacific*, p. 165.

¹¹ Similar earlier reports are found in PHILIPPI, R. A. *La Isla de Pascua i sus Habitantes*. Jeografía [Easter Island and its Inhabitants. Geography], pp. 16, 21.

¹² KAEPLER, A. L. *Rapa Nui Art and Aesthetics*, p. 35; KAEPLER, A. L. *Sculptures of Barkcloth and Wood from Rapa Nui*, p.17.

¹³ cf. MÉTRAUX, A. *Ethnology of Easter Island*, pp. 157–158; ENGLERT, S. *La Tierra de Hotu Matu'a* [The Land of Hotu Matu'a], p. 226.

use for other ceremonial artifacts. It seems reasonable to consider the privileged position of the high-ranking individuals as a bonus factor in securing it.¹⁴

The research reported here focuses on several lines of evidence, and attempts to test the working hypothesis that the piece is authentic, and that the painted inscription bears partial structural / internal resemblances with several other passages attested on a number of genuine inscriptions.¹⁵ The examined bark-cloth piece will be known as the “*Raʻjitoki fragment*” – an eponym in honor of the presumed young lady from Easter Island who once owned it (see *Background*, for a historiography). Admittedly, our rational and multi-dimensional approach is not new: readers are invited to follow Dalton’s, Métraux’s, Barthel’s, Pozdniakov’s, Fischer’s, Horley’s, Wieczorek’s, or Melka’s detective work¹⁶ on various objects, e.g. the “*Paris Snuffbox*”; the “*Honolulu 445-fragment*”; the inscription on tablet “*Honolulu 3622*”; the “*London tablet*”; the “*Berlin tablet*”; and the “*Sydney rei miro*,” regarding their status and adequacy as legitimate (or not) RR products.

As the script suffers (not only) from two serious objective limitations, i.e. *sparseness of data*¹⁷ and *want of a direct bilingual text*,¹⁸ it becomes even more compelling to test any inscription that claims to be genuine. Considering the wooden artifacts secreted in caves, rock crevices, and other hideouts would have decayed with the passage of time,¹⁹ attention is drawn by Melka to the fact that “...*the prospects of finding new, legitimate long RR texts [are] more than slim*”.²⁰ The existence of the *Raʻjitoki fragment*, however, suggests a number of lines of approach, worthy of pursuit: (1) tapping into private collections which may hold a number of undocumented Easter Island artifacts, whether RR-

¹⁴ See KAEPLER, A. L. *Sculptures of Barkcloth and Wood from Rapa Nui*, p. 17.

¹⁵ cf. BARTHEL, T. S. *Grundlagen...*; FISCHER, S. R. *Rongorongo...*

¹⁶ DALTON, O. M. *On an Inscribed Wooden Tablet from Easter Island (Rapa Nui) in the British Museum*; MÉTRAUX, A. *Easter Island Tablets in the Bernice P. Bishop Museum; Ethnology of Easter Island*; BARTHEL, T. S. *Grundlagen...; Rongorongo-Studien...*; POZDNIAKOV, K. *Les Bases du Déchiffrement de l'Écriture de l'Île de Pâques*, p. 294; FISCHER, S. R. *Rongorongo...*; HORLEY, P. *Rongorongo Tablet from the Ethnological Museum, Berlin*; WIECZOREK, R. M. *Naming the rongorongo Artifacts*; MELKA, T. S. *A Developmental Continuum for the rongorongo Script of Easter Island*.

¹⁷ The problem has been highlighted over the last 150+ years by a long train of authors.

¹⁸ ZENDER, M., *Theory and Method in Maya Decipherment*, pp. 3–4; MELKA, T. S., MÍSTECKÝ, M. *On Stylometric Features of H. Beam Piper's Omnilingual*, pp. 5–7.

¹⁹ See EYRAUD, E. *The Sojourn of the First Missionary on Rapa Nui*, p. 29; ROUTLEDGE, K. *The Mystery of Easter Island*, Chapter XVII; BARTHEL, T. S. *Neues zur Osterinselschrift*, pp. 162–163; FISCHER, S. R. *Rongorongo...*, pp. 14–20

²⁰ MELKA, T. S. *On a “Kinetic”-like Sequence in rongorongo Tablet “Mamari”*.

related or not (many scholars may not realize how many Easter Island artifacts remain unnoticed in private collections); (2) newly found evidence may reveal that RR was not always and exactly executed on wood, rather than on a variety of materials. We may cautiously suggest that such non-conventional cases hint that the phenomenon was a little more pervasive than previously thought, perhaps surpassing the circles of ritual expert scribes and chanters; (3) any added data is bound, in principle, to render the *rongorongo* script more accessible and bring it under experimental control.

Since the documentation and authentication of RR candidate samples are deemed most important, it should be clearly stated that a precise decipherment of the sequence of the *Rangitoki fragment* is here disregarded. Large numbers of decipherments have proven to be “far too convenient and suspect” over the years; many others are simply non-falsifiable due to the reduced corpus. This observation may be compounded by the fact that *rongorongo*, in frequent cases, is evidently a mixture of elements, where the ancient mnemonics plays its role. As such it may meet the criteria of an “*early script*”,²¹ in which case “...it is more appropriate to speak of ‘interpreting’ texts rather than of ‘reading’ them [point-by-point, our note].” The quote comes from Christopher Woods,²² while examining proto-Cuneiform signs and figures. Consider, at any rate, that proto-Cuneiform and *rongorongo*, unrelated scribal productions as they are in time and space, deserve scientific attention in terms of a developmental chronological scale and the communicative potential they entail.

Background and Physical Description

Background

In early November 2018, one of us, Robert M. Schoch (RMS), was approached by a professional art and antiques dealer who was in the process of selling the *Rangitoki bark-cloth piece*. The dealer was acting as a go-between for a family based in Zurich, Switzerland. It was imminent that the piece was to be sold to a private collector; so as not to lose the chance to study the piece, RMS arranged an alternative private purchase. The *Rangitoki fragment* is currently stored in an undisclosed secure institutional location. The information recounted here surrounding it comes from the family who sold it, as passed on through the

²¹ cf. MELKA, T. S. *A Developmental Continuum for the rongorongo Script of Easter Island*.

²² WOODS, C. *The Earliest Mesopotamian Writing*, p. 44.

dealer acting as an intermediary. The family members, according to the dealer, are the direct descendants and close living relatives of the original collector.

According to the family, their ancestor Albrecht (Albert) Van Houten served on a vessel that paid a visit to Easter Island in March 1869, and he fell in love with a beautiful young woman on Rapa Nui named Rangitoki (= *Ranjitoki*). Upon departing, Rangitoki gave Van Houten a small portion of her clothing as a memento – the fragment of bark-cloth with the glyphs (Fig. 1). The dealer, passing on information from the descendants, described the article of clothing from which the fragment was taken as a “loincloth”. Furthermore, according to the family oral tradition as recounted by the dealer, Van Houten had observed that more generally various Rapanui women and girls at that time (1869) used bark-cloth adorned with “symbols” for “loincloths”.

We hypothesize that formerly, in pre-Christian times (that is, prior to the 2 January to 11 October 1864 stay of Joseph-Eugène Eyraud on Easter Island as its first known Christian missionary),²³ *rongorongo* was not only inscribed on wooden tablets but also sometimes painted on bark-cloth. Fischer states, “Around the year 1865 most of the *rongorongo* inscriptions appear to have been destroyed.”²⁴ Wooden tablets were either hidden away, burnt, or recycled for utilitarian purposes, such as for building small boats (“*Large Washington tablet*”),²⁵ or as spools for cordage (“*Échancrée*”, the “notched” tablet).²⁶ Bark-cloth in all of its forms was highly valued on Easter Island,²⁷ and thus we can hypothesize that bark-cloth painted with *rongorongo* inscriptions might well have been reused in early Christian times for practical purposes such as clothing (see further discussion of this possibility in *Ethnographic Clues*). The *Ranjitoki inscription* may have been painted prior to 1864, at a time when *rongorongo* was still a flourishing tradition; subsequently the bark-cloth was reused during the early missionary period of the late 1860s.

At some point, whether shortly after receiving the fragment in 1869 or later, Van Houten folded the bark-cloth piece in places, rolled it up, tied a piece of twine around it, and stored it in a watchcase. He wrote the note (discussed below) that is still inside the watchcase, and reportedly carried the bark-cloth piece with him as a memento in his jacket pocket near his heart as a sailor’s

²³ cf. FISCHER, S. R. *Island at the End of the World*, pp. 92–96.

²⁴ FISCHER, S. R. *Rongorongo*..., p. 14.

²⁵ See FISCHER, S. R. *Rongorongo*..., pp. 472–473; HORLEY, P. *The Large rongorongo Tablet from the Collections of the Smithsonian Institution*, Washington, D.C.

²⁶ See FISCHER, S. R. *Rongorongo*..., pp. 21–22, 419–422; ORLIAC, M., ORLIAC, C. *Trésors de l’île de Pâques*, pp. 257–259.

²⁷ cf. KAEPLER, A. L. *Sculptures of Barkcloth and Wood from Rapa Nui*.

“love token” and keepsake. Along with the bark-cloth piece, there are two small bone beads carved as skulls which Van Houten kept in the watchcase as well. Two additional pieces of information, according to the family, concerning Albrecht Van Houten are: (1) despite his Germanic ethnicity (the current living relatives were referred to as a “Dutch family” by the dealer; however, as RMS knows from his own family history, Germans, German-speaking people, and Dutch often intermarried), Van Houten was serving on a British vessel when he visited Easter Island in 1869. (2) He died at sea sometime in the 1890s, apparently while in the South Pacific.

Thus far, we have not been able to identify a seaman by the name of Albrecht Van Houten nor the vessel on which he served when he visited Easter Island in 1869. It is known that numerous ships made brief stops to the island during the nineteenth century, but today there is no record of many of these visits. Furthermore, many nineteenth-century seamen remain today anonymous to history. Several ships are recorded as having paid calls to Easter Island in 1869 (unfortunately, no dates more specific than the year are recorded for these ships): “*Hermann* under unknown command; *Ionia* under unknown command”²⁸ and a ship of unknown name.²⁹ McCall also records six ship arrivals at Easter Island in the previous year, including the *Ionia* during “February 11 – 13” of 1868 and the *Hermann* on “March 11?” of 1868.³⁰ Furthermore, Grant McCall records the *Ionia* as visiting Easter Island in 1872, 1873, and twice in 1875;³¹ these records may not be complete. The *Ionia* was variously under the command of captains named “McLean” and “Lovegrove” (ibid.), suggesting it was a British ship. Although it is speculation, conceivably Van Houten could have served on the *Ionia*, which made multiple stops at Easter Island, including perhaps in 1869. The volume *Easter Island 1793 to 1861: Observations by Early Visitors before the Slave Raids*³² contains a discussion of Easter Island artifacts in museum collections that appear to demonstrate there were various ships visiting Easter Island, although there is no record of these visits other than the artifacts that were acquired and happened to end up in the collections.³³ It is conceivable that the *Rangitoki* fragment is the sole surviving record of an otherwise unknown visit to Easter Island in 1869.

²⁸ McLAUGHLIN, S. *The Complete Guide to Easter Island*, p. 257.

²⁹ McCALL, G. *Appendix (Known Ship Arrivals to Easter Island from 1722 – 1879)*, p. 141.

³⁰ Ibid. *Appendix (Known Ship Arrivals to Easter Island from 1722 – 1879)*, p. 141.

³¹ Ibid. *Appendix (Known Ship Arrivals to Easter Island from 1722 – 1879)*, p. 142.

³² RICHARDS, R. *Easter Island 1793 to 1861*.

³³ See RICHARDS, R. *Easter Island 1793 to 1861*, Appendix D, “Further Visits Indicated From Dated Artifacts Now in Museums”, pp. 128–130.

We want to point out explicitly that the *Rañitoki fragment* was never (to the best of our knowledge), until now, recognized as a *rongorongo* inscription. Neither the family nor the dealer made any connection between the *Rañitoki* bark-cloth piece and *rongorongo*. The dealer, speaking on behalf of the family, referred to the bark-cloth fragment as being painted with “*traditional Easter Island symbols*”. We have no evidence to suggest that the *Rañitoki fragment* was created as an imitation or forgery of a *rongorongo* inscription for monetary gain or for any other purpose (see further discussion in *Linguistic Clues*).

Physical Description

The *Rañitoki bark-cloth fragment* has a maximum length of about 15.5 cm and a maximum width of about 4.5 cm as measured just to the right of glyph /200/³⁴ (for glyph code numbers, see below, and Figs. 3a, b). Measurements for the major individual glyphs and glyph combinations, from left to right, are as follows (all measurements given in this section are approximate),

- Glyph /50/: 2.15 cm tall / 0.76 cm wide
- Glyph /600/: 2.13 cm tall / 1.76 cm wide
- Glyph combination /46.76/: 1.84 cm tall / 1.63 cm wide overall (width across the two glyphs)
- Glyph juxtaposition /700-76V/: 2.04 cm tall / 1.71 cm wide overall (width across the two glyphs)
- /7?/ (glyphic verification, pending): 2.08 cm tall / 1.50 cm wide
- Glyph /200/: 2.26 cm tall / 2.09 cm wide
- Glyph /87/88?/127?/: 2.29 cm tall (note that this includes a gap or tear in the bark-cloth) / 1.08 cm wide at the base.

The bark-cloth is of an off-white color with at times the appearance, depending on the lighting, of possibly a very faint yellowish-pinkish hue. It is extremely difficult to determine if the bark-cloth was ever dyed – if it was, the

³⁴ The *solidus* symbol “/” is an artificial device intended to isolate glyphs or glyphic sequences, and bears no relationship to phonological criteria; see also MELKA, T. S. “*Harmonic*”-like Structures in the *rongorongo Script*, p. 118. In this paper, numeric glyph references and other conventions related to the RR corpus are in line with BARTHEL, T. S. *Grundlagen zur Entzifferung der Osterinselschrift*, pp. 82–84, pp. 159–164. Researchers are aware that a greater scientific rigor is required for Barthel’s “lossy” classification, cf. POZDNIAKOV, K. *Les Bases du Déchiffrement de l’Écriture de l’Île de Pâques*; FISCHER, S. R. *Rongorongo...*; SPROAT, R. *Approximate String Matches in the Rongorongo Corpus*; GUY, J. B. M. *General Properties of the Rongorongo Writing*; in any event, for want of a better system, we stick to BARTHEL, T. S. *Grundlagen...* for a quick orientation.

color is incredibly faint now or totally washed out. As already noted, traditionally on Rapa Nui bark-cloth was used in both an undyed and dyed state. The glyphs are painted with a red pigment.


The watchcase in which Van Houten stored the *Rangitoki piece* has a maximum external diameter of 4.8 cm. The watchcase is “silver” (how pure the silver is, or if it is primarily just a silver-colored alloy, has not been determined and is not particularly relevant to the study of the bark-cloth fragment). The watchcase appears to be in keeping with a middle- to late-nineteenth-century European watchcase. It has a glass front. The bark-cloth piece was slightly folded, rolled, and bound with a plant-fiber twine when in the possession of the descendants of Albrecht Van Houten. The *Rangitoki fragment* had been stored in the watchcase as a miniature “scroll” oriented vertically (that is, parallel to the stem of the watchcase) with a bone bead on either side of the rolled bark-cloth. The bark-cloth fragment was subsequently removed from the watchcase by the descendants, the twine removed, and the piece unrolled.

Attached to the inside back of the watchcase is a handwritten note on paper in German, the contents of which are described and discussed below (see Section *Linguistic Clues*). According to his descendants, this note was written by Albrecht Van Houten himself.

The two small bone beads that accompanied the *Rangitoki bark-cloth piece* are crudely carved to resemble human skulls. They are each 1.3 to 1.4 cm tall. The impression that the dealer seems to have had, based on his interactions with the descendants, was that according to the oral family tradition, the bone beads were collected from Easter Island at the same time as the *Rangitoki bark-cloth fragment*, but at this point we do not believe we can be certain about this. Furthermore, even if the beads were collected from Easter Island in 1869, they could have been either manufactured on the island or they could have been trade items that had been previously brought to the island. Either way, we feel that we should comment on the skull beads briefly and the potential significance of such items to the Rapanui.

On Easter Island, human skulls were occasionally preserved and modified with engravings,³⁵ including with *fish* representations.³⁶ Fishes and humans

³⁵ See e.g. THOMSON, W. J. *Te Pito te Henua, or Easter Island*, p. 538, Plate L; LEHMANN, W. *Essai d'une Monographie Bibliographique sur l'Île de Pâques*, p. 151, Appendix; ROUTLEDGE, K. (Mrs. SCORESBY ROUTLEDGE). *The Mystery of Easter Island*, p. 240, Fig. 96; CAMPBELL, R. *La Cultura de la Isla de Pascua – Mito y Realidad* [The Culture of Easter Island – Myth and Reality], p. 105; HEYERDAHL, T. *The Art of Easter Island*, Plate 183c; RAMÍREZ ALIAGA, J. M., HUBER, C. *Easter Island – Rapa Nui, a Land of Rocky Dreams*, p. 112, and MORDO, C. *Easter Island*, p. 49.

were sometimes equated, particularly in terms of human sacrifices.³⁷ We also suspect that in contexts other than human sacrifices a fish may have been a stand-in for or representation of a human as well. One of us (RMS) has seen in private collections small (about 3 to 4 cm long) carved bone “fish” reportedly collected from Easter Island during the nineteenth- to early-twentieth centuries that may have represented humans, and we wonder too if the RR “fish”-glyph /700/  may have had such a meaning in some cases.³⁸ It may be speculated that the small bone “skull beads” (even if imported to Rapa Nui in the nineteenth century) and small bone fish carvings may have had similar meanings for the Rapanui.

Concerning carvings of skulls indigenous to Easter Island, they appear to be relatively rare. Michel Orliac and Catherine Orliac discuss a wooden carving of a skull in their *Treasures of Easter Island*, as well as “The skull in Rapanui religion”.³⁹ Orliac and Orliac suggest that the human skull could represent or reference the god Make-make, and they also associate human skulls with fertility (the fertility of chickens, in particular). However, such symbolism and associations do not appear to readily pertain to the bone skull beads associated with the *Rapitoki bark-cloth fragment*.

³⁶ See OWSLEY, D. W., SIMON, V. E., BARCA, K. G. et al. *Demographic Analysis of Modified Crania from Rapa Nui*, p. 264, Figure 14.6.

³⁷ See HANDY, E. S. C. *Polynesian Religion*, p. 193; WALLIN, P., MARTINSSON-WALLIN, H. *The “Fish” for the Gods*, pp. 7–9; EDWARDS, E., EDWARDS, A. *When the Universe was an Island*, pp. 275–276.

³⁸ See BUTINOV, N. A., KNOROZOV, Y. V.’s *Preliminary Report on the Study of the Written Language of Easter Island*, p. 13, and MELKA, T. S.’s “Harmonic”-like Structures in the rongorongo Script, p. 121, discussion on its physical shape and the encoding of a concrete [“aquatic creature”] vs. an abstract [“victim, captive, murdered person”] entity); see also ENGLERT, S. *La Tierra de Hotu Matu’a* [The Land of Hotu Matu’a], p. 455, for a linguistic basis, “ika = pescado... La víctima, el herido, el muerto, el enemigo a quien hay que matar, la persona que está destinada a la muerte por la maldición de un timo (conjurador). Cadáver de un hombre caído en la guerra. [ika = dead fish... The victim, the wounded, the dead, the enemy who has to be slain, the person destined to die because of the curse of a timo (“exorcist priest”). A man’s corpse killed in the war]”.

³⁹ ORLIAC, M., ORLIAC, C. *Trésors de l’île de Pâques*, pp. 191–193, pp. 187–188.

Linguistic, Ethnographic, and Comparative Structural Evidence

Linguistic Clues

The *rongorongo* inscription on the bark-cloth, as aforesaid, is accompanied by a short note found inside the watchcase, written in ink presumably by Albrecht Van Houten (Fig. 2). The transcription of the note yields a mini-text written in German, “*Ein Stück von dem Rock meiner geliebten wunderschöner Rangitoki. In mich als geschaut überulicht – März 1869 –*”. A plausible translation is “A piece from the skirt of my beloved precious Rangitoki. It looks into me as the Holy Spirit – March 1869 –”. Regarding “*überulicht*,” we are inclined to think that perhaps Mr. Van Houten did not spell correctly the word he intended to write, by adding the epenthetic “*u*”; “*überlicht*,” meaning “...light from a superior source”, is thus translated as the radiance that comes with the “Holy Spirit”. In view of the nineteenth-century setting, the religious connotations attached to this romantic memento add a gleam of credibility.

Another alternative rendering of the note, as suggested by an independent source, is: “*Ein Stück von dem Rock meiner geliebten wunderschöner Rangitoki. An mich als Geschenk erreicht*” [A piece from the skirt of my beloved precious Rangitoki. Given to me as a present]. Considering the paleographic analysis of the term “*erreicht*”: the presence of an umlaut (= double upper dot) not connecting with the initial <e>; the second character is definitely a and not a <rr>, we hold the first hypothesis to be closer to the mark.

The second line of inquiry does not point in an altogether different direction; it concerns the date “*March, 1869*”. Unlike many free-wheeling speculations in the RR studies, the recorded timeline tends to confirm with less presumption the objectivity of events. As reported previously (that is, before the discovery of the *Rangitoki bark-cloth fragment*), the first known *rongorongo* object to fall into the hands of a European, specifically, of Monseigneur Florentin Étienne (Tepano) Jaussen, Apostolic Vicar of Tahiti and Bishop of Axière, was tablet “*Échancrée*”,⁴⁰ which took place at either the end of June 1869, or in July 1869.⁴¹ The evidence suggests that the *Rangitoki bark-cloth fragment* was

⁴⁰ cf. VAN HOOREBEECK, A. *La Vérité sur l'île de Pâques*, p. 247; FISCHER, S. R. *Rongorongo...*, pp. 21–22, p. 422; ORLIAC, M., ORLIAC, C. *Trésors de l'île de Pâques*, Figures 195, 196, 197.

⁴¹ FISCHER, S. R. *Rongorongo...*, pp. 490–494, suggests that two *rei miro* with *rongorongo* inscriptions, both now in the collections of the British Museum, “London *rei miro* 6847” and “London *rei miro* 9295”, may have been originally collected in the early nineteenth century, or minimally prior to the labor raids of 1862 – 1863, but as the

acquired in March 1869, prior to when “*Échancrée*” or any of the other wooden RR tablets were acquired by Fathers Gaspard Theodor Zumbohm and Hippolyte Roussel, and, soon after, became part of the collection of artifacts of Mgr. Jaussen.⁴² Furthermore, the *Ranjitoki fragment* was delivered as a gift or token of a romantic relationship, rather than being sold – which seems, in our opinion, to substantiate that it is authentic, at least in the sense that it was not created fraudulently for monetary gain.⁴³

The depth of observations is expanded by the occurrence of the Rapanui name “*Ranjitoki*”, the former love interest of Van Houten. As such, it constitutes the third line of inquiry, the linguistic one. First, we need to resolve whether such a name even makes sense on an etymological basis, and next, establish a possible onomastic context. The appellation consists of two parts “*Ranji*” and “*toki*”. At this moment, there are two points that need to be clarified: (1) given the extended homonymy in Polynesian-type languages,⁴⁴ the terms have often more than an absolute fixed translation, and (2), however reputable the consulted sources, the veracity of the accounts / testimonies of post-missionary informants cannot always be taken at face value.⁴⁵

In what follows, we avail ourselves of John Macmillan Brown, Sebastian Englert, and Jordi Fuentes for our analysis.⁴⁶

In Macmillan Brown, “*rangi*” (= *ranji*) is related to – *seat of affection* (obsolete) in “*Maori*” / and, as a verb, *to love*, in “*Easter Island Dialect*”.

In Englert, “*ranji*” translates into – *sky, heaven, firmament / cloud* (plus, names for a variety of clouds) / as a verb, [to] *call*, [to] *shout*, [to] *proffer an exclamation*.

earliest definitive documentation for either piece dates to the 1870s, we cannot say for certain when they first came into European hands.

⁴² “*Échancrée*” was received, but not recognized as an example of *rongorongo*, by Zumbohm in May 1869; cf. FISCHER, S. R. *Rongorongo...*, p. 21; ORLIAC, M., ORLIAC, C. *Trésors de l’île de Pâques*.

⁴³ See, in a similar context, ROUTLEDGE, K. (Mrs. SCORESBY ROUTLEDGE). *The Mystery of Easter Island*, p. 271; RAMÍREZ ALIAGA, J. M. *La Colección Isla de Pascua del Museo de Historia Natural de Valparaíso* [The Easter Island Collection of the Museum of Natural History of Valparaíso], pp. 7, 9.

⁴⁴ cf. FUENTES, J. *Dictionary & Grammar of the Easter Island Language. Pascuense–English, English–Pascuense*; KRUPA, V. *Phonotactics, Homonymy and Vocabulary Expansion in Marquesan*.


⁴⁵ cf. ROUTLEDGE, K. (Mrs. SCORESBY ROUTLEDGE). *The Mystery of Easter Island*, p. 213.

⁴⁶ BROWN, J. M. *The Riddle of the Pacific*, p. 287; ENGLERT, S. *La Tierra de Hotu Matu’a* [The Land of Hotu Matu’a], p. 490; FUENTES, J. *Dictionary & Grammar of the Easter Island Language. Pascuense–English, English–Pascuense*, pp. 832–833.

In Fuentes, “*rāŋi*” is described by – n. cloud / firmament / sky // –*aumóa*: clear sky // –*hóe kái*: cirrus // –*motího*: cloudy sky // –*púŋa~púŋa*: cumulus nimbus // –*kére~kére*: black nimbus / –*kíri~kíri míro*: cirrus formed by little black and white clouds // –*úri~úri*: nimbus // –*bíri*: stratus // as it can be seen there is no distinction between **sky** and **cloud**; it is the sky which varies its appearance // New Zealand *lāŋi*. Tahiti Is. *rái*. Maŋaia Is. *ápa-rāŋi*. Gilbert Is. *ába*. Ponape Is. *chápa*. Marquesas Is. *áni, áki*.

Furthermore, in Englert, “*toki*” is given in Spanish as – *formón de piedra* (with *formón*, explained otherwise by us as, *especie de escoplo: herramienta a modo de cincel que usan los carpinteros*⁴⁷ [type of chisel / blade: a tool in the guise of a chisel used by carpenters]). Englert’s entry is literally translated as *stone chisel*.

In Fuentes, “*toki*” is given by the following: n. Very hard kind of stone used in making tools / By extension of use, chisel // Maŋaia Is. *tóki*: axe. Rarotóŋa Is. *ta-rápa, tapáe*: axe. Tahitian: *tói*: axe. Marquesas Is. *tói, tóki*: axe.⁴⁸

“*Toki*” is identified, alternatively, as “*Steinbeil*” [stone axe, adze] in Barthel.⁴⁹ These artifacts, often made of basalt, or occasionally of obsidian, were employed in the carving of tuff statues, or of other hard matter in pre-missionary Rapanui. Pursuing his logographic-based method, Barthel relates *toki* to sign /63/ , and by a rather strange coincidence, the bigram /63:9/ (on Bv10)⁵⁰ is offered as the equivalent of “*toki rangi*” [sacred, heavenly adze]. In Hicks, Hamilton et al., readers are directed to stone *toki*⁵¹ – the carving tools used by ancient Rapanui people.⁵²

Another possibility to consider is that Van Houten misheard the term “*reŋa*” [renga] for “*rāŋi*” [rangi]. In his vocabulary, Englert links the term “*reŋa*” with

⁴⁷ ENGLERT, S. *La Tierra de Hotu Matu‘a* [The Land of Hotu Matu‘a], p. 504.

⁴⁸ FUENTES, J. *Dictionary & Grammar of the Easter Island Language. Pascuense–English, English–Pascuense*, p. 866.

⁴⁹ BARTHEL, T. S. *Grundlagen...* pp. 295–296.

⁵⁰ On the “correspondence” *toki* = sign /63/, see BARTHEL, T. S. *Grundlagen...*, p. 226, footnote 5; regarding the occurrence of bigram /63:9/, see BARTHEL, T. S. *Grundlagen...*, p. 105.

⁵¹ HICKS, D., HAMILTON, S. et al. *Easter Island and Pitcairn Island*, p. 568 [Note that their Figure 29.4 is mislabeled in the caption; the specimen illustrated is from Pitcairn Island and described on p. 570].

⁵² For more data on stone implements, including the discussed *toki*, see PHILIPPI, R. *La Isla de Pascua i sus Habitantes. Jeografía* [Easter Island and its Inhabitants. Geography], p. 26; THOMSON, W. J. *Te Pito te Henua, or Easter Island*, Plate LVII; MÉTRAUX, A. *Ethnology of Easter Island*, pp. 272–276.

the modifiers *pretty*, *beautiful*.⁵³ Used as a noun it corresponds to “cute little girl”, “woman”, “young lady”. Be that as it may, both forms make some sense in their final rendering, “*Ranjitoki*” as “Heavenly / Lovely (or, Sacred) Obsidian / Adze”, or “*Rejatoiki*” as “Beautiful / Precious Adze”.

In consulting further linguistic sources, we detect the components “*toki*” and “*raji*” emerging in a list of ancient Rapanui rulers,⁵⁴ viz., “*Sixth [King] Aturangi*”; “*Seventeenth [King] Atua Ure Rangi*”; “*Twenty-sixth [King] Kotepu Ite Toki*”; “*Thirty-seventh [King] Toati Rangi Hahe*”. Alfred Métraux, in turn, mentions quite a few warriors, called *Toki Heu*, *Toki Punipuni*, and *Toki Rengorengo*,⁵⁵ where the “head”-element is consistently “*toki*”. In like manner, in R. Campbell’s lines of a purported early song, titled “He Tangi O Te Ngaruoha” [The Lament of Friends], the masculine name *Ko-rapa-rapa-rangi* [El de los cielos brillantes – The Shining Sky] is spotted.⁵⁶ “*Rangi*”, as part of names, appears in another song collected by Campbell, bearing the title “Tae-Reka” [Des-gracia – Fallen out of grace]: *Ko-rangi-hetu’u* [El cielo estrellado – Starry Sky].⁵⁷ The component “*Rangi*” is similarly attributed in post-missionary times to one of the “birdmen” for the year 1877, listed as “*Rangitopa*”. The list is reportedly a collection of the participants in the *tangata manu* competitions of 1867 – 1879.⁵⁸ This may be an indirect piece of evidence on the continuity of the onomastic tradition in Easter Island’s population between the pre- and post-missionary periods. For all we know, it is plausible that other pre-missionary names (members of the social elite or commoners) would have included either the constituent “*rangi*” or “*toki*” in their composition.

In summary, evidently the young lady from Easter Island had a name in accord with the legitimate traditions attested to in the hitherto examined references. Furthermore, even if the woman Albrecht Van Houten fell in love with in 1869 was only in her teens, she would still have been born and named during pre-missionary (pre-1864) times.

⁵³ ENGLERT, S. *La Tierra de Hotu Matu’a* [The Land of Hotu Matu’a], p. 492.

⁵⁴ THOMSON, W. J. *Te Pito te Henua, or Easter Island*, p. 534.

⁵⁵ MÉTRAUX, A. *Ethnology of Easter Island*, p. 83.

⁵⁶ CAMPBELL, R. *La Herencia Musical de Rapanui: Etnomusicología de la Isla de Pascua* [The Musical Legacy of Rapanui: Ethnomusicology of Easter Island], p. 256.

⁵⁷ Ibid. *La Herencia Musical de Rapanui: Etnomusicología de la Isla de Pascua* [The Musical Legacy of Rapanui: Ethnomusicology of Easter Island], p. 406.

⁵⁸ EDWARDS, E., EDWARDS, A. *When the Universe was an Island*, Table 23, pp. 414–415; cf. ROUTLEDGE, K. (Mrs. SCORESBY ROUTLEDGE). *The Mystery of Easter Island*, p. 266.

Ethnographic Clues

Given the soft perishable material on which the *Rangitoki* RR sequence appears, its preservation to this day is a fortunate happenstance. The piece is liable to shed further light on cultural aspects of pre-missionary Easter Island – prevalently on the *rongorongo* script and the production and use of bark-cloth.

The fact that the RR sequence is found to be painted on a fragmentary shred of bark-cloth suggests at the outset that the script was used in a “flexible” way according to the needs and inspiration of the author. As mentioned earlier, the employment of bark-cloth found its express manifestation in clothes and head-gears. In like manner, a number of sources convey that bark-cloth had found partial use in ancient times in the manufacture of the relatively large *paina* figures. *Paina* stood for stuffed effigies, resembling a mannequin of rushes,⁵⁹ which were given as a token of esteem to a father, or possibly a brother, (whether alive or dead) during a ritual celebration.⁶⁰ Contrary to the lost large *paina* figures, a number of small stuffed figurines made chiefly of *tapa* (bark-cloth) survive. These smaller figures are referred to by Kaeppler as “*barkcloth-covered sculptures*”,⁶¹ with the count of the actual known surviving sculptures being five, plus two bark-cloth headpieces.⁶² In view of *the workmanship and highly developed technique of the few specimens preserved*, Heyerdahl was of the opinion that such features denoted a *professional tradition*.⁶³ Thomson,⁶⁴ Métraux,⁶⁵ and especially Brown,⁶⁶ offer in turn a profuse commentary on the uses and making of bark-cloth, without forgetting to emphasize that the material was in poor supply. While admitted that John Macmillan Brown is not our best hope to understand the extension and the relevance of *mahute* in pre-missionary times, some of his lines give a pause for thought, “*In Easter Island it [i.e. bark-cloth, our note] was more commonly worn undyed and white as on the*

⁵⁹ See FEDOROVA, I. *Rapanui Wicker Figures and their Names*, p. 91, in this respect, “*Large wicker figures (3 meters and more in height) were made from twigs, reeds and tapa.*”

⁶⁰ See PHILIPPI, R. A. *La Isla de Pascua i sus Habitantes*. *Jeografía* [Easter Island and its Inhabitants. Geography], p. 45; HEYERDAHL, T. *The Art of Easter Island*, pp. 176–177; FEDOROVA, I. *Rapanui Wicker Figures and their Names*, who recount earlier reports made by De Langle – of the La Pérouse expedition in 1786 –, Eyraud, Routledge, and Métraux.

⁶¹ KAEPLER, A. L. *Sculptures of Barkcloth and Wood from Rapa Nui*, p. 17.

⁶² *Ibid.* *Sculptures of Barkcloth and Wood from Rapa Nui*, p. 17; and RMS has seen in private collections the apparent fragments of several other such sculptures.

⁶³ HEYERDAHL, T. *The Art of Easter Island*.

⁶⁴ THOMSON, W. J. *Te Pito te Henua, or Easter Island*, pp. 467–468.

⁶⁵ MÉTRAUX, A. *Ethnology of Easter Island*, pp. 157–158.

⁶⁶ BROWN, J. M. *The Riddle of the Pacific*, pp. 164–166.

paina figure and in the masked dances. But the gallants and the superior people generally had it dyed yellow with the colouring from the turmeric root. [Georg] Forster [a naturalist, part of the 1773 – 1774 voyage of James Cook to the South Seas, our note], in describing the dress of the crowd he met, adds: ‘Most of these cloaks were painted yellow’, or as he puts it before, ‘orange colour’.”⁶⁷ Recall that it is possible that the original color of the bark-cloth, although now extremely faded, on which the RR sequence of the *Ranjitoki* fragment is painted fit in-between the range of yellow and orange, resulting eventually in a very faint yellowish-pinkish hue observable on the piece today under certain lighting conditions. Possibly it was never dyed, in which case it would fit the description of “more commonly worn undyed and white”. Either way, the bark-cloth of the *Ranjitoki* fragment is compatible with bark-cloth as traditionally used on Rapa Nui.

Since the bark-cloth is composed of organic matter, an intuitive step to be taken might be testing the assumption of its production date. In this sense, submitting it to a C-14 test is, technically, a possible measure. There are several caveats to consider, at this juncture, about such an age estimation: the date of *the raw material* and the date when *the inscription was painted* may not correspond, and more importantly, given the imprecision of radiocarbon dating, a radiocarbon date would probably not pinpoint or adequately settle the issue of whether the age of the bark-cloth was pre- or post-missionary. Obviously, we cannot expect C-14 dating to solve the problems of the *Ranjitoki* fragment. As radiocarbon dating is an inherently destructive process, requiring a physical sample of the artifact being submitted for dating, at this time RMS is unwilling to recommend such an extreme step (which would cause damage to the *Ranjitoki* fragment) given that the expected results would be ambiguous at best. Yet, radiocarbon dating tests have been made with other organic materials from ancient Easter Island, e.g. *wood*,⁶⁸ and *teeth* from burials excavated during the 1981 National Geographic Easter Island Anthropological Expedition,⁶⁹ with results generating new vistas and continuing arguments.

Refinement of research could include the analysis of the pigment used in order to determine if it is an organic substance indigenous to the island, or if it came from elsewhere; although, even if the pigment came from elsewhere, the

⁶⁷ Ibid. *The Riddle of the Pacific*, p. 165.

⁶⁸ cf. FORMENT, F., HUYGE, D., VALLADAS, H. *AMS ¹⁴C Age Determinations of Rapanui (Easter Island) Wood Sculpture*, or ORLIAC, C. *The Rongorongo Tablets from Easter Island: Botanical Identification and ¹⁴C Dating (Research Report)*.

⁶⁹ COMMENDADOR, A. S., DUDGEON, J. V. et al. *A Stable Isotope ($\delta^{13}\text{C}$ and $\delta^{15}\text{N}$) Perspective on Human Diet on Rapa Nui (Easter Island) ca. AD 1400 – 1900*, p. 175; OWSLEY, D. W., BARCA, K. G. et al. *Evidence for Injuries and Violent Death*, p. 225.

Ranjitoki fragment could still be an authentic pre-missionary piece from Easter Island as the Rapanui were trading and receiving goods from the outside since the time of the European discovery of the island in 1722. The tradition of decoration and artisanal coloring among the inhabitants of Easter Island is mentioned, e.g. in Thomson's report, "*The colors with which the decorations are made are procured from roots, leaves, and berries of indigenous plants and are prepared with considerable skill. Several kinds of earth are used for the dark colors, the pigment being ground down and boiled in the juice of the sugar-cane*"⁷⁰.

At this time, we believe, the question of the *Ranjitoki* fragment's identity and genuineness can be best settled by scholarly analysis of the remaining inscription itself (see Section *Structural Clues*).

Considering the current lines of inquiry, it seems that there are two major possibilities regarding the *Ranjitoki* fragment: (a) either the inscription was originally painted on a piece of bark-cloth that had nothing to do with the "loincloth / skirt" of young *Ranjitoki*, and then reused ad hoc (once Christianity came to the island) for utilitarian purposes, namely, clothing; or, (b) an indigenous person, familiarized somehow with what was left of *rongorongo* in the aftermath of the labor raids of 1862 – 1863 and the coming of Christianity in 1864, decorated part of the clothing piece in an act of remembrance of the vanishing scribal art, or in an act of aesthetic devotion. Although we know next to nothing about the person in question and his / her (?) motivation(s), the assumptions fall within plausible boundaries. Dresses, skirts, coats, or cloaks, it must be remembered, even in the twenty-first century, feature not infrequently patterns with sundry geometric, zoomorphic, phytomorphic, anthropomorphic, and script-like motifs.

One has to wonder also if this *tapa* piece was the only one ever deliberately painted⁷¹ with *rongorongo* signs. At present, we can't break away from the realm of pure speculation. But, as S. R. Fischer comments on unknown pre-missionary artifacts that doubtlessly may be in private hands,⁷² so we are inclined to believe that there should have been more than one young female adult on nineteenth-century Easter Island, proudly and aesthetically displaying on their attire part of their cultural heritage.


⁷⁰ THOMSON, W. J. *Te Pito te Henua, or Easter Island*, p. 468; ENGLERT, S. *La Tierra de Hotu Matu'a* [The Land of Hotu Matu'a], pp. 227–228, has a vivid description of the coloring techniques and materials concerning the clothes made of *mahute*.


⁷¹ The sequential order on the *Ranjitoki* fragment implies a semantic structure that was not construed at the spur of the moment.


⁷² FISCHER, S. R. *Rongorongo...*, p. 510.



Structural Clues

As afore-mentioned the fragment has an overall length of about 15.5 centimeters. The painted sequence consists of ten glyphs (with compound /46.76/ deconstructed), and it runs in a non-boustrophedon fashion from left to right, without a fixed baseline alignment over a planar surface. The current deixis of orientation (left-to-right) complies with two practical criteria in the greater part of the RR corpus: the structural similarity of many shared passages, plus the general rightward direction of the “heads” in animal- and human-

shaped glyphs,⁷³ with “*makohe / taha*” glyph /600/⁷⁴ (= ) embodying that criterion on the *Ranjitoki fragment*. Several exceptions attributable to personal

interpretations are not absent, however, e.g.  on Sb7, coded with symbol “?” in Barthel,⁷⁵ and apparently a *hapax legomenon* – a glyph occurring only once in a text. The said glyph is in effect a rare variant of the commonly observed

glyph /670/  in the corpus. Other attestations with a sinistral-“head” quality

of the /600/-class include # /653y/  ⁷⁶ (Br8), # /657/  with a /76/-suffix (Gv8), otherwise, not adversely affecting their status as idiosyncratic forms or their intended meaning.

As with the most part of the RR inscriptions there is no indication of “word” boundaries on the *Ranjitoki fragment*; besides, given the brevity of the sequence any claim in this respect is held to be uncertain. Each glyph is about 2 cm in stature, i.e. 18–23 mm, and the most reasonable explanation for their size is the medium in which they occur. Most assuredly, you need a fine-tipped brush and a smooth, steady surface to render faithfully on bark-cloth the shape and details of the classical RR glyphs. In addition, the hand-eye co-ordination in conformity with the angle of writing / painting implement and body position (tense vs. relaxed) are to be accounted for. Yet, the majority of the individual glyphs are recognizable and generally well-formed (Figs. 3a, b). Comparison with the glyphs carved on wooden tablets shows the latter ones to be, as a rule, smaller. Barthel offers specific details for a number of them,⁷⁷

⁷³ cf. MÉTRAUX, A. *Ethnology of Easter Island*, p. 394; FISCHER, S. R. *Rongorongo...*, pp. 349–350.

⁷⁴ FISCHER, S. R. *Rongorongo...*, p. 489.

⁷⁵ BARTHEL, T. S. *Grundlagen...*

⁷⁶ The alphanumeric code “y” in BARTHEL, T. S. *Grundlagen*, pp. 164–165, denotes a mirror-image.

⁷⁷ Ibid. *Grundlagen...* p. 159, fn. 1, 2.

“Größenordnungen von 15 mm¹⁾ oder 10-12 mm zurückführen²⁾. Durch die Zeilenhöhe wird das Format der Schriftzeichen und, deren Anzahl entsprechend, auch die Textlänge fest-gelegt [Order of magnitude (is) from 15 mm to 10–12 mm in a returning direction. The format of the written signs is conditioned by height of the row (or the adzed channel, our note), in keeping with their numbers, establishing likewise the length of text].

Footnote 1) *Exemplare A, B, C, E, G und S; in der Zeichengröße auch I* [Specimens A, B, C, E, G and S; in the same glyphic size, consider also I].

Footnote 2) *Exemplare H und N: 10 mm, Q und R: 11 mm, P: 12 mm* [Specimens H and N: 10 mm, Q and R: 11 mm, P: 12 mm]”.

In a similar vein, Englert talks about tablets “...covered with neat rows of tiny, beautiful, incised symbols, each generally from 3/8 to 5/8 an inch long”.⁷⁸ Converted to the standard metric system, the glyph size is 9.5 mm to 15.9 mm.

By contrast, there are examples with larger glyphs on the tablets / fragments, such as side *b* of “*Échancrée*” (Fig. 4), or the glyphs occurring on the “*Stéphen-Chauvet* fragment”. In such cases, scholars normally associate them with a crude style of hand-carving, with the inelegant rendition on side *b* of “*Échancrée*” made by a less experienced scribe.⁷⁹ As for the “*Stéphen-Chauvet* fragment”, aka text *Fa* (a 10.8 cm piece of wood),⁸⁰ although listed in the canonical corpus of RR,⁸¹ doubts still persist as to whether it might be an early post-missionary imitative product.

As for the internal analysis – described below – we begin with the hypothesis that the *Rangitoki* fragment is a randomly preserved inscription from either very late pre-missionary times (circa early 1860s) or very early post-missionary times (1864 to March 1869, when the fragment came into European hands). It is logical to seek, in this sense, for parallels in other genuine pre-missionary artifacts, so as to prove its accession status to the present corpus. S. R. Fischer endeavored to prove the legitimacy of a number of objects following this procedure.⁸² Yet, caution advises us to state that it would be exceptionally good luck to retrace the full sequence (at least) in one of the other extant artifacts. We have failed thus far in retrieving the full *Rangitoki* fragment

⁷⁸ ENGLERT, S. *Island at the Center of the World: New Light on Easter Island*, p. 74.

⁷⁹ BARTHEL, T. S. *Grundlagen...*, p. 20; FISCHER, S. R. *Rongorongo...*, p. 422.

⁸⁰ cf. ORLIAC, M., ORLIAC, C. *Trésors de l'île de Pâques*, p. 261.


⁸¹ cf. BARTHEL, T. S. *Grundlagen...*, p. 21, “Trotz des primitiven Duktus ist nicht an eine Fälschung zu denken [Despite its rough ductus we should not think of it as a falsification]”. *Duktus* is understood here as “...the sequence and direction of a letter’s [= glyph’s, our note] different traces”, in line with MALLON, J. *Paléographie Romaine*; see also FISCHER, S. R. *Rongorongo...*, pp. 436–439.

⁸² See FISCHER, S. R. *Rongorongo...*




sequence in the previously known corpus. It has been possible, however, to identify bigrams, or even a trigram, bearing resemblances with parallels or quasi-parallels elsewhere – “partial sequences,” in another choice of words. An extensive list of likely matches (adjusted or not parallels) are not offered due to space considerations.

In the same way, with *rongorongo* non-deciphered, and with scholars pursuing the prize and prestige that comes with translation, the script surely has the ability to instigate controversy on an international as well as interpersonal level. We reiterate that we do not intend to “translate” the piece under analysis and claim any such status; rather, while focusing on various lines of pragmatic investigation, concerned readers are invited to speculate for themselves regarding the “translation” of the *rongorongo* if they so desire.

The first figure is that of sign /50/ in Barthel’s scheme.⁸³ Alongside /51/ (an allomorphic form), /50/ has been related metaphorically to be a *komari* (vulva), representing the principle of fertility and regeneration (e.g. “*henua*”, land, ground, uterus, placenta). The next figure, most probably corresponding to glyph /95h/ suspended between # /50/ and # /600/, seems to be a reduced or a




simplified form of its full-bodied first variant .


This is no surprise, since reductions are quite common across the corpus, usually responding to scribal whims, errors,⁸⁴ lack of space (at one with individual perceptions), or the interaction of the incising tool (typically, obsidian flake / a shark’s tooth; and perhaps, a bird’s bone) and wood fiber (in our case, a thin-tipped “brush” and the not very even surface of bark-cloth). On the other side, it could be, at least, conjectured that the full form was painted back in the old times and slightly washed-out as time elapsed (although we do not see any direct evidence to support this hypothesis).

It may also be proposed that we are dealing, at this point, with a “cut off” glyph /90/ , or /91/ . Morphologically, their upper part may stand up to visual scrutiny, and there are various “one-eared” glyphs that appear as such in the corpus. Nonetheless, the evidence of glyph /95h/ is more likely to be sustained given its frequent occurrence and combination with other glyphs, as a full or a reduced form; see an instance of /95/ with a “decorative feather” glyph /3/ on Qr7, accomplished via suffixation in “stick”-like glyph /1/ . Other similar attestations occur in T. S. Melka’s personal research notes.

⁸³ BARTHEL, T. S. *Grundlagen...*

⁸⁴ Technically, even qualified *rongorongo* scribes would not have been immune to minor mistakes, especially during hours-long carving sessions or uncomfortable conditions, cf. MELKA, T. S. *Palindrome-like Structures in the rongorongo Script*, p. 164.

Conversely, glyphs /90/ and /91/ are generally fully shaped; see e.g. several instances on *Ab1*, as part of the bi-gram /91-600/ ; on *Sb8*, glyph /91/ occurs in close proximity to glyph /V50/, as part of a four-based harmonic-like string, /91-V50-91-70-91.76-70-91:70/ , with the anthropomorphic figure with “upward arms” /316/  functioning as an “introductory” glyph.⁸⁵

While not fully certain, further bits of evidence are suggestive: on tablet “*Aruku Kurenga*,” specifically on *Br1*, the trigram /595s-600-50f/  is found. This mini-string is, in fact, part of a “poetic”-like composition occurring on *Br1*.⁸⁶ Glyph /595s/ functions as an “introductory” glyph along the mini-verses; yet, our direct target is the bigram /600-50/. Re-checking Fig. 3, we realize that /50-95-600/ bears a slight similarity to /600-50/. Over several years, international researchers have shown that RR script has scores of mini-strings of a similar nature, strewn with reversions / transpositions, contractions, elisions or additions of occasional glyphs – single or compounded (cf. Fig. 6).⁸⁷ Such scribal properties, in contrast to a standardized English text of the twenty-first century, are clearly in evidence. Yet, the ancient scribes were not attempting to destroy or conceal the intended information by doing so; neither were they given to recreational stylistics on their sacred or secular texts. However compressed or non-uniform,⁸⁸ the information was intelligible to the RR men,


⁸⁵ MELKA, T. S. “Harmonic”-like Structures in the rongorongo Script, pp. 120–121; *ibid.* Figure 2, # 1.

⁸⁶ cf. MÉTRAUX, A. *Ethnology of Easter Island*, p. 401, Fig. 57; BARTHEL, T. S. *Grundlagen...*, p. 229, fn. 2; KRUPA, V. ‘Moon’ in the Writing of Easter Island, p. 6; GUY, J. B. M. *Fused Glyphs in the Easter Island Script*, p. 446, Fig. 2.

⁸⁷ See also MELKA, T. S. *A Developmental Continuum for the rongorongo Script of Easter Island*.

⁸⁸ Research has shown that the information recorded in RR texts is characterized by a continuous trade off of morpho-syntactic *redundancy* and *reduction* (compression) features, to borrow the terms from JAEGER, T. F. *Redundancy and Reduction: Speakers Manage Syntactic Information Density*, p. 24. Despite not being uniformly distributed across the sequences, the information was not severely damaged or lost due to the retentive memory of the experienced scribes. The result was very often a telegraphed style of writing, where certain glyphs or mini-sequences were removed at their discretion, cf. BUTINOV, N. A., KNOROZOV, Y. V. *Preliminary Report on the Study of the Written Language of Easter Island*; BARTHEL, T. S., *Grundlagen...*; *Pre-contact Writing in Oceania*; FISCHER, S. R. *Rongorongo...*, p. 617, note 56; MELKA, T. S. *Palindrome-like Structures in the rongorongo Script*. Processes that deal with word compression, such as acronyms, alphabetic abbreviations, clippings, and blends,

with the aforesaid properties pointing to high versatility and personal competition for a better way of expression and retrieval.

The most compelling evidence comes, nonetheless, from another string found on tablet “*Aruku Kurenga*”, Br10, repeated creatively on three other tablets, Hr9 • Pr8 • Qr9 (see Fig. 6). Br10 displays sequentially the code-numbers /380.50-600-430.76.../, etc. What really matters now is the segment /50-600-*n*.76/ (with “*n*” standing for any variable glyph). Glyph /380/, i.e. (/V375y/ on Pr8; /384?/ on Qr9, are scribal variants) – the “*sitting man*” with a “*gaping mouth*” – appears to be compatible with a non-phonetic textual “delimiter”. It suggested to the old chanter a new piece of text was about to begin, triggering likewise his long-term memory and the concomitant knowledge on this or that specific chant. Following the succession, we notice glyph /50/, then, glyph /600/ (the “*frigate bird*”), and most astoundingly, a “*gaping man*” or “*bird*” attached to an upward “hook”-like appendage, coded under number /76/. S. R. Fischer (in his 1997 monograph, and elsewhere) believes it to be a “phallus”. The problem is that (to put it simply) many researchers have found many holes in his theory that deals with procreation and cosmogony chants.⁸⁹ Returning to the *Ranjitoki fragment* (Fig. 3a), we spot the bigram (or, di-glyph) /46.76/, which happens to be identified on another RR artifact, the “*Santiago Staff*” (Ia), viz. /46.76-V89a-2/, .⁹⁰ The closing


vertical line “|” stands for some type of “text divisor,” responding to organization of data, relatable to name groupings or chronological divisions.⁹¹ The bigram /46.76/ is attested only *once* in the whole corpus of *rongorongo*.⁹² Although





or optional word removal, occur similarly in modern English, with function words as the primary candidates, e.g. the conjunction “that”, as in “*We think (that) pattern visualization was important for RR men*”, or the preposition “to”, e.g. “*It helps you (to) focus where your money goes*”, see AKMAJIAN, A., DEMERS, R. A. et al, *Linguistics: An Introduction to Language and Communication*; ROHDENBURG, G. *The Role of Functional Constraints in the Evolution of the English Complementation System*.






⁸⁹ cf. MELKA, T. S. *A Developmental Continuum for the rongorongo Script of Easter Island*.

⁹⁰ See BARTHEL, T. S. *Grundlagen...*, p. 70.

⁹¹ cf. MELKA, T. S. *A Developmental Continuum for the rongorongo Script of Easter Island*.

⁹² BARTHEL, T. S. *Grundlagen...*, p. 100. Otherwise, a similar configuration is discernible on Ia8’s “triad” ; with its initial compound coded as /45.76-600-87/; cf. also /45.76/ on Ia2 and Ia14. As far as we know, a number of “punctured” or not glyphs alternate their shapes across the corpus, with compounds /46.76/ and /45.76/ resulting in exchangeable variants. And there is some extra evidence for this (see sequences Hr7 • Qr7 • Pr7 on the alternation /45.52x/ vs. /46.52x/) – although when it

Metoro's version of ancient Rapanui chants is considered to be tentative – at best –, ⁹³ it may be to the point to cite Mgr. "Tepano" Jaussen regarding glyph /46/ in the subsection "Hommes" [Human beings] of his "Répertoire des Signes Idéographiques..." [Inventory of ideographic signs...], . ⁹⁴ Another short sequence worth reporting is that on Sa3-4, with /46/ embedded in a "harmonic"- / "palindromic"-like environment, /380.1*-67-22f-46-522f-46-22f-46-246-1.86/ ; with bigrams /380.1/ and /1.86/ functioning as "text delimiters" or "graphical frames". Fischer depicts bigram /380.1/, or its expanded forms with the decorative elements /52/  or /3/ , as a "proem", i.e. *introduction, prelude*. ⁹⁵ Butinov and Knorozov portrayed the initial combination of signs /380.1.3/ on the rows of the "Small Santiago" tablet (Gr) as "...denoting a seated human being, a stone, a moss". ⁹⁶

Another parallel that concerns glyph /46/  and its association to the "fish"-shaped glyph /700/ (in line with Rangitoki's /46.76-700/  ) is found elsewhere: text Y (= "Paris Snuffbox"). ⁹⁷ Yet, the other examples (Sa7 • Bv11 • Ev8), instead of /46-700.6/, ⁹⁸ seem to display the trigram /46-73.6/  per Barthel's *Grundlagen...* The close outward resemblance between a variant of /700/ (i.e. /710a/)  and glyph /73/ may clarify the given instances Sa7 • Bv11 • Ev8. In expanding the search, another instance occurring on Db2 and preceded




comes to the classical *rongorongo* texts, there are often exceptions to almost any "written rule".

⁹³ See BARTHEL, T. S. *Perspectives and Directions of the Classical Rapanui Script*, p. 175.




⁹⁴ JAUSSEN, F. É. *L'Île de Pâques. Historique, Écriture et Répertoire des Signes des Tablettes ou Bois d'hibiscus Intelligents*, Fig. 173.

⁹⁵ FISCHER, S. R. *Rongorongo...*, p. 502.

⁹⁶ BUTINOV, N. A., KNOROV, Y. V. *Preliminary Report on the Study of the Written Language of Easter Island*, p. 10, Table 2, 1. Although "iconic descriptions" of non-deciphered signs should not be taken generally in a literal sense, they may be suggestive of their naturalistic (or not) character.

⁹⁷ POZDNIKOV, K. *Les Bases du Déchiffrement de l'Écriture de l'Île de Pâques*, p. 293, Fig. 2, c; cf. also FISCHER, S. R. *Rongorongo...* p. 430, RR 5a3, with regard to the tracing of bigram . We should have to count among other instances those of Hv6  and Pv8  (i.e. /46-700/).

⁹⁸ POZDNIKOV, K. *Les Bases du Déchiffrement de l'Écriture de l'Île de Pâques*, p. 293, Fig. 2, c.

by a “frigate bird” glyph /606s/  is noticed. Although coded as /73.6/,⁹⁹ it is most likely a “fish”-shaped glyph of the /700/-class. The observation is supported by a near-parallel /606.76-700/  on Ia12,¹⁰⁰ with the “frigate bird” glyph sporting an affix /76/ and the “fish” glyph /700/ devoid, at this point, of the “arm / hand”-like affix /6/. While the evidence provides good reasons to mistrust Barthel’s system of transliteration regarding the occurrence of  (/73.6/ versus /700.6/), it is prudent to say that the issue requires further investigation.

At the moment, in case the fragment under analysis is a fake, or even an innocent imitation,¹⁰¹ we wonder how a post-missionary “forger” or “imitator” could decide on such an unusual combination, i.e. /46.76-700/, and reproduce it on a randomly acquired piece of bark-cloth. In probabilistic terms, he / she (?) had many other glyphs or other frequently occurring bigrams to choose amongst. With the context expanded, the *Rajitoki*-bigram seems to assimilate in a triadic-like structure /46.76-700-V76/, in the vein of the successive triads on texts Ia, Ta, Gv (and lesser on Gr). To supply further details: the “fish”-shaped glyph /700/ is attested several times on Ia, whether in initial, medial, or final position within a “triad”. Otherwise, solo glyph /V76/ – with a diminutive pair of half-X-shaped “embellishing” hair-lines occurring on the *Rajitoki* fragment –, is also attested as “such” on Ia. Quasi-parallels are observed, e.g., on Ia9, a solo /V76/ glyph with “flourishes” is seen on “triad” 8, i.e. /700.76-76.53h-177/ – left to right – in medial position.¹⁰² Some added short lines are perceived in the upper part (a vertical “mini-chevron,” and two other nearby mini-lines), which may be treated as *embellishments*. Similar to documented cases in Latin paleography, in medieval European scriptoria,¹⁰³ or to people writing on paper or on electronic media nowadays, it may be safely proposed that ancient Rapanui scribes had their whims, too. The applied RR embellishments do not convey any sound – they

⁹⁹ BARTHEL, T. S. *Grundlagen...*, p. 54.

¹⁰⁰ cf. FISCHER, S. R. *Rongorongo...*, pp. 259, 451 (section RR 10–1).



¹⁰¹ As FISCHER, S. R. *Rongorongo...*, p. 509, notes, “*There have essentially been two kinds of rongorongo “forgeries”: those that innocently imitated and those that purposely deceived*”.

¹⁰² See BARTHEL, T. S. *Grundlagen...* p. 73.

¹⁰³ See e.g. JOHN’S, J. J. “*Latin Paleography*” on otiose strokes, i.e. the superfluous, unnecessary strokes, as non-functional part(s) of a letter; PARKES, M. B. *A Note on Palaeographical Terms*; DEROLEZ, A. *The Palaeography of Gothic Manuscript Books* offer examples of “decorative” and fancy scribal devices used in manuscripts of the early and late Middle Ages.

rather fit within the “aesthetic” and “fanciful” canons of each particular hand, thus to be treated as conscious or unconscious decisions in the course of carving. Another example among the many is present on the *recto* of tablet “*Keiti*” (Er5),¹⁰⁴ with six “*under-the-elbow*” embellishments carved along the leading “anthropomorphous” symbol in a “*harmonic*”-like sequence (see Fig. 5).

If we hypothesize that we are dealing with a forgery or a slapdash glyph combination in the guise of the “Gauguin *rongorongo*” (RR *u*),¹⁰⁵ or of the carved stone-fragment “K-T 2149”,¹⁰⁶ the question as to *why* the glyphs on the *Rangitoki* fragment are convincingly aligned and construed according to previously observed structural (semantic) tenets, begs for an answer. Very likely, the person behind the bark-cloth sequence was, even if an “imitator”, someone who had (at least) some scribal experience. To generate a “triadic” string in such an original way hints at familiarity with *rongorongo*, whether in pre- or post-missionary times. We could have gained a better understanding if the fragment was much longer, but as luck would have it, we handle what physical evidence is existent.

The next glyph, as nearly as we can tell, resembles basically or vaguely, two other glyphs: the “*rei miro*” glyph /7/ , or the first variant of # /117/ . Glyph /7/ is, by and large, incised vertically, but there are cases when attested (as a solo, or compounded glyph) in a horizontal position (Ia6 • Ia11 • Ia12 • Hv5 • Qv8). Back in the olden days, these breastplates – mostly made out of a single plank of wood – were symbols of status and power.¹⁰⁷

¹⁰⁴ The numbering of the sequence is after BARTHEL, T. S. *Grundlagen...*, p. 55.

¹⁰⁵ The arbitrarily placed RR glyphs at the top section of the painting titled “*Merahi Metua no Tehamana*” (1893; formerly at Collection Wildensheim, New York; now, at Chicago Institute of Art) are incorporated by French artist Paul Gauguin, cf. CAMPBELL, R. *La Herencia Musical de Rapanui: Etnomusicología de la Isla de Pascua* [The Musical Legacy of Rapanui: Ethnomusicology of Easter Island], p. 380; VAN HOOREBECK, A. *La Vérité sur l’île de Pâques*, pp. 274–275; FISCHER, S. R. *Rongorongo...*, p. 517; ROBINSON, A. *Birdmen of Rapanui: rongorongo (Easter Island)*, chapter VIII, p. 227.

¹⁰⁶ The so-called “K-T 2149” (= *Kon Tiki Stone 2149*), a poor pastiche of RR glyphs, is “from [the storage cave of, our note] Juan Pakarati II Atan”, and as HEYERDAHL, T. *The Art of Easter Island*, Plate 298c, draws attention to, “c is certainly no authentic sample of rongo-rongo script but the signs, individually and in groups, were still believed to possess magic power”.

¹⁰⁷ See MÉTRAUX, A. *Ethnology of Easter Island*, pp. 230–232; ENGLERT, S. *La Tierra de Hotu Matu’a* [The Land of Hotu Matu’a], p. 493; BARTHEL, T. S. *Grundlagen...*, pp. 297–298; HEYERDAHL, T. *The Art of Easter Island*, pp. 203–204; Plate 44, Plate 47a; ORLIAC, C., ORLIAC, M. *Easter Island: Beneath the Eyes of the Gods*, p. 346.

The other alternative to be entertained is the first variant of /117/, i.e. /a/, which results eventually in a “thickly” painted version. Evidently, given the single occurrence of this slightly opaque-looking glyph, a definite proof cannot be offered. A helpline in this case might be the broader glyphic context, i.e.

checking if glyph *rei miro* /7/ tends regularly to be the neighbor (*collocate*, in the narrowly linguistic sense) of anthropomorphic-glyphs of the /200/-class

per Barthel’s notation,¹⁰⁸ whether on the left or right. The search yields positive identifications. Exact glyph /200/, or variant (single, or compounded) placements are attested, for instance, on Aa4 /208.7/ • Ev8 • Sb5 /200.7/ • Ra3,

7. More illustrated examples from the known corpus follow: Rb2 (left);

Ev8 , or Sb5 (right); or even enveloped by glyph /7/, as the “hollow-

belly” glyph /208/ on Ab7.¹⁰⁹ Similarly, there are occurrences of

glyph /300/, a “gaping mouth” half-man / half-bird that collocates with glyph /7/ on Aa3. Research has shown that glyphs of class /200/ often interchange with glyphs of class /300/, meaning, they are sheer allomorphs.¹¹⁰

In another context, glyph /600/ having a high symbolic impact in the Old Rapanui lore (as the supreme deity Make-make ; as an emblem / “coat of arms” of the most important lineage group Miru; or as messenger of the gods),¹¹¹ correlates with the *rei miro* /7/ in several short-range or long-range environments, e.g. Aa3, 3, 3, 4, 7 • Ab1, 1, 2, 8 • Qr8. Practically speaking, *rei miro*-glyph /7/ could have a logographic value in these contexts, suggesting *rank* or imposing *authority* of certain divine and earthly personages.

As for the other option, glyph /117/ is very rare in terms of frequency, namely, one occurrence /117a/ on Sb3, plus three other compounds /117b.76/ on Gv1. Chances may seem infinitesimal that it can occur on a piece, resurfacing after a century and a half, i.e. on the *Ranjitoki fragment*. Consider

¹⁰⁸ BARTHEL, T. S. *Grundlagen...*

¹⁰⁹ “Hollow-belly” glyphs /208/, /209/ (plus variants) are, most probably, a blending of two single-man glyphs /200/, cf. WIECZOREK, R. M. *The Double-Body Glyphs and Palaeographic Chronology in the Rongorongo Script*.

¹¹⁰ See BARTHEL, T. S. *Grundlagen...*, p. 273; POZDNIAKOV, K. *Les Bases du Déchiffrement de l’Écriture de l’Île de Pâques*, p. 295; MELKA, T. S. *Palindrome-like Structures in the rongorongo Script*, p. 166.

¹¹¹ cf. BARTHEL, T. S. *Rongorongo-Studien*, p. 378; MELKA, T. S. *Palindrome-like Structures in the rongorongo Script*.


that, in statistical terms, the actual corpus consists of *ca.* 14,500 glyphs (plus or minus a couple of hundred glyphs, depending on the method of counting and deconstruction of complex glyphs), and the first variant /117a/ is attested only once. One simple question may be raised now, what are the odds that it can be re-traced on a newly found ten-glyph inscription? Yet, as we are talking in probabilistic terms and dealing with random phenomena, nothing can be summarily dismissed.


The final point of discussion addresses the partly effaced figure . In regard to this glyph, there are two alternatives to be considered in terms of statistical and morphological plausibility. The assigned numeric codes /87/88?/ correspond in Barthel's "*Formentafeln*" [Sign-form plates] to the design-variants of the "*rapa*" dance paddle and .¹¹² In addition, in terms of artistry, another more refined version of "*rapa*" is found on the "*Santiago Staff*" and "London *rei miro* 6847" (see Fig. 7). The secondary alternative is to ponder the last glyph on the *Rangitoki fragment* as the first variant of glyph /127?/ .



The glyph on the *Rangitoki fragment* inscription appears inverted and "punctured" on one of its "blades". Either "graphic" feature (i.e. the upside down position, and the "circlet") appears on several glyphs; most probably, they are to be interpreted in terms of idiosyncratic choices, cf. "punctured" glyph /89b/ (Sb5) versus "non-punctured" glyph /89a/ (Sa1); a "somersault" glyph /95x/ , the "core" component of /3.95x.3.76/ on tablet Gv1, or a "frigate bird" glyph /600f/ , exhibiting "hairs / filaments" and a conspicuous "eye socket" versus an "eyeless" and "hairless" counterpart (both occurring) on Ab2. While differing from each other in unimportant ways, in terms of function, /89a/ vs. /89b/; /95/ vs. /95x/; /600/ vs. /600f/ remain the same, however. Since no fixed writing norms seem to have existed (at least, in the present artifacts), *rongorongo* was apparently in a state of flux. As we continue to delve ever deeper into the corpus, it is posited that many skilled or less skilled scribes, apart from following the general criteria of "writing", were quite often reinterpreting calligraphically (at best), or misinterpreting (at worst) the accessible inventory of glyphs and their sequencing.

¹¹² BARTHEL, T. S. *Grundlagen...*

Let us quote Jean Bianco, “*Chaque graveur... possédait un style qui lui était propre et il est parfois malaisé de reconnaître ou d’identifier un glyphe à cause de la stylisation poussée de l’écriture et des divergences dues à ces différents graveurs* [Each etcher (= scribe)... had a style which was particular to him and it is sometimes difficult to recognize or identify a glyph because of the highly stylized nature of the writing and the differences attributable to these etchers (= scribes)]”.¹¹³

Another example of a “half-man / half-bird” glyph with a “dancing paddle” is the juxtaposition /300.88/  attested on Ab2.¹¹⁴ “*Rapa*” was regarded as another sign of “high standing,” and was part of certain festivities as an important and sacred accessory.¹¹⁵ All in all, in view of present evidence, the probability that /87/88?/ corresponds to the “*rapa*” glyph is *quite high*. The low

frequency glyph /127/  does not associate with glyph /200/ and correlates, as a rule, with differently designed glyphs (cf. tablet Rb8). There are cases when its full shape is preserved fairly, as there are other ones where its detection becomes somewhat difficult due to its position near the edge of the tablet.

Barthel¹¹⁶ assigns, for instance, /V33/  to the penultimate glyph on Bv11; however, an inspection of a high resolution photograph of the *verso* of “*Aruku Kurenga*” identifies it as glyph /127/ .

All things considered, the hypothesis of the “*rapa*” glyph interpretation for the last surviving glyph on the *Raŋitoki fragment* is likely to be the most promising.

Concluding Remarks

In conclusion, after analyzing it carefully, we propose that the evidence suggests that the *Raŋitoki fragment* represents a relic of the *rongorongo* tradition on Easter Island. It may have been in the hands of a European prior to, even if only by a couple of months, any other currently known *rongorongo*

¹¹³ BIANCO, J. *Une Numération de Polynésie Occidentale dans les Tablettes de l’Île de Pâques?* p. 42.

¹¹⁴ cf. BARTHEL, T. S. *Grundlagen...*, p. 114.

¹¹⁵ cf. THOMSON, W. J. *Te Pito te Henua, or Easter Island*, Plate LIII, Figs. 1, 2, dancing wands; HEYERDAHL, T. *The Art of Easter Island*, Plate 57; ORLIAC, M., ORLIAC, C. *Trésors de l’île de Pâques*, p. 181.

¹¹⁶ BARTHEL, T. S. *Grundlagen...*, p. 50.

inscription.¹¹⁷ Furthermore, it was neither purchased nor acquired in exchange for other valued items in those precarious times, but given as a gift of love from a Rapanui woman to a European man – thus apparently precluding that it was created as an “imitation” or “forgery” for financial or other gain. While we cannot state how long before its acquisition in March 1869 the inscription was painted on the bark-cloth – it is conceivable that it pre-dates the first Christian missionary on the island in 1864 – as we have discussed above, the creator of the *Ranjitoki* fragment appears to have been familiar with *rongorongo*, suggesting that he (or possibly she?)¹¹⁸ may have had some RR training or scribal experience. If this was indeed the case, then in this sense, whether or not the *Ranjitoki* fragment was created prior to the first missionary visit to Easter Island, it can be said to represent an “authentic” and “genuine” *rongorongo* inscription. In this light, short as it may be, the *Ranjitoki* fragment adds to the known corpus of *rongorongo* inscriptions.¹¹⁹

In 1997, S. R. Fischer stated, “If *rongorongo* was ever written on *tapa-bark cloth*, no evidence for this practice has survived.”¹²⁰ With the discovery of the *Ranjitoki* fragment, this statement needs reassessment. We have to wonder if there are other *rongorongo* inscriptions written on bark-cloth, perhaps in private

¹¹⁷ See note 41.

¹¹⁸ We acknowledge that many sources contend that traditional *rongorongo* was the exclusive province of males, cf. ROUTLEDGE, K. *The Mystery of Easter Island*, pp. 245–246; ENGLERT, S. *La Tierra de Hotu Matu’a* [The Land of Hotu Matu’a], p. 316; BARTHEL, T. S. *Pre-contact Writing in Oceania*, p. 1177; FISCHER, S. R. *Rongorongo...*, pp. 314–318, p. 553, but we cannot completely exclude the possibility that perhaps a female painted the glyphs on the *Ranjitoki* fragment, particularly if the fragment was adorned during the tumultuous period of the 1860s when societal norms and traditions may have been breaking down. Indeed, it might be speculated that *rongorongo* was not always the closed and secretive activity, limited to so-called “*rongorongo men*” and the royal elite, as has generally been assumed. Perhaps during at least some periods in the history of Easter Island, RR also diffused among the Rapanui populace more generally. What, we might ask, was the “*rongorongo* literacy rate” among the inhabitants of the island prior to the labor raids and the coming of Christianity? Unfortunately, these are questions that may never have definitive answers.

¹¹⁹ In examining a single compound glyph /2:70/ incised on the back cranial part of a wooden statuette from Rapa Nui deposited at Peter the Great Museum of Anthropology and Ethnography (Kunstkamera), St. Petersburg 199034, Russia, with acquisition number 402.1., WIECZOREK, R. M. Naming the *rongorongo* Artifacts, p. 8, points out, “Lack of context for all of the tablets is actually one, if not the main, obstacle in the decipherment effort. Therefore even the shortest *rongorongo* fragment with some context should be cherished and carefully examined by researchers”. The scrutiny of the “*Ranjitoki* fragment” is likely to prove worthwhile of said concern, too.

¹²⁰ FISCHER, S. R. *Rongorongo...*, p. 379.

art collections or passed down as family heirlooms, waiting to be recognized for what they are.

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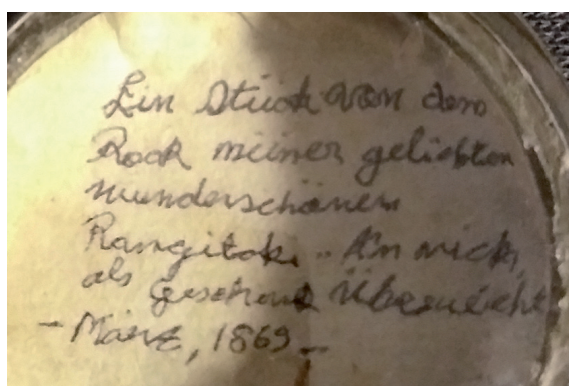
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Schoch and Melka, Fig. 1. A remnant from an indigenous apparel of the early post-missionary period: the *Rangitoki* bark-cloth piece. Along with it are shown the watchcase in which it was stored and the two bone beads that accompanied the bark-cloth piece in the watchcase. Photograph © Robert M. Schoch, taken with the permission of the anonymous owner.

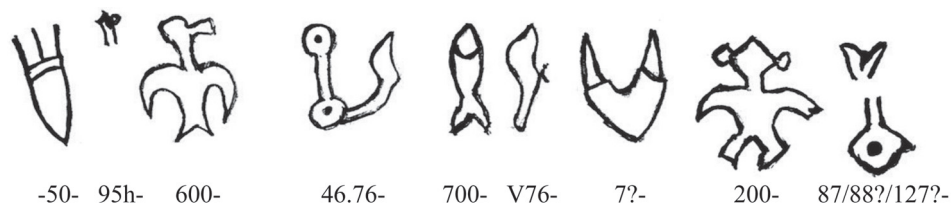


Schoch and Melka, Fig. 2. The short note in German found in the watchcase enlarged for better discernment of the written content. Photograph © Robert M. Schoch, taken with the permission of the anonymous owner.



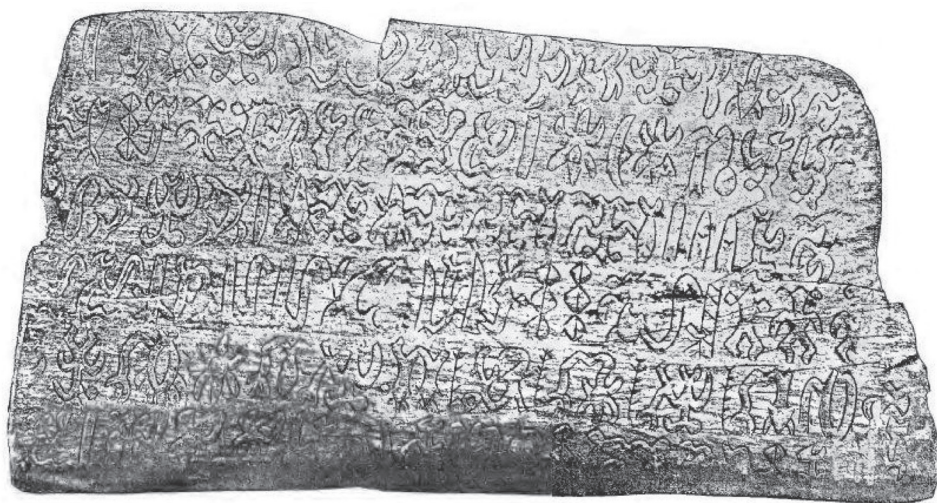
-50- 95h- 600- 46.76- 700- V76- 7?- 200- 87/88?/127?-

Schoch and Melka, Fig. 3a. The *Ranjitoki fragment* – code numbers are supplied after Barthel’s *Grundlagen...*; “V” stands for a variant glyph; symbol “?” indicates slight or heavy doubt when accompanied by a specific code-number, e.g. “87/88?/127?”. The use of the latter symbol in assignments certainly comes as no surprise since there are (a) patches of damaged areas across the tablets; (b) various glyphs appear badly corrupted; (c) a number of glyphs result in highly idiosyncratic realizations, i.e. variant forms. Barthel’s alphanumeric code “h” (= /95h/), applies to a reduced glyph or affix placed in an upper position (from the initial “h” of the German word “hoch” [high]). Photograph © Robert M. Schoch, taken with the permission of the anonymous owner.



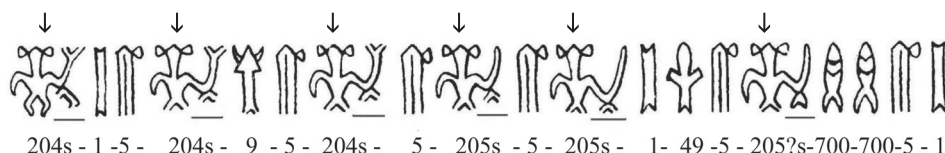
-50- 95h- 600- 46.76- 700- V76- 7?- 200- 87/88?/127?-

Schoch and Melka, Fig. 3b. Manual line-tracing of the sequence appearing on the *Ranjitoki fragment*. Given the uneven surface of the material, tracings obtain a close approximation (i.e. transliteration), not a facsimile of the painted writing.



Schoch and Melka, Fig. 4. Side *b* of tablet “Échancrée”.¹ Given the peculiar size of the signs, the carving on side *b* contrasts with that on side *a*, presumably showing a different scribal individuality.

Er5 (tablet “Keiti”)



Schoch and Melka, Fig. 5. A number of “under-the-elbow” embellishments are observed in the anthropomorphous figure of the /200/-class in this “harmonic”-like sequence on Er5.² Barthel’s preference for the “embellishment” is the alphanumeric code “s” (an initial for *Schmuck*, “ornament” in German).³ The horizontal line under the “elbow” is artificially supplied for effects of precise discrimination. Symbol “↓” indicates the “clef”, i.e. the static initial glyph in each mini-segment within the longer sequence.⁴

¹ THOMSON, W. J. *Te Pito te Henua, or Easter Island*, Plate 43 – from photographs presented by George Davidson to the California Academy of Sciences; see also FISCHER, S. R. *Rongorongo...*, Fig. 35.

² cf. MELKA, T. S. “Harmonic” – like Structures in the rongorongo Script, p. 118.

³ BARTHEL, T. S. *Grundlagen...*

⁴ cf. GUY, J. B. M. *General Properties of the Rongorongo Writing*; MELKA, T. S. “Harmonic”-like Structures in the rongorongo Script; HORLEY, P. *The Large rongorongo Tablet from the Collections of the Smithsonian Institution*, Washington, D.C.

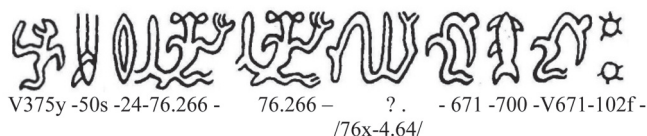
Br10



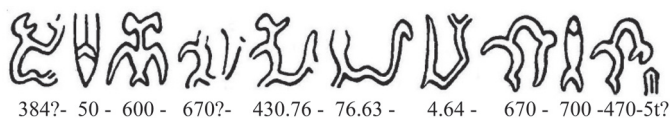
Hr9



Pr8



Qr9

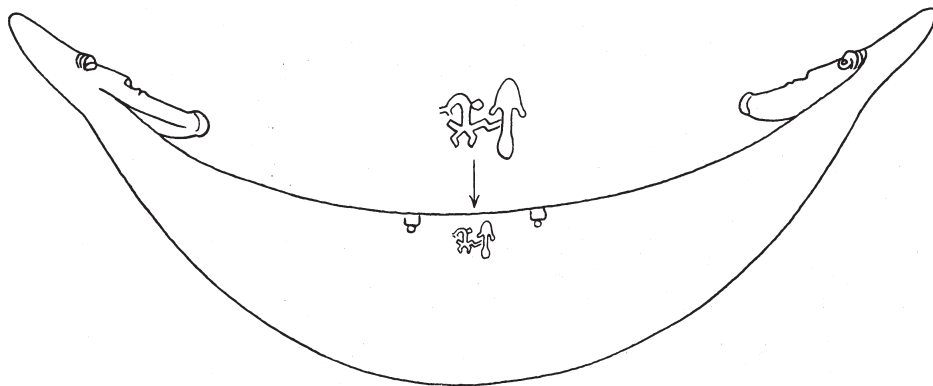


Schoch and Melka, Fig. 6. Quasi-parallel “burst” on four different tablets, showing the trigram of interest /50-600-*n*.76/ occurring right after the “delimiter” glyph of the /300/-class (i.e. /380/; /385/; /V375y/; /384?/).⁵ The shape and the position of glyph /76/ (pointed vs. rounded; rightward vs. leftward; standing right vs. upturned) seems to conform to the choice each pre-missionary scribe made, resulting in mutually convertible glyph-forms. Barthel does not provide explicit numbering for *Qr9*-sequence, except for /5t?/.⁶ Barthel’s alphanumeric code “t” applies to the significant reduction of size of a glyph in a lower position (from the initial “t” of the German word “*tief*” [low]). An amendment is made for symbol /?/ on Pr8, with the following coding, /76x-4.64/, with /76x/ representing an *inverted form* (= alphanumeric code, “x”).

⁵ See ÁVILA FUENTEALBA, F. *Ensayo de Estudio Visual de las Tablillas Rongorongo* [Essay of Visual Study of the *rongorongo* Tablets], p. 37, Figura 32.

⁶ BARTHEL, T. S. *Grundlagen...*, p. 64.

Brustschmuck „Rei-Miro“ London 1 (J)



Schoch and Melka, Fig. 7. “London *rei miro* 6847,” aka text J, displays an anthropomorphous figure holding a “*rapa*” (a ceremonial double-bladed dance paddle). The first glyph in the bigram is a fusion of /520/ and /522/, with a suprafused “proboscis” glyph /64/, whereas the second larger glyph is /88/;⁷ rendition of *rei miro* (breast-plate) glyphs after Bodo Spranz in T. S. Barthel’s monograph.

⁷ For more, see BARTHEL, T. S. *Grundlagen*..., pp. 24–25; FISCHER, S. R. *Rongorongo*..., pp. 490–492.