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I The

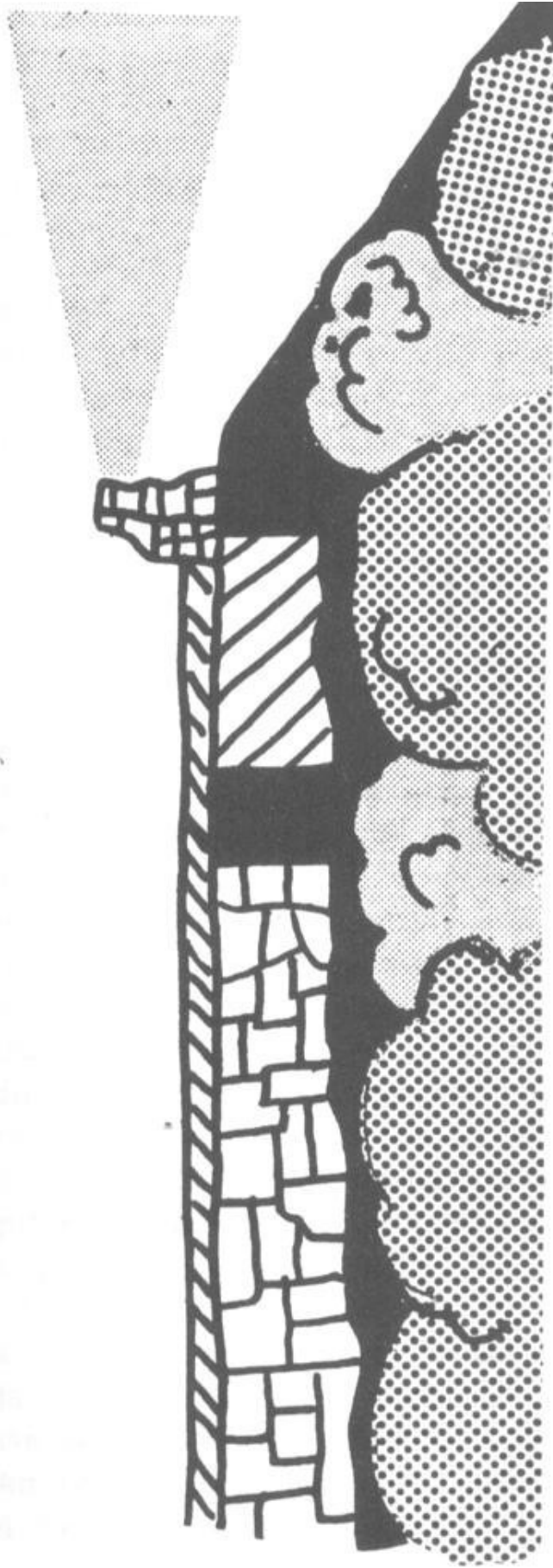
Fortress of King Ipir 1. The white king of Amambay "At that time, a powerful and wise king named Ipir ruled the region. He was white and had a long blond beard. He lived with men of his race and Indian warriors loyal to him in a large village on top of a hill. He had formidable weapons and possessed immense riches in gold and silver. One day, however, he was attacked by savage tribes and disappeared forever. This is how my father told it to me, who had heard it from his father. In these terms or in very similar ones, Major Samaniego had often heard some old Indian speak to him, in his guttural Guaraní, of the white king of Amambay. This brilliant young Paraguayan army officer, passionate about ethnology, did not get bored during the long hours of free time left to him by the routine service of his sapper battalion in a then unpopulated border province. Every night, in some tented settlement, he recorded on magnetic tapes the endless stories of the elders whose friendship he had managed to win. In this way, he helped to save from oblivion traditions that would soon be erased from the memory of future generations, and ancestral beliefs doomed to disappear under the veneer of vague imported Christianity. These traditions and beliefs were common, in essence, to all the Guaraní tribes of Paraguay, Bolivia and Brazil, with the addition, as a local peculiarity, of the memory of an unexpected white king. Major Samaniego knew that indigenous traditions can distort historical facts, but they never invent them. Who, then, could this Ipir have been, whose name has nothing to do with the Guaraní? The problem arose, but there was no reasonable expectation that it could be solved. Some, however, must have known what to expect in this regard, and one even has the right to wonder if it is not a state secret that has been forgotten today. On 1 March 1870, Marshal Francisco Solano López, president of Paraguay, fought his last battle. For five years, he had kept the allied forces of Brazil, Argentina and Uruguay in check, but the end was near. Slowly, metre by metre, he had been retreating towards the northeast and now found himself in Cerro Cora, in Amambay, 32 km from the Brazilian border. In a country that had 1,200,000 inhabitants at the beginning of the war, only 28,000 men—over the age of twelve—fit to bear arms. That morning, the marshal had donned his full dress uniform for a final baroud ii'honneur. He had just seen his eldest son, a sixteen-year-old colonel, fall in battle. Surrounded by the Brazilians, he stood his ground, without retreating a single step. A lance throw unseated him, another finished him off as he continued to defend himself with his gold-hilted parade sword. "I die with my country" were his last words, as reproduced in all the history books of Paraguay. But tradition adds a seemingly meaningless phrase, which, perhaps for this reason, the books omit: "This is not the first civilisation to disappear in this place." By retreating to Brazil instead of making his way to neutral Bolivia, thus giving up all hope of escaping his fate, did the marshal want not only to die with his last soldiers, but also to fall in that precise place, whose symbolic value he knew? We have the right to ask ourselves this question. Ipir and López were certainly absent from the thoughts of a German engineer who, in February 1940, crossed the avenue that serves as the border between the twin cities of Ponta Pora in Brazil and Pedro Juan Caballero in Paraguay, a few dozen kilometres from Cerro Cora. A native of the Sudels, Fritz Berger had been wandering around South America for years without settling anywhere. He had been seen in Asunción during the Chaco War from 1932 to 1935, where he had rendered good and loyal service to the Paraguayan army in a workshop where weapons taken from the enemy were reconditioned. He then went to Brazil, where for four years he tried in vain to locate oil deposits in the state of Paraná. His geological knowledge, it seems, was extremely limited, which is not unusual for a mechanical engineer. Nevertheless, he planned to continue his search in Paraguay. But very soon, he made some discoveries of a different nature, which greatly interested Major Samaniego, to the point that he obtained the army's approval to create the Geological and Archaeological Association, better known by the acronym AGA, which hired Fritz Berger. From 1941 to 1944, the AGA worked hard and effectively. Not only did its leader, Major Samaniego, and the German engineer travel throughout the region and discover inscriptions and drawings that could not be attributed to the Indians, as well as numerous other vestiges of a vanished civilisation, but its sappers also almost completely dismantled an enormous hill on top of which stood an imposing wall. No one in Paraguay, however, gave the slightest importance to the results obtained. On the other hand, the international press was not very interested in what might happen in a small South American country: the Second World War provided it with more information than it could publish. In 1945, the AGA was dissolved. Discouraged and ill, Fritz Berger remained in Amambay with the army until the civil war of 1947. He then moved to Brazil, where he died the following year in Dourados, at the home of an old friend and fellow countryman. Sceptics questioned our engineer's mental stability, and it must be said that they had good reason to do so. Among other things, Berger was searching for the "treasure of the White King", while suspecting at times that the Jesuits had found it before him. On the other hand, he became increasingly delusional as the years of a very hard life in the rainforest passed for a European in his fifties. Was he not seeing, in a state close to hallucination, palaces and temples hidden beneath the trees, where clearly there were only rocks of somewhat strange shapes? Berger himself realised that something was wrong with his brain, and wrote about it to a friend in Munich with whom he corresponded.

