# DECIPHERMENT OF THE EASTER ISLAND SCRIPT 

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What is kohau rongorongo - a mnemonic means, as some scientists think, ${ }^{\text {, }}$ or a phonetic script, as others are sure? ${ }^{2}$

Bishop T. Jaussen, who recorded on Tahiti Island some data on kohau rongorongo the Rapanuian Metoro pretended to know, the missionary S. Englert, who lived on Easter Island for many years, and some ethnographers who made field investigations on Easter Island (C. Routledge, A. Metraux, T. Barthel) agree unanimously that 1 ) every glyph tells a whole word and 2) this word is connected with some other words which are not represented on the tablet by glyphs and should be read by heart. The text is written not only on the tablet, as T. Barthel notes, but in the memory as well - a condensed text on the tablet and a full one in the mind. ${ }^{3}$ The word represented on the tablet by the glyph is, according to C. Routledge, only a peg, according to T. Barthel - only a Stichwort, ${ }^{4}$ The natives Metoro, Tomenika, Kapiera and Teaa stated this. Tomenika added that the word represented by the glyph was usually connected with 3-10 words, ${ }^{5}$ and Kapiera even adduced two texts to compare - a written one and an oral one. In the written text there were $10-15$ glyphs, in the oral one - about 50 words. ${ }^{6}$ The most difficult thing was, as Metoro said, not reading but keeping in mind. When experts in script (tangata rongorongo) gathered in Anakena during their annual meetings, they used to check not the tablets (it was even possible not to bring them) but the correct reading.

In our attempts to read the texts on the tablets we thus start from

[^0]two premises: 1) every glyph tells a whole word and 2) this word is connected with some words not marked on the tablet that the tangata rongorongo used to recite by heart.

Is it possible to read the texts on the tablets now, i.e. to read the information not only written but kept in the memory by the experts as well? S. Englert, C. Routledge, A. Metraux consider it impossible. ${ }^{7}$ H. Nevermann supports the opinion. ${ }^{8}$ T. Barthel is inclined to believe the same, and moreover that the texts are written in ancient language as it was 500 years ago. That is why it is possible only to interpret them. ${ }^{9}$

The work of deciphering Easter Island script has been going on for more than 100 years, and some real results have been obtained. In 1871 the Bishop of Tahiti, Tepano Jaussen, invited one of the Rapanuians working on Tahiti to read the texts on 4 tablets (Jaussen obtained 5 tablets, but one of them was given as a present to N. N. Mikloucho-Maclay not long before, when the traveller visited Tahiti in July 1871 on his way to New Guinea). This person, called Metoro (Tau a Ure), seemed to know the kohau rongorongo and fulfilled the Bishop's request. Jaussen thoroughly recorded his "readings", but they appeared to be not real readings (the text became incoherent). It was not even a story about how to read one or another glyph, but an interpretation of what the glyph might represent ("this is the earth", "this is the sky", "this is a chief", etc.) and what is more, sometimes in the Tahitian language. Jaussen did not publish the "Metoro readings". However, he compiled from them a catalogue of glyphs.

The Leningrad schoolboy Borya Koudryavtsev, while studying two tablets brought home by N. N. Mikoucho-Maclay and kept in the Museum of Anthropology and Ethnography in Leningrad (one of them is now on display in Helsinki) ${ }^{*}$, made an important discovery: he found out that these two tablets have one and the same text. Later, looking through the published photos, he found this text or a part of it on two more tablets. B. Koudryavtsev had no time to publish his article (he died during the Siege of Leningrad). Only after the war was his article published. ${ }^{10}$

One important condition for deciphering the kohau rongorongo is, of course, a knowledge of the Rapanui language and culture. Among the published works are T. Barthel's "Grundlagen zur Entzifferung der Osterinselschrift" and A. Metraux's "Ethnology of Easter Island". A. Metraux gives a detailed description of precontact Rapanuian culture, quotes a number of myths, traditions, legends, and makes some valuable observations about kohau rongorongo. T. Barthel was the first to publish in full the "Metoro readings" recorded by T. Jaussen (discovered in archives in Rome)

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Figure 1. Chilean small tablet.
and compiled a detailed catalogue of the glyphs.
Myths, traditions and legends were recorded by numerous people and published in different magazines sometimes hard to find. The Leningrad ethnographer and linguist I. K. Fyedorova managed to collect all (or almost all) the folklore texts and combined them (in Russian and in Rapanuian when it was possible to get such a version) in her monograph "Myths, Traditions and Legends of Easter Island"." As we are concerned with the approaches to reading kohau rongorongo, we shall mention the article by Yu. V. Knorozov and the author of this paper "Preliminary report on Easter Island script ${ }^{\prime \prime 2}$, where the text on the Chilean small tablet is interpreted (Fig.l).

The glyph "a man" (tangata) is repeated there six times: in one case the glyph "a man" is followed by one glyph, in three cases by two, in two cases by three. Personal names are usually preceded by the particle -nga (for example, Nga Tavake); the concept of "a person" is sometimes shown by the word nga (tetahi nga, "one man"). Then the Rapanuian places after the personal name the name of his father (e.g. Tuu-ko-Ihu), and in this case he needs two glyphs to tell the name on the tablet (Ego + father). Sometimes the personal name is followed by the names of the father and grandfather (e.g. Makoi-Ringiringi-a-Huatava), so to render such a


Figure 2. The genealogy (Chilean small tablet).
triple name three glyphs are required: Ego + father + grandfather.
Let us divide this small text into six groups, each starting with the glyph "a man", and let us place them one under the other (Fig. 2). We shall start "reading" from the first group: "a man" nga, "an octopus" heke. We have got the name: Nga Heke. In the second group: "a man" nga, "a shark" mango, "an octopus" heke, a glyph that separates the name from the following one. We have got the name: Nga Mango Heke. The reading of the names is conditional (it is quite possible that they are read in a different way), but the formal point here is important: in the first group the glyph "an octopus" (heke) is present, in the second group the glyph "an octopus" is also present but not in the first place but in the second (Mango Heke). We may conclude that Nga Heke is the father, Nga Mango Heke is his son. In the third group: "a man" nga, "a turtle" honu, "a shark" mango. We have got the name: Nga Honu Mango. This reading is also conditional, but what is noteworthy is the fact
that in the second group the glyph "a shark" is situated in the first place, in the third group the glyph "a shark" is also present, not in the first, but in the second place. We may draw the conclusion that Nga Mango Heke is the father and Nga Honu Mango is his son. In the fourth group: "a man" nga, unidentified glyph (let us suppose "a rat", kiore), "a turtle" honu. So we have got the name: Nga Kiore Honu. Again the same picture: in the third group the glyph "a turtle" is situated in the first place, in the fourth group - in the second place. We may conclude that Nga Honu Mango is the father and Nga Kiore Honu is his son.
A. Metraux rejected the possibility of finding any genealogies on the tablets. But having got acquainted with our analysis of the text on the Chilean Small tablet, he changed his opinion. On the tablet preserved in Santyago, he writes, is a series of glyphs which probably corresponds to a short genealogy. ${ }^{13}$

Not everything is clear in the text in which A. Metraux admitted the existence of a genealogy. First of all, the names have not yet been read. Nga Heke, Nga Mango Heke, Nga Honu Mango, Nga Kiore Honu cannot be considered true readings; Metoro named the glyphs in such a manner ("this is heke", "this is mango", "this is honu") and we do not know how they should be read. Secondly, not everything is clear in the fifth and in the sixth groups. In the fifth group it is unclear where the third glyph came from; if it is a glyph of the grandfather's name, why is it not the glyph "a turtle"? In the sixth group the glyph telling the name of the grandfather is unquestionable (in the fifth group this glyph tells the name of the father), but nobody knows where the second glyph (father) appeared from.

By the way, our analysis of this text is not a reading proper but a step for further reading and gives certain standpoints for further studies. Firstly, the glyph "a man" can be read as nga. Secondly, the information of the aborigines is corroborated - every glyph tells a whole word.

In the article mentioned we analysed the text on the Tahua tablet consisting of 19 glyphs (Fig. 3). This text, as we then said, begins with the glyph "a boat" (vaka) followed twice by the pair of glyphs "a walking man" and "the sky", which may be read as rangi ("to send, to visit"), and four times by an unidentified glyph (it may be a numeral), and twice by the glyph of a man with his hand raised (according to Metoro, elder brother glyphs for plants... then a glyph for foot (oho "to go, to send") and the glyph for father (matua) ". ${ }^{14}$

At that time (1956) we could not avail ourselves of the "Metoro readings" and of the full collection of folklore texts. Only the


Figure 3. Text on the Tahua tablet.
catalogue of glyphs compiled by T. Jaussen was used while analysing the text on the Tahua tablet. Our analysis nevertheless appeared to be correct, though now we may make it more precisely. We did not then pay due attention to the myth in which two of the six men sent to Easter Island dissuade Hotu-Matua from landing there ("this land is bad"). I. K. Fyedorova had paid attention to the episode and supposed that "these scouts were sent by different chiefs, so it will explain why Ira and Raparenga attempted to persuade Hotu-Matua that the land of the island was bad".15 The text on the Tahua tablet affirms this supposition: two chiefs (glyphs 3,5 ) sent (glyphs 4, 6) six men (glyphs 7-12), but four of them (glyphs 7-10) were sent by Hotu-Matua and two (Ira and Raparenga, glyphs 11-12) were sent by some other chief (Hau-Maka, maybe). The names of the scouts are not represented in the script and the tangata rongorongo had to mention them by heart.

The text for analysis on the Tahua tablet was read by Metoro in such a way: 1) tangata ui 2) ki tona marama 3) tangata noho ana 4) ite rangi 5) te tangata 6) hakamaroa ana ite rangi 7) moe 8) e noho ana ki te moa 9) e moe te erueru 10) e mosa te kapakapa 11) e moa te terehua 12) ka hora ka tetea 13) ihe kuиkuи 14) ma te maro 15) henua 16) kua tuu 17) marai 18) i tona ohoga 19) ariki. ${ }^{16}$ In this text, recorded not very strictly by T. Jaussen, tangata means "a man", ui "to look", marama "a
moon", noho "to go", rangi "the sky", "to send", moa "a hen" (moe is a mistake in recording), ihe "a needle-fish", maro "a garland of flowers", henиа "an earth", marai "a sacred place", ariki "a chief".

Metoro, here as always, named the meaning of glyphs but at the same time (not willing to repeat, as it seems) he interpreted the same glyph with a slight difference (e.g. "a hen", $7-10$ ). One more detail is curious. Glyph 13, rather frequent in different tablets, was interpreted by him as ihe "a needle-fish", avanga "a tomb, a vault in ahu", hokohuki "a digging stick", hokovero "a spear", tau "a rock", kona "a place", henua "an earth". Only once while "reading" the analysed text did he pronounce the word kuиkuu, i.e. he named one of the scouts that had perished and had been buried in the cave. Maybe here he rightly defined that this glyph means avanga "a tomb, a vault in $a h u$ " and added according to his knowledge that the perished scout Kuukuu was mentioned.

Here we have a rare true reading: Kuukuu, though the glyph telling his name is lacking. The only glyph present (13) tells the pivotal word "a grave", so everything connected with it should be read by heart.

Thus the information told by the natives is confirmed; only pivotal words are represented on the tablet and the wisdom of the tangata rongorongo mainly consists of his memory of the oral texts, and only then of his knowledge of glyphs. Without the context the glyph avanga does not mean much.

The conclusion that not all the words are present on the tablet, but only pivotal ones, that some words (names of scouts, for example) are represented by pictograms but not by phonetic glyphs now determines our approach to the decipherment of kohau rongorongo. We believe it is too early to attempt to read some new words not found in dictionaries or some new texts unknown from other sources (as. T. Barthel does, for instance). But we should not restrict ourselves to pure structural analysis, not even attempting to read the text (as the Australian researcher D. Guy does).

Let us try to identify some familiar text (a myth, tradition, legend, etc.) on the tablets. The structure of the written text should to some extent coincide with the structure of the oral text (we have seen this on the Tahua tablet).

We possess several versions of the myth about the coming of the first migrants to Easter Island from the ancient land of origin, Hiva. The first to arrive was the chief Hau-Maka (in the myth his spirit). According to another version Hau-Maka visited Easter Island in dreams. Hau-Maka was searching for a sandy beach. So he proceeded along the islands Motu Nui, Motu Iti and Motu Kaokao to the east along the southern coast, doubled round the Poike

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Figure 4．Text on the Aruku Kurenga tablet（myth about the three expedi－ tions）．
peninsula，turned to the west and there found the sandy Anakena Bay． Some other places visited by him in passing are also mentioned．After him six scouts came to the island．They were also searching for a sandy bcach and，following the same route，stopped at Anakena Bay．Some 50 place names visited by them in passing are given．And at last Hotu－Matua set off for the island，following the same route as far as Anakena Bay．${ }^{17}$

The structure of the myth is as follows：the first expedition is described，some geographical names are listed，terminating in sandy Anakena Bay；this is repeated for the second expedition and the third．

On the Aruku Kurenga tablet（Fig．4）we find a text with a structure coinciding with that of the myth about the three expeditions：three series of glyphs each consisting of $11-14$ groups．The first series should be indi－ cated by $\mathrm{A}(\mathrm{x})$ ，the second by $\mathrm{B}(\mathrm{x})$ and the third by $\mathrm{C}(\mathrm{x})$ ． A is a constant glyph of the first series，$B$－of the second，$C$－of the third，and $x$ are var－ iable glyphs：in one group from the first series it may appear as one，in the other group－as another，etc．The variable glyphs in these three series are the same： $\mathrm{A}(1), \mathrm{B}(1), \mathrm{C}(1) ; \mathrm{A}(2), \mathrm{B}(2), \mathrm{C}(2)$ ，etc．with some insignifi－ cant additions in the second series： $\mathrm{B}(9 \mathrm{a}), \mathrm{B}(1 \mathrm{la})$ and in the third series： $C(8 a), C(9 a), C(1 l a)$ ．The sequence of variable glyphs is one and the same．We may suppose that glyph A is read as＂Hau－Maka＂，B as＂scouts＂ （though it is a single glyph）（Fig．3，7－12）and C as＂Hotu－Matua＂（Fig．3， 19）， x －glyphs represent the place names（since the route of the three expe－ ditions is the same，the place names should also be the same）．

In the myth about the scouts some 50 geographical places are named from Orongo via Poike peninsula to Anakena Bay. The termini should be hypothetically read as follows: glyph 9 means "a sand" (according to Metoro). It may be sandy lands Taharoa or Hanga-o-Honu. Glyph 8 may be read as Taharoa (taha "a bird", a frigate-bird) or as Hanga Tavake (tavake "a phaeton-bird"). Glyph 11 may in this case denote a bird (Anakena is literally "a cave of birds"). Glyph 7 (according to Metoro, poki "a son, a grandson, a nephew, a descendant") should here possibly be read as mahaki to designate the place Vai-Mahaki on Poike peninsula. A. Metraux writes that "in legends the term mahaki is often used to replace the absent person -a parent, brother, sister, daughter, son, etc.". ${ }^{18}$

So here is a hypothetic reading of some points placed on the route from Poike peninsula, and the place names Vai-Mahaki, Hanga-o-Honu, Anakena, Taharoa are known in the myth of three expeditions. As regards the place names before Poike (glyphs 1-6), it still seems impossible to read them. The attempt to identify the whole myth about the three expeditions on the Aruku Kurenga tablet cannot be considered fully successful. The cause of the failure lies in the fact that the text contains numerous geographical names and the man contains even more, so the researcher may choose the ones that suit him and the method gives an unreliable result.

It would be desirable to choose for analysis and reading a text from the tablet that is not only known to us from other sources but is unambiguous in meaning. For instance, here we have 10 groups of glyphs on the tablet and 10 names known from other sources; metaphorically these 10 glyphs are 10 different kinds of locks and the 10 names are 10 different keyes. The task is to "open" the 10 concrete locks with the 10 concrete keys (provided that one key "opens" only one lock).

The text we are looking for contains 4 tablets: Tahua, the Leningrad Big, Leningrad Small and Chilean Big one (Fig. 5). It may be denoted with the formula: $10 \mathrm{~A}(\mathrm{x}) \mathrm{B}$, or $10 \mathrm{~A}(\mathrm{x}) \mathrm{C}$ B, where A is a constant glyph (according to Metoro, raa "a sun" or hetu "a star"), x are ten variable glyphs, B one final glyph (accordin to Metoro, uhi "a yam") on the Tahua tablet. C B are two final glyphs on the three remaining tablets.

We may use this concrete text to demonstrate the peculiarities of our method of deciphering and its distinguishing features from other methods used by other researchers - the method of formal analysis (Australian scientist D. Guy), the method of interpretation (T. Barthel), the method of reading (I. K. Fyedorova). D. Guy makes, as he writes, a "purely structural analysis of the text". He does not attempt to identify the meaning of the glyphs in the text, nor the
information about the glyphs and script obtained from Metoro and Rapanuians by inquiry; nor does he use the data about Rapanuian culture, myths, legends, traditions from the works of A. Metraux, T. Barthel, etc. All these materials he considers to be not very reliable and he uses them "as an argument is only to weaken the conclusions" obtained with the help of pure structural analysis. ${ }^{19}$

This is one extreme - pure structural analysis of the text. The other extremity is the attempt to read (in the same text) some separate words not fixed in the Rapanui language and even to read a story unknown from other sources.
T. Barthel supposes that group 1 (Fig. 6) tells about the dawn, groups $2-5$ tell about the phases in an eclipse of the sun, group 7 - about the sunlight. ${ }^{20}$ I. K. Fyedorova reads this text as follows; group 8 "came and took the yams", group 9 "came and ate the yams".21 I prefer the version of I. K. Fyedorova. It seems more probable, but, unfortunately, it finds no analogy in other sources and remains a hypothesis only.

We tried to find from other sources a text analogous in structure with the text on the tablet. In 1956 we suggested that the text contains a list of yam varieties, because each group ends with the glyph uhi "yams" (according to Metoro). So here we have a myth in which one of the heroes enumerates the sorts of yams growing in his garden. Only two of them are mentioned in the myth - hatuke and tarakura. A. Metraux gives the names of about 40 species of yams.

So the attempt to "unlock" these 10 locks ( 10 variable glyphs) with the help of even 40 keys (yam varieties known to us) does not help.

Later we returned to this text. The initial glyph is here hetu "a star", raa "a sun". The Rapanuians know the Matariki stars (Pleiades), literally "small eyes" (mata "an eye", riki "small") or "chiefs' eyes" (if the word Matariki was derived from mata ariki, as on the Island of Mangaia, the word ngariki was derived from nga ariki). The word mata has one more meaning: "a tribe". So we get a chain of related meanings: Matariki stars, mata "eyes", mata "a tribe". We may consider that the initial glyph mata is read here as "a tribe" and a list of them follows. In the text we find 10 groups of glyphs (Fig. 7) and 10 tribes inhabiting Easter Island: HitiUira, Hiru, Raa, Hamea, Marama, Haumoana, Ngatimo, Ngaure, Tupahotu, Koro-o-Rongo (Fig. 8). The task is to open 10 locks ( 10 variable glyphs x ) with the well-known 10 keys ( 10 tribe names).

According to Metoro, the glyph hiti means "a plant" in the second group (Tahua tablet) or ui "to look" (Leningrad Big tablet). The glyph in the third group is marama "a moon", vaka "a boat". The





Figure 5．Text on Tahua tablet．

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Figure 6．Text on 4 tablets：Tahua，Leningrad big one，Leningrad small one， chilean big one．

| $\begin{aligned} & 3 \text { HAKU } \\ & (\text { TAXYA) } \end{aligned}$ | TOAKOBAHLE Metopo | ЗोАак，выражаюощий название племени | Ytenue zhaxa （no Meropo） | पtenue amaka b enucke naemen | Mabzanue taememu |
| :---: | :---: | :---: | :---: | :---: | :---: |
| ¢0 | Ka ero ka tapamea | ＜3） | Ka tuu i te tonga | － | $\begin{gathered} \text { MuPy } \\ \text { (игAПAY-kDUBOHOCLe) } \end{gathered}$ |
| Sijo 作 | ma te tagata e hetu noho $i$ te here $i$ uhi tapamea | $\mathcal{S}$ | 8 Pmaitaki－hiti （ $A \cap A C$ ） | hiti <br> pacterye | Хити－уира |
| 图作 | $e$ hetuu mau ite rima kua noho te ma－ rama euhi tapamea | ） | D marama | marama <br> AYHA | Mapama |
|  | $e$ hetu mata $e$ hokohuki ko te nuahine | － | － | － | Tymaxoty |
|  | $i$ mamau $i$ te ahi e uhi tapamea | హొ | tangata yenober，Ar0AL | nga <br> YеAOBCK，Arogh | Hraype |
| Mos 色作 | ko te ahi hakaturoes si te henua | $\mathfrak{G}$ |  | $\begin{gathered} \text { moa } \\ K Y P H \Psi A \end{gathered}$ | Hratumo |
| 䟸佂 | ka puhi hovi ki te ahi ma te howohuri | $0 \pi$ | hale | hau Xибискус | Xaymoaha |
| MoN作 | ki te ahi e uhi tapamea | so | raa | $\begin{gathered} \text { raa } \\ \text { co^rye } \end{gathered}$ | PaA |
| Mis | ka puhi hovi ki te ahi ma te toga tu te tapamea | 05 | tonga <br> столь в хижнне | ha <br> hare－хижина | Xamea |
| 解作 | e tagata hakaga－ nagana e uhi tapamea． | 90\％ | － | Pohro | Kopo－o－Pohro |

Figure 7．Text on the Tahua tablet（tribes）．
glyph in the fourth group（except the Tahua tablet）is amo＂a stretcher＂， ＂to carry＂．We have already ascertained the glyph in the fifth group in the case of genealogies：it is nga＂a man＂．The glyph in the sixth group was determined on the Tahua tablet（the four scouts）as moa＂a hen＂．The glyph in the seventh group，according to Metoro，is hau＂a hibiscus＂

In the third group the Marama tribe is mentioned．In other groups the tribe names are given on the tablets only partly，not in full．The glyph hiti in the second group（Tahua tablet）tells the tribe name Hiti－Uira．On the Leningrad Big tablet another variable glyph，$u i$ ，in the second group tells the same tribe name Hiti－Uira．In the fifth group the glyph nga should be read as Ngaure．In the seventh group the glyph hau is from Haumoana．

So we have already＂unlocked＂four of the＂locks＂with four of the＂keys＂－we have read the tribe names Hiti－Uira，Marama， Ngaure and Haumoana，not interpreting them at will but accord－ ing to the＂Metoro readings＂and analysis of genealogies（nga＂a man＂）． These tribe names do not leave room for doubt in their reality or


Figure 8. Easter Island (tribes).
readings. Some six "locks" are left (groups 1, 4, 6, 8, 9, 10) and six "keys" (Miru, Tupahotu, Ngatimo, Hamea, Raa, Koro-o-Rongo).

The name of Ngatimo tribe consists of two parts: ngati "descendants" and $m o$ (maybe the name of some ancestor). The name Mo was not fixed in any sources. But the myth recorded how a chief, Moa, from the Tupahotu tribe married the daughter of a chief from Miru tribe, migrated from the Tupahotu territory to some other place and there founded a new tribe. ${ }^{22}$ It seems possible to get the tribe name Ngatimo as an abridgement of Ngati-Moa ("descendants of Moa"). And the glyph from the sixth group (moa "a hen", according to Metoro) then tells the name of NgatiMoa or Ngatimo tribe.

The glyph for a bird (maybe tavake "a phaeton bird") appears in the fourth group on the Tahua tablet. Hotu-Matua had another name, Nga Tavake. It comes from the myth: "The land was left where Teavaka landed. Ariki Hotu-Matua landed and settled there." ${ }^{23}$ It also comes from the names of the four scouts posing as sons of Hotu-Matua and including his second name, Tavake, in their personal names: Kuukuu-a-Huatava, Ringiringi-a-Huatava, Nonoma-a-Huatava, Ure-a-Huatava, ${ }^{24}$ hua being "a son" and Tava a shortened Tavake. The glyph in the fourth group on the Tahua tablet is apparently read as Hotu and tells the tribe name of Tupahotu.

Metoro interpreted the glyph in the fourth group on the three remaining tablets as amo (in Rapanuian and Tahitian it means "to carry"). There is another Rapanuian word with the same meaning - tupa (in Tahitian the word tupa does not mean "to carry"). The difference between amo and tupa is that amo means "to carry on the ends of a pole" and tupa is "to carry on a stretcher with the load placed in the middle". The glyph in the fourth group testifies to the load placed in the middle. Thus we should consider this glyph as tupa and read the text here as Tupahotu.

It would be logical to suppose that the list of tribes on the tablets would start with the name of the most powerful tribe - this was the Miru tribe. The glyph "legs" in the first group probably indicates that the members of this tribe were imputed to have weak legs (they were even nick-named ngapau "bow-legged").

Now three "unlocked" puzzles (groups 8, 9 and 10) and three keys (Raa, Hamea, Koro-o-Rongo) remain untouched.

So far in analysing texts from the four tablets, we have not crossed the limits of Easter Island. But in order to understand the meaning of the twoheaded figure (group 10), we have to take a broader look. The meaning of moai-aringa figures on Easter Island is not yet ascertained. On Tahiti and Hawai'i similar images portrayed a deity. The chief deity there was Rongo, and so we shall interpret the variable glyph in the tenth group as Rongo, enlisting as an exception the materials from other Polynesian Islands. This glyph would then give the tribe name Koro-o-Rongo.

The name of the Raa tribe is apparently told by the eighth group. The variable glyph in the ninth group was interpreted by Metoro as tonga "a central post in the dwelling". We could not see any connections between the glyph (tonga) and the tribe name (Hamea). One of the ten "locks" remains locked and the last "key" (Hamea) does not open it.

There are some vague gaps in the analysed text from the four tablets. We did not find the meaning of the glyph of the raised hand (groups $3,4,5,7$ ). It may tell about the temporary tribal union including Tupahotu, Marama, Ngaure, Raa tribes. But other evidences name the HotuIti union of tribes Tupahotu, Hiti-Uira, Ngaure, Koro-o-Rongo. As R. Williamson notes, quite rightly, the structure of these two unions could hardly be constant. ${ }^{25}$ Tradition tells how the Harama tribe used to make war against the Miru tribe; part of the Hiti-Uira tribe had been included in the Tuu union of tribes and fought against Hotu-Iti. ${ }^{66}$ Perhaps the text on the four tablets will confirm the supposition of R. Williamson about the inconstant structure of the unions of the tribes Tuu and Hotu-Iti.

In conclusion we would like to note that the old question of
whether kohau rongorongo is a mnemonic means or a phonetic script was put in the wrong way: not "either", but both are possible at the same time. Even phonetic (syllabic) glyphs may prove to be mnemonic means. Indeed, what is the glyph nga telling the tribe name Ngaure? In one aspect it is a syllabic glyph -nga, in the other it is a mnemonic means reminiscent of the word Ngaure. The same applies to glyphs hiti (reminiscent of the word Hiti-Uira), ui (the same word), hau (the word Hau-Moana), tupa (the word Tupahotu), etc.

Unfortunately only few of the tablets have been preserved (not more than 20). The folklore records are compratively few and sometimes of poor quality (the Rapanuian version was not recorded in many cases), or the translation was wrong. The Rapanuian language has so far received insufficient study. All this makes the decipherment of kohau rongorongo much more difficult.

## Notes

1. Te Rangi Hiroa 1938: 236.
2. Федорова И.К. Исследование рапануйских текстов. - В сб.: Эабытые системы письма. М., 1982, с. 32, 39.
3. Barthel 1958:335.
4. Routledge 1919: 302.
5. Metraux 1940: 399, 403.
6. Routledge 1919: 252.
7. Englert 1970: 76; Routledge 1919: 302; Metraux 1940: 404.
8. Nevermann 1947: 22.
9. Barthel 1963:374.
10. Кудрявцев Б.Г. Письменность острова Пасхи. -Сб. МАЗ, т. II, 1949.
11. Федорова И.К. Мифы, предания и легенды острова Пасхи, М., 1978.
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13. Metraux 1957: 189.
14. Бутинов Н.А. и Кнорозов Ю.В. Ук.соч., с. 87.
15. Федорова И.К. Мифы, предания и легенды ..., с. 346 .
16. Barthel 1958: 186.
17. Федорова И.К. Мифы, предания и легенды .... с. 94-98.
18. Metraux 1940: 228.
19. Guy 1985: 373.
20. Barthel 1958: 242.
21. Федорова И.К. Исследование рапануйсних теистов, с. 41 .
22. Федорова И.К. Мифы, предания и легенды, с. 134-136, 143.
23. Там же, с. 89.
24. Там же, с. 92.
25. Williamson 1924: 409.
26. Федорова И.К. Мифы, предания и легенды, с. 175, 194, 246, 248.

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[^1]:    * During the symposium in 1987, when this paper was originally given, artefacts from the Leningrad Museum of Anthropology and Ethnography were displayed in an exhibition in Helsinki. (Eds.)