spaced out but continuous. A reader from Germany kindly sent us the text of some of these letters. We must admit that, had we received these documents before our first expedition to Cerro Cora, and not after the third, as was the case, we would not have left without some concern. Didn't our improvised archaeologist claim to have discovered a city, Atlantik, "50 km in diameter and 150 km long", a "grand Phoenician installation", "large deposits of helium and oil, with pipelines still usable", and "monuments that appear to be a cathedral and large palaces"? He was certain that Noah had lived in the region. But he added: "Tonight, I was awakened by loud cries. There was no one there. Was it an oscillation, or did it all happen in my head? One of these days, people will say, 'The engineer is crazy, you know.'" Let us admit that such a judgement would not have been far from the truth. Needless to say, we found neither helium deposits, nor grandiose buildings, nor the ruins of an Atlantis in the places explored by Berger, which our engineer, who was not very cultured according to those who knew him, wanted to make the capital of Atlantis. The "madman," however, had not wasted his time. For years, day after day, he had explored, not without venturing beyond from time to time, a relatively small area, and nothing in the sector must have escaped him. When, a few months before our first expedition to Amambay, former Major Samaniego, now a Major General and Minister of National Defence, deigned, in the course of a long audience, to give us precise and prudent information about the archaeological sites discovered more than thirty years earlier, he insisted on the role played at that time by Fritz Berger. For our part, the existence of pre-Columbian remains in Amambay came as no surprise to us. Years earlier, we had demonstrated that Vikings from Schleswig had conquered a vast empire in South America in the Middle Ages (1), that we had discovered runic inscriptions left by them in Paraguay (2) and Brazil (3), and that we had even found their descendants (2, 4). In 1973, two of our collaborators — we will discuss this at length in Chapter IV — had surveyed Cerro Guazú, a small mountain range located 50 km as the crow flies from Cerro Cora, the largest runic complex in the world, and sixty-one of its inscriptions had already been translated. We could therefore expect new discoveries—or rediscoveries—in the region. On the other hand, the name of the white king was highly significant to us. Not only, as we have already said, does Ipir have no meaning in Guaraní, but it is foreign to the structure of a language whose words, with a few exceptions that do not include any cases in *ir*, end in a vowel. On the contrary, it has a Norse consonance: suffice it to compare it with Ymir, the name of the giant whose body the gods Odin, Vili and Ve used to make the earth in Scandinavian mythology.

2. The Cerro Cora Wall When, about 500 km from Asunción, along the good paved road that has connected Coronel Oviedo with Pedro Juan Caballero since 1969 (see map fig. 1), and 32 km before the latter city, you cross the Aceite stream, a small passable road leads to the place where Marshal López died, on the banks of the Aquidabán-Nigui stream, an indirect tributary of the Aquidabán River. This leads into a national park guarded by an army detachment, thanks to which the area has retained its natural appearance. All around, the large, centuries-old trees were cut down without the slightest consideration, and of the beautiful tropical forest of yesteryear, almost nothing remains, except in the vicinity of the hills, except for a dense, low forest, dotted with stunted trees, where fires wreak havoc when the dry season arrives, now that the tall species are no longer there to maintain the protective humidity. We are in Cerro Cora, a Cerco de Cerros (this is the meaning of the Spanish-Guaraní name), which forms an almost perfect circle with a diameter of about 5 km. Of the dozen hills that make it up, only one is located north of the Aquidabán that cuts through it. This one is of no interest to us, nor are those to the west. The five to the east, on the other hand, deserve our attention. From south to north: Cerro Tupa (Cerro-Dios), also known today as Cerro Aceite; the three hills collectively called Ñemoñanga (the Family): Tuja Og (the Old Man's House), Guaive Og (the Old Woman's House) and Guyracu Amba, a name whose meaning is not entirely clear to us, and not only to us, since almost everyone calls this hill "Alambi-

Ten months earlier. Let's look at the results obtained. To the northeast of Cerro Cora stands Cerro Itaguambypé, or Cerro del Murallón: about two kilometres long and around one hundred metres high above the plain that forms the interior of the enclosure to the west. A valley about five hundred metres wide and approximately fifty metres deep separates it from another hill that runs parallel to it. We are only giving estimated dimensions here, since in order to take exact measurements, which are otherwise of no interest to our work, we would have had to cut paths through the jungle, which we were not in a position to do. Seen from the plain, the hill does not differ much from its neighbours, apart from Guyracu Amba, which is a truncated peak. Its wooded western flank rises gently to the foot of a rocky wall. But its summit, at least to the south, is neither a plateau nor a rounded ridge. There, the "rock" forms a narrow ridge whose two parallel sides rise vertically five to ten metres, depending on the sector, above the slopes of the hill. The ridge in question, three metres wide and somewhat reduced in some sections by landslides, is flat and forms a usable path. It extends for about three hundred metres — again, we did not take exact measurements — following the irregular summit of the hill in a north-south direction (cf. sketch, fig. 2), cut in the centre by an opening of about ten metres, corresponding to a twenty-metre gap between the two sections it separates (cf. sketch, fig. 3). At the southern end of the hill, it reaches a platform five metres above the path (photo 1), which seems to have been round in its time: a kind of tower from which one has a panoramic view of the entire surrounding region. For the Indians, the whole complex was an itaguambypé, a fortress. The Indians were right, even more so than they could have imagined. For it is a wall built by human hands. Its base is natural throughout. But its slopes have different characteristics that allow them to be divided into three groups. Some are nothing more than rock walls, almost vertical, but irregular; others are also rock, but carved vertically; and others, which are the most numerous, are built with blocks of stone of unequal dimensions, perfectly fitted together, forming absolutely smooth walls (photo 2), at least when they were not disarticulated by tree roots, which in some places caused displacement and even collapse (photo 3). Are our conclusions certain? Could it simply be a natural rock wall, despite appearances? In a case like this, it is appropriate to play devil's advocate. With regard to the vertically carved slopes, we consulted a geologist who was categorical: a phenomenon of this kind can only be the work of nature if it involves hard rock subjected to the action of glaciers. However, we have relatively soft sandstone here, and the region has never experienced a glacial period.

FIG. 2—Croquis de la muralla de la fortaleza de Cerro Corá.
Perfil.



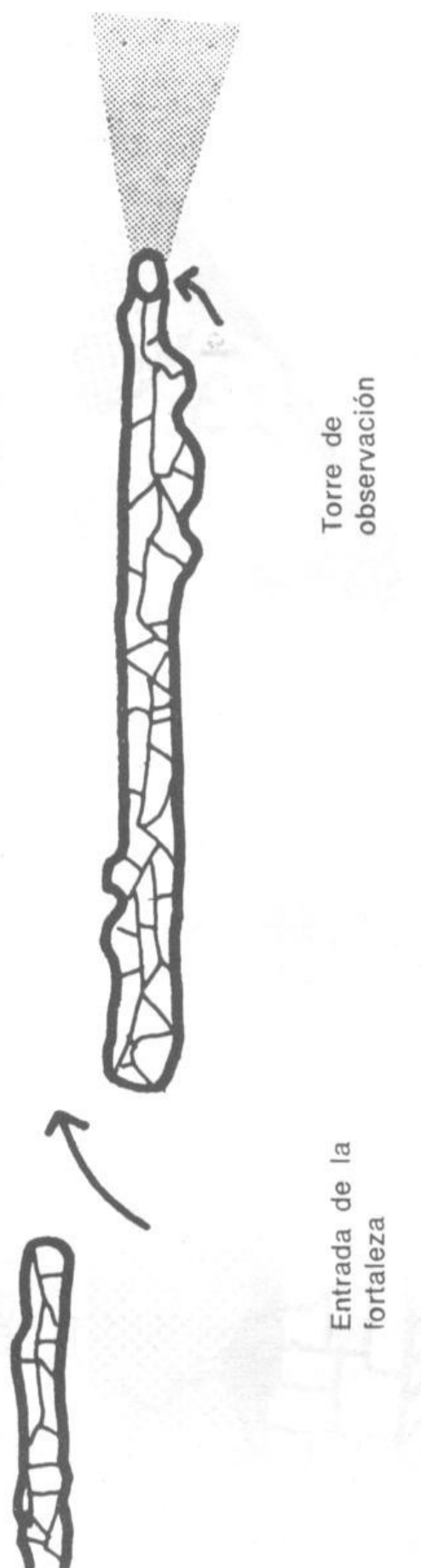
Roca natural



Roca vertical
 alisada

Vista sobre Cerro
 Corá y el camino de
 Weibingo al Atlántico

FIG. 3 – Croquis de la muralla de la fortaleza de Cerro Corá.
Extensión.



The sections made of blocks raise even fewer doubts, if possible. No geological movement could have broken the rock with such geometric precision, nor systematically carved sharp edges, nor respected the horizontal and vertical alignment of the blocks that it would have produced. Moreover, the wall, in the sections in question, has exactly the same appearance as the pre-Inca buildings of Peru and Bolivia, in which the irregularity of the carved stones constitutes a defence against earthquakes: each one responds in its own way to seismic force; the whole thus manifests a certain flexibility that it would be impossible to achieve with a rigid structure. Peru and Bolivia, in which the irregularity of the carved stones constitutes a defence against earthquakes: each responds in its own way to seismic force; the whole thus exhibits a certain flexibility that prevents it from collapsing, as would sometimes happen if all the aligned stones were to move with the same movement or if, being smaller, they were less fixed to each other by their own force of inertia. This method of construction is, in itself, incomprehensible in Paraguay, where there are and never have been earthquakes of any significant magnitude. Therefore, it could not have been invented there. The Guaraní Indians, on the other hand, were unfamiliar with carved stone before their incorporation into the Jesuit missions, and the Jesuits, whose architecture is well known and who used a technique completely different from the one just described, never settled in Cerro Cora. One conclusion is therefore obvious: the builders of Itaguambypé,

or their ancestors had come from another region. Where and when? Clearly, from the Andean highlands, the only place in the world where walls of uneven blocks had ever been built, and before the founding of the Inca Empire, since the technique had been lost after the conquest of Tiahuanacu by the Araucanians of Kari around 1290 (1). This double deduction is not surprising: we know (2) that some Vikings who escaped the massacre on the Island of the Sun had taken refuge in the Paraguayan jungle where, earlier, in Peaviru, the "Soft Road" that led from Lake Titicaca to the Atlantic, there were forts whose indigenous garrisons were commanded by white officers. Our last doubts about the nature of the wall disappeared during our third expedition. On the one hand, Professor Pistilli, who is an engineer, confirmed after a thorough examination that it was indeed a construction. On the other hand, we discovered a small inscription (•fig. 4), clearly



FIG. 4 – *La pequeña inscripción rúnica, incomprensible, de la fortaleza de Cerro Corá.*

runic, which had escaped our attention during our previous investigations. Unfortunately, its poor state of preservation made it impossible to translate or even transliterate it with any degree of certainty. It remains to be seen why the Vikings who took refuge in Amambay built the enormous wall we have just described there. Located on top of a hill, it could not have served as a "Great Wall of China" or a Danevirke, designed to prevent the enemy from accessing a certain territory. The "tower" at the southern end was a magnificent observation platform and could only have been used to detect troop movements: if it had been a place of worship, it would have been isolated, whereas it is part of a much larger complex whose sole purpose could only have been military. During our first expedition to Cerro Cora, we thought we had spotted the remains of a similar construction on the top of the hill parallel to the one we are interested in. We therefore concluded that the wall formed one side of a huge fortified enclosure, similar to Danish military camps. We were wrong. The survey carried out in 1976 showed that there were only rocks opposite and that our wall was the only one of its kind. So, do we have to give up our interpretation? Certainly not. Two hypotheses, which nothing will ever confirm or disprove, and between which no data allows us to choose with any degree of certainty, are in fact capable of explaining the presence of this apparently useless wall. The first is that it was a fortress whose construction had been interrupted. In this case, the Vikings would have taken advantage of the hill's privileged location and geological configuration to build an observation "tower" and then the wall, which was partly natural and required only minimal work, at least for them, who had an abundant indigenous workforce at their disposal. For one reason or another — the destruction of the Tiahuanacu empire, which put an end to the construction of the capital itself, if the work predates 1290; the harassment of the Amambay refugees by hostile Indians, or their own decline, if it is later — they would later have abandoned their project. The other hypothesis is that the wall constituted one side of a fortified enclosure whose other three sides were built with stakes, a procedure that was familiar to both the Vikings and—we have testimony to this effect from the chronicler Ulrich Schmidel (4) when he describes, in the 16th century, the village of the Carians that bore the Germanic name of Froenirtiere¹— the Indians of Paraguay. In both cases, the stronghold, in addition to its function as an observation platform, would have been intended to serve as a place of refuge for the whites and their Indian allies in case of attack. Today, there is no water in the hills or in the valley they covered, but perhaps the situation was different seven or eight hundred years ago and, in any case, the Aquidabán River is very close by.

3. The "Old Man's House" South of Itaguambypé, as we have already mentioned, three hills form the eastern arc of Cerro Cora. The third, Tuja Og, is an important mambla, about 150 metres high, whose summit consists of a plateau that slopes gently southwards. At its highest point, there is a small rocky platform, devoid of any vegetation, on whose ground four figures are engraved. The first, a cross whose equal arms branch into three terminal branches (fig. 5), is a drawing

¹ From the Norse froenir, nominative plural of froeno, belonging to the Lord, common good, and ajara, tar, whose Indo-European root dru or drew gave triu in Gothic and tree in English, with the meaning of carbon. The name of the village would thus mean "Good of the Lord-forest, Common Forest".

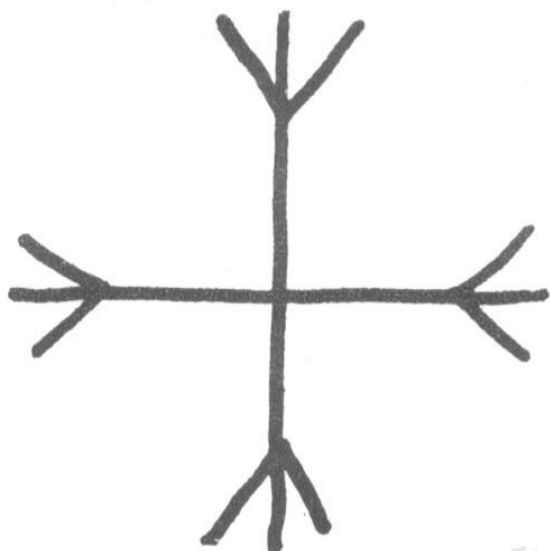


FIG. 5 – *La cruz paté del Tuja Og.*

purely European symbol that was related to the various crosses of the Middle Ages, derived from the sacred tree of the Germanic peoples, the Irminsul. The Indians often drew three-toed "ostrich footprints," but always in isolation. The second has a geometric Y shape

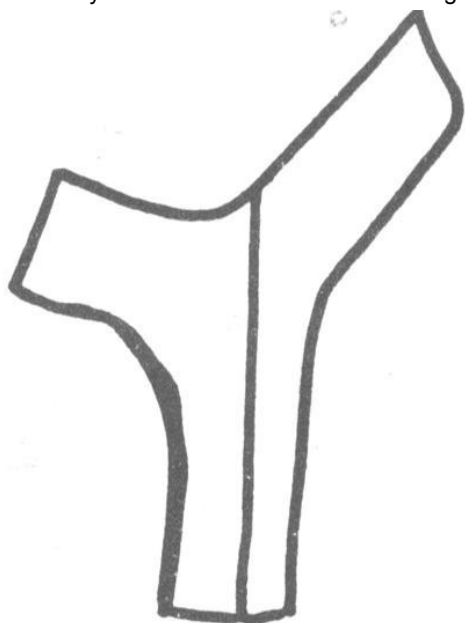


FIG. 6 – *Figura geométrica del Tuja Og.*

(fig. 6)

whose meaning escapes us but which cannot, in any case, be of indigenous origin. The third seems to be the image of some fabulous bird (fig. 7). The fourth, finally, is more familiar to us (joto 4): it is a compass rose, perfectly oriented, which attests to the considerable geographical knowledge of its author, whether or not he knew the compass. The existence of these drawings had been pointed out to us by General Samaniego. Lieutenant Colonel Escobar and Sergeant López, for their part, had told us at the end of our first expedition about a cave in Tuja Og whose walls were covered with inscriptions but whose entrance had been blocked at some unknown point in time by a landslide.

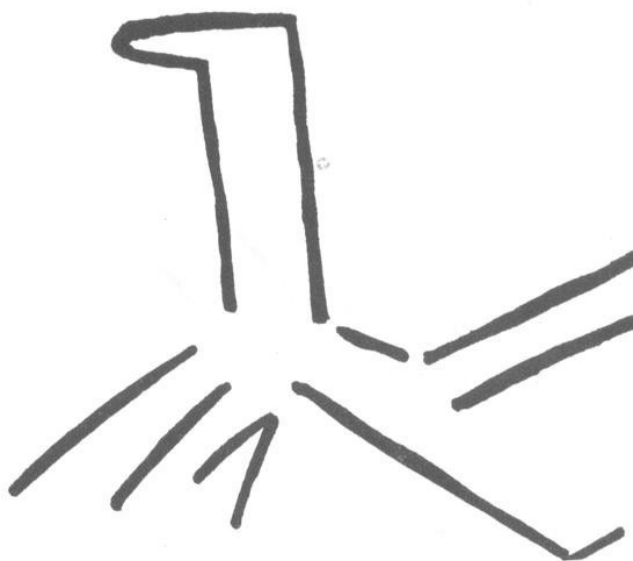


FIG. 7 – *El pájaro fabuloso del Tuja Og.*

by the explosion—we see a well-known sign (fig. 9): the double



FIG. 9 – *Doble runa de la muerte en el friso del abrigo bajo roca del Tuja Og.*

runa de la muerte de la epigrafía germánica, que se encuentra tanto en los litogramas escandinavos de la Edad del Bronce como en los litoglifos continentales de la Edad Media. De sus otros dos motivos, uno nos es desconocido y su significado se nos escapa. El de la derecha (fig. 10).



FIG. 10 – *El tridente de Fosite en el friso del abrigo bajo roca del Tuja Og.*

28

which we had already found in Sete Cidades (3), in north-eastern Brazil, resembles, although it lacks the handle, Poseidon's trident, the Fosite of the Frisians. Now, the latter, settled along the coasts of the North Sea, maintained close contacts with their neighbours in Schleswig, from whom they were not always clearly distinguishable. The sign in question is found again on the last stone in the group (photo 6), topped by six runes, the first of which is isolated while the remaining five are linked in two groups of two and three, respectively. This lithoglyph has a strange appearance that links it to one of the ideograms previously found in the "treasure urn" of Cerro Morotí (2). It differs from it, however, in that it constitutes an alphabetical series whose transliteration gives: aukoss The whole is untranslatable because it is incomplete. The first rune appears, in fact, on the edge of the break in the stone, and it is very likely that others preceded it. After the last one, almost completely erased traces can be guessed at, which must belong to other characters. Nevertheless, what remains of the inscription gives us two comprehensible Norse words: auk, from aukz, offspring, descendant; oss, us. We know that auki was the title given to the sons of the Inca before their marriage (1). Finally, there is a twelfth stone, made of harder and lighter sandstone, which did not belong to the frieze.



FIG. 11 – *El tridente de Fosite en una piedra dura extraída de los escombros en el abrigo bajo roca del Tuja Og.*

29

It bears a single motif (fig. 11), clearly related to the one we have already encountered twice: a kind of trident without a handle. Let us complete this analysis of the inscriptions at Cerro Cora by mentioning the strange "coat of arms" seen on the western flank of Cerro Tupa, 2 km south of Tuja Og. It is a square measuring about 10 m on each side, whose bare stone stands out amid the surrounding vegetation. It is divided into four "cantons" by a cross, deeply engraved in the rock, although we cannot say whether it is natural or artificial. In the canton to the right of the chief—that is, at the top left from the observer's point of view—six lines of engraved characters are clearly visible, although they have been severely damaged by erosion. The first line contains only four legible runes (fig. 12), which make no sense to us. The third



FIG. 12 – El “escudo” del Cerro Tupä: las cuatro letras runicas de la hilera superior.

(fig. 12) is

not unlike one of the hieroglyphs of Cerro Cora (2), and even the drawing, easily identifiable, discovered by Hampa in northeastern Brazil (3). However, everything we have just said must be taken with the utmost caution, as we were only able to survey the "shield" with binoculars and a telephoto lens. As for the other lines, they are completely illegible: they are more guessed at than seen.

4. The warriors' bath -

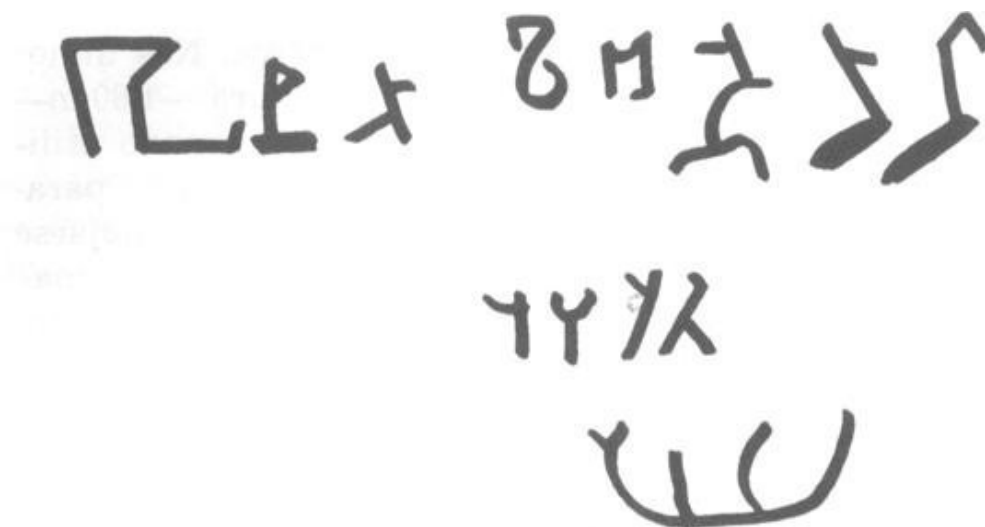


FIG. 13 – El “escudo” del Cerro Tupä: grandes caracteres runoides.

South of Cerro Itaguambypé—Cerro del Murión—is the source of a small stream mentioned above, the Aquidabán-Nigui, which first flows northward and then curves widely to join the Aceite stream, a tributary of the Aquidabán, below Cerro Cora. A few hundred metres from the cross marking the spot where Marshal López died, the stream breaks into a waterfall at the foot of which a natural pool has formed, with a sandy bottom and calm, clear water that invites bathing. The military detachment personnel often use it. This idyllic spot is accessed by a path that leads to the top of the waterfall, which is only partially covered by water, at least during the dry season. Next to the stream, the rock dominates, from a height of just over three metres, a charming little beach on the banks of the pool, which is the only access route. We were not surprised, then, to find four steps carved into the wall, at least one of which was particularly well preserved, with sharp edges that could only have been carved with the help of a metal tool. Things would have ended there if we hadn't wanted to take the opportunity to take a dip in the cool water. As we descended, we realised that, despite our height (1.80 m) and long legs, we found it uncomfortable to use the steps, which were too far apart. A Paraguayan soldier who was 1.60 m tall and accompanying us had to slide down from step to step, holding on with his hands. The climb was a real challenge for him and required an unusual amount of effort on our part. There is 85 cm between the ground and the first step of the waterfall, 65 between the first and second, 60 between the second and third, and 90 between the third and fourth. This means that these steps were carved by men over 1.80 m tall, thus excluding both Paraguayans and Spaniards, not to mention the Guaraní, who did not have metal tools. No one would have spaced the steps in such a way as to make them difficult or impossible to use. Everything therefore suggests that the Aquidabán-Nigui staircase is the work of the Vikings. We have a very precise indication of the height of the latter: their Guayaki descendants owe their average height—in males—of 1.57 m to degenerative dwarfism, but they have the head and genitalia of men measuring 1.90 m or more (2). The soldiers of Cerro Itaguambypé, then, used the natural pool to bathe, as those of Cerro Cora do today. Nothing could be more natural. This conclusion is reinforced by the existence, on the bank of the stream and at the height of the waterfall's drop, of a wall parallel to the access path. It is a rock measuring 16.80 m long by 1.90 m wide.

maximum width of m, whose highest point is currently 1.43 m above the ground. The wall facing the path is made of vertical, continuous planes, perfectly smooth and clearly man-made.

Why? The answer to this question is provided by a pile of stones that can still be seen among the trees, just behind the wall. These uncut blocks weigh between 10 and 20 kg and can therefore be easily transported. They are of the type that the Vikings, as we shall see in Chapter III, used to build the walls of some of their buildings. The sandstone they are made of is redder than the surrounding rocks, which tend towards grey: they were brought here. It follows from all this that the Aquidabán-Nigui wall must have served as the foundation for one of the walls of a building overlooking the waterfall. What was this building used for? It was certainly not a changing room, as the Vikings were not ashamed of their bodies. We see two possible explanations, which, moreover, are not mutually exclusive. The first is that the building in question was a guard post, a fort designed to protect the bathers, who were obviously unarmed. The second is that it was a sauna. We know that the Vikings had preserved the custom of this unique steam bath in America, since the Indians of Mexico had adopted it in every detail ('). It would therefore not be surprising to find it in Paraguay. 5. **A Viking military centre** Our previous campaigns had enabled us to identify, in the Sierra de Yvytyruzú (2), a Viking monument whose runic inscriptions were significant, as they indicated directions to follow. It was a post station located at a crossroads in Peaviru, a mere staging post, like the tampu of the Inca and pre-Inca Royal Roads, which also served as a place of worship. The buildings that must have stood there disappeared under the jungle. All that remains is a large, barely worked rock with the 'signpost' and some engraved drawings, including a magnificent image of Odin, the Sun God. As for the village of Cerro Morotí (2), where we had carried out excavations that allowed us to discover fragments of pottery with runic inscriptions, all we know about it is that it was destroyed in 1626 by the Guayakies, descendants of the Vikings, who lived there. We do not know whether it was an important town before the destruction of the Tiahuanacu empire around 1290, or whether it was founded later by refugees. The second hypothesis is the most likely, as we found no traces of stone buildings at the site. Cerro Cora offers us a completely different picture. A fortress, especially one with a wall three hundred metres long, implies a large garrison, likely established in a hostile region and, in any case, intended to protect a point of special importance. There, as in all the eastern parts of their empire, the Vikings must have employed Guaraní auxiliaries: not soldiers, but warriors who, in times of peace, lived in their villages according to their ancestral customs and, in times of war, were grouped into militias led by white officers. The fortified enclosure must therefore have served as a place of retreat for the families of the combatants, which would explain its size, but it also constituted a solid bastion from which it was possible to control both the Cerco de Cerros to the west and the region to the east and south-east, extending as far as the Ypané River and perhaps beyond. It is no coincidence, then, that south of Itaguambypé, on the other side of the pass crossed today by the two roads that run from Cerro Cora, one to the east and the other to the south, we see the traces left by the Vikings in Tuja Og. The observation and, probably, worship platform located at the top of that hill, with its perfectly oriented compass rose, not to mention the pattée cross and the geometric design of unknown meaning engraved on its floor, is opposite the "tower" of the wall. The identity of those who used it leaves no room for doubt: the incomplete but intelligible runic inscription found on one of the fragments of the frieze that adorned the rock shelter a few metres below would suffice to define it. Nor is it by chance that the Cerro-Dios, which dominated the southern road a few kilometres away, the southern road, bears on its eastern flank a "coat of arms" in which, despite the ravages of erosion, runic and runoid characters can still be seen, and even a silhouette of a ship that we have already found in Paraguay and Brazil in a Viking context. The wall of a fortress built in the style of the pre-Inca buildings of the Andean Altiplano where the Danes had their capital, the runic and runoid inscriptions of Tuja Og and Cerro Tupa, and also some steps, in the stone of a waterfall, which were carved with a metal instrument and could only be used by men of very tall stature: This is certainly enough to establish that Cerro Cora was a military centre located in a strategic location. It remains to be seen what its purpose was. //

The untouched necropolis 1. A strange hill The year was 1940. During one of his regular horse rides in the jungle, Fritz Berger had just forded the Ypané River, about 10 km south-southeast of Cerro Cora as the crow flies, and about 30 km along the old roads he had taken (cf. map, fig. 73). Before him stretched a potrero, as it is improperly called in the region, a natural plain surrounded by hills, at the edge of which stood a small hill. The Indians had told him that this was the dwelling place of King Ipir. The hill in question appears to be nothing more than a large rock about forty metres high (photo 7), made up of two ridges and covered halfway up, like all the hills in Amambay, with dense vegetation. The indigenous people, the only inhabitants of the region at that time, called it Yvyty Pero, or Cerro Pelado in Guaraní: the same name given today in Spanish to another rock located in the Sierra de Yvytyruzú, 500 km further south, at the foot of which we found splendid runic inscriptions (2). We do not know exactly what Don Federico —as he was called— saw in Yvyty Pero. We do know that he returned from there convinced that the hill was a burial mound containing a real underground palace, built around the burial chamber of the White King. His observations must have been quite accurate and his arguments quite solid for the AGA to send a detachment and set up a permanent camp with wooden houses on the banks of a small stream, a few dozen metres from the hill. Major Samaniego had decided to open up the hill, now renamed Ipir. Where to attack? Fritz Berger had an instrument that we were unable to identify but that two reliable witnesses—an officer and a non-commissioned officer who served in the AGA at the time—described to us: it looked like a theodolite topped with a large "clock" and allowed metals to be detected and differentiated. Now, in the hollow that separates the two ridges of the hill, there was a square-shaped pit, several metres deep, at the bottom of which the device indicated the presence of gold. The soldiers began to dig. At first, it was easy: a conglomerate of soft earth and stones was removed without much difficulty. They found two man-made objects: first, a triangular piece of gold that 'looked like the broken corner of a table'; then, a staff topped with a hand made of the same metal. Shortly afterwards, they came across the sandstone that makes up the hill. Dynamite had to be brought in from Asunción. In the meantime, the pit had filled with rainwater. A pump was brought in after a few weeks. By the end of 1941, the excavation had reached a depth of 18 metres. It was impossible to obtain the necessary explosives, which were normally imported from Germany and the United States, countries at war. The work had to be interrupted. It resumed at the end of 1942, this time with a small pneumatic drill. On the side of the hill, there was

He dug a second shaft, slanted and open to the sky, which joined the first at the point where it had been abandoned, in order to facilitate ventilation. At a depth of 23 metres—calculated vertically—that is, at the level of the base of the hill, the soldiers came across a kind of slab that proved impossible to break. The machine's wicks broke one after another, and the explosives, unable to drill holes in the mine, failed to even scratch the surface of what Berger considered to be the "roof" of the palace. Our witnesses assured us that it was undoubtedly an artificial material, similar to cement but harder. A third attempt, in 1944, was made at the base of the hill. At a height of about 10 metres, another square-section shaft opened up on the side of the hill. On the back wall, an inscription, whose characters, damaged by erosion, did not seem to belong to the Latin alphabet, caught our attention. This vertical trench was deepened. In this case too, the slab blocked further progress. Various events led to the work being abandoned for good. All that remained of three years of effort were increasingly vague memories. The gold objects found during the excavations have disappeared, as have the pieces mentioned by Fritz Berger in a 1941 letter to his friend in Munich: a "14 x 10 cm plaque — stone or metal — shining like a diamond"; several representations of heads, some amphorae, some artefacts, "all of high artistic value", some mixed with the rubble and others "displayed as in a museum"; the image, buried, of a woman (fig. 14) "made of alabaster or the finest porcelain", 1.20 m long, suggesting a medieval tomb reclining figure; two dice, topped with unidentifiable figures, "similar to cut diamonds" (fig. 14). While directing the work, Don Federico devoted much of his time to surveying the hill. Its external measurement presented no difficulty. But our engineer went much further beyond and drew up the plan of the underground installations. "The building is 38



FIG. 14—Yacente jemenino en los alrededores del Cerro Ipir, según Fritz Berger.

Enormous, he wrote in October 1941. And I have not yet been able to estimate it fully. There are probably eight hundred pieces, perhaps more. It is interesting to see how these people worked geometrically, down to the centimetre. I found polygons so exact, from an arithmetic point of view, that the best engineers could not have made them. The thickness of the walls... Separate pieces, but at the same time joined by systems of paths. Everything is so precise without anything being interchangeable. Was this one of those daydreams in which Fritz Did Berger sink so often? Or had he resorted to a working method that escapes us? Let us confess our ignorance. In his letters, we find only one clue: "Today, while an explosion was taking place in the pit, I felt vibrations in the cavities below me at a distance of about 200 metres." This was a useful procedure, which we were also going to use, but it did not allow us to count underground rooms or survey polygons to the nearest centimetre. We knew no more than that about the AGA's research when, in 1977, we set up camp at the foot of Cerro Ipir, which we had been able to reach, via impassable roads, thanks to the Unimog provided to us by Mercedes-Benz Argentina, a hundred metres from the farm that has been there for about twenty years. The hill is located on the edge of a bare plateau that extends southwards into a small plain where, today, zebu cattle are raised. All around is the impenetrable jungle that our incomparable vehicle would nevertheless allow us to explore. What interested us most, of course, was the hill itself. One of the members of our mission, engineer Vicente Pistilli, quickly determined that the hill was not a burial mound at all, but rather a completely natural formation. We had expected this, as we knew that it would be impossible for us, without technical means superior to those available to the Paraguayan army at the time, to penetrate the cavity indicated by Berger. At the very least, we wanted to confirm the data established by the AGA and, first of all, to find out whether the plateau was really hollow. We found the pit and the trench intact. Their poor state of preservation prevented us from reading the inscription engraved on one of the walls of the latter, but the uruz—or rune—that could be clearly seen on it was enough to identify it. This was, for us, an essential point. It remained to examine the bottom of the excavations. Professor Hermann Munk, who, like a good Tyrolean, had brought his mountaineering ropes, was able to reach it. Once the pebbles and dead leaves that had accumulated over more than thirty years had been removed, he came into contact with the slab, whose whitish colour stood out amid the red sandstone of which the hill is made. But he was unable to remove even the smallest fragment of it, either with a pickaxe or a geologist's hammer. All he could ascertain, and this was the most important thing, was that the slab sounded hollow. Fritz Berger was right, then. We still had to make sure that the cavity he had detected was really as large as he claimed. In the absence of an echo sounder, there was no other way to do this.

to project, in a regrettably primitive manner, a sound wave from the wells. We therefore detonated a dozen firecrackers in succession at the bottom of the wells and, with our ears pressed against the ground, we listened to the vibrations caused by the explosions on the plateau, moving further and further away from the base of the hill. We were thus able to verify that the wave propagated underground as quickly as in the atmosphere, up to about 200 m: the distance indicated by Berger. Beyond that, nothing happened, which is not surprising considering the incomparable damping power of sandstone, a rock made of highly compacted sand. Conversely, we could deduce from this that where the wave was felt, there was indeed a void. A natural void? Beneath the plateau, this is theoretically possible. But not beneath the hill, as far as we can tell. Sandstone has a high specific weight. It is also extremely brittle. These two characteristics combined mean that any underground cavity would have been crushed by the hill, which no rock layer would have been able to support. Furthermore, there are no limestone deposits in the region that could provide natural cement. It therefore seems that the slab on which the hill rests was poured by human hands in a veritable mining operation. If so, the cavity must have an entrance. We did not have much hope of finding it. Nevertheless, we continued to examine the hill and its surroundings metre by metre. Soldiers from an engineering battalion placed at our disposal by the Minister of National Defence — former Major Samaniego — searched all the crevices that could conceivably conceal a corridor. In vain. Or well the entrance was cover centuries ago and the na-

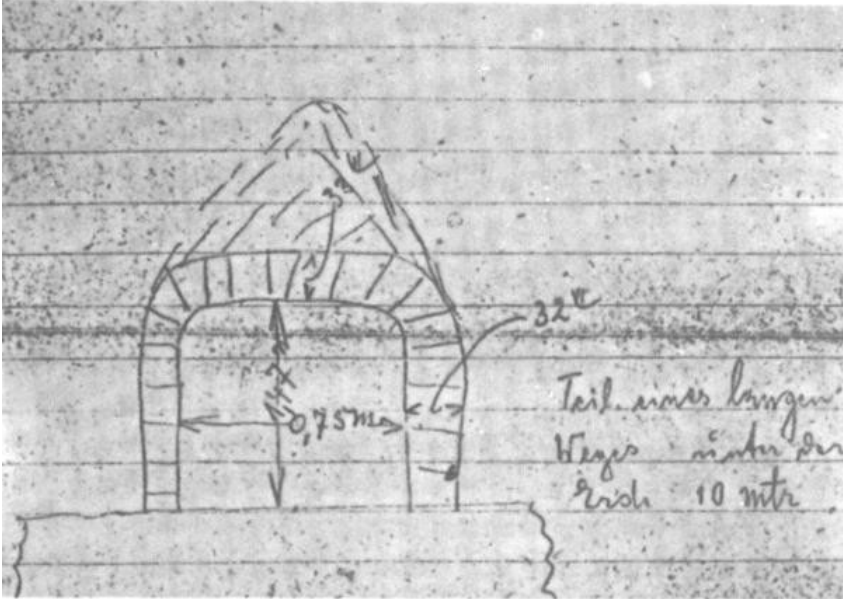


FIG. 15 – Túnel en los alrededores del Cerro Ipir, según Fritz Berger.

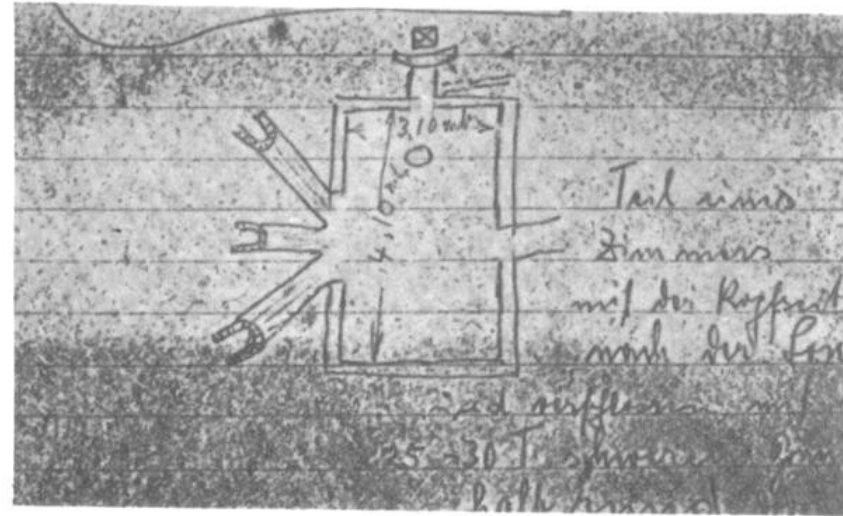


FIG. 16 – Túnel en los alrededores del Cerro Ipir, según Fritz Berger.

Nature took care of erasing its traces; or else it is located miles away and only chance, which in this case was unfavourable to us, could point it out to us. We will have to obtain—that is, borrow—machinery that will allow us to drill through the slab. Perhaps we will succeed. 2. **The Land of Sleeping Beauty in the Forest** For Fritz Berger, Cerro Ipir was nothing more than the centre of a vast region that, in a distant era, had been densely populated. Let us allow him to ramble, as he so often did, about the gigantic palaces, temples and industrial facilities he saw everywhere, "as far as the horizon", and to which he generously attributed an age of "6,000 years, or 500,000": mere hallucinations of a "madman". But this 'madman' knew how to escape from the 'land of Sleeping Beauty in the Woods', as he himself put it, when faced with a technical problem. The engineer would then reappear, with his tape measure, his slide rule and his metal detector, and draw, if necessary, highly accurate sketches. We can therefore believe him when, emerging from his daydream, he claims to have found a plate of iron alloy, cast iron, coke or "a good portland cement mortar, much better than the one we know today", or when he tells us about a concrete ford under the waters of the Ypané River.

Not to mention that the soldiers were going to build a bridge on the site, which, incidentally, remained a project. These are concrete facts. The AGA engineering officers would certainly not have mistaken rock for cement. The same reasoning applies to the underground canal that Don Federico discovered in 1941 near Cerro Ipir, where he found 1.5 metres of running water at a depth of about 25 metres, without being able to determine whether it was part of a water supply system or a sewer. We know nothing more about this canal, but its existence should come as no surprise, as we often heard mention of works of this kind during our three expeditions to Amambay from local inhabitants who had found their remains—during hunting trips. The underground channel we have just mentioned is not, incidentally, the only one Berger discovered. As early as 1940, he wrote to Munich that he knew of tunnels 130 km long and provided several sketches (jigs. 15 to 18) showing extremely detailed cross-sections and branching chambers. This is certainly not the product of a sick imagination. To be convinced of this, one need only note that the measurements are given in centimetres and that the drawing is perfectly consistent. Nor does it seem possible to question the authenticity of the half-erased inscription (fig. 19) that our engineer claims to have surveyed above an open gate on the side of an unspecified hill—which we were unable to locate—always in the vicinity of Cerro Ipir. This is for two reasons. Firstly, because one of its motifs—a kind of three-toed foot whose meaning escapes us—appears, along with three other drawings, above the entrance to the Buritizal burial mound in Brazilian Piauí, where the Viking place of worship of Sete Cidades is located, which we were able to identify (3) beyond any doubt thanks to its runic inscriptions. Secondly, because the group of signs to the right of what vaguely resembles a flower appears to be made up of runes. The condition of the inscription and the poor quality of the drawing do not allow us to be more certain. However, if we read three characters from top to bottom and the remaining three from bottom to top, as if the

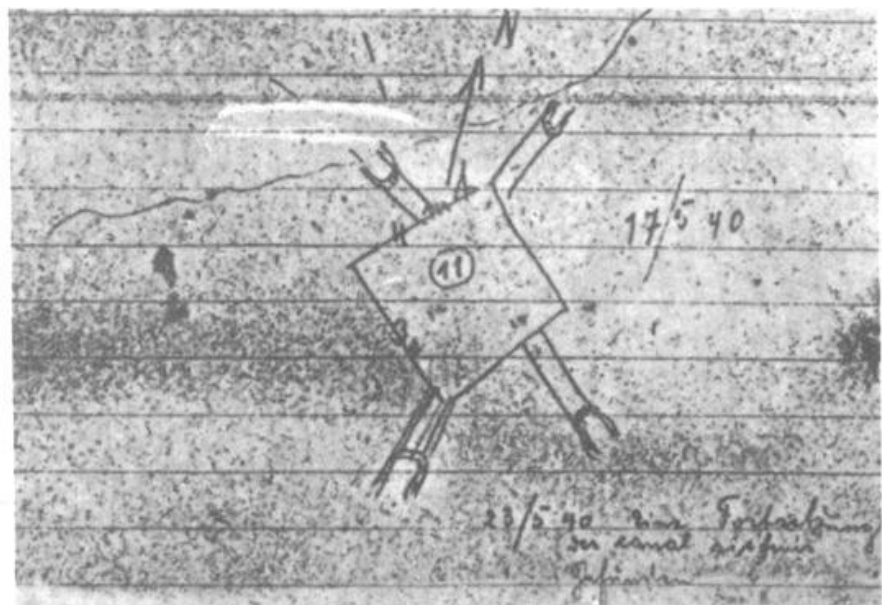


FIG. 18 – Túnel en los alrededores del Cerro Ipir, según Fritz Berger.

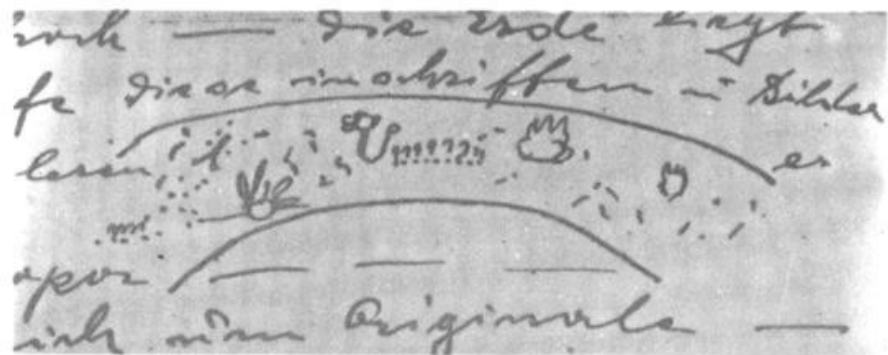


FIG. 19 – Inscripción encima de un portón, en el flanco de un cerro, según Fritz Berger.

whole constituted una especie de círculo imperfecto, obtenemos, por tras-
literación: Lo
which means in Old Norse, Professor Munk tells us: *equal victory* or, more freely, *victory in spite of everything*. The orthographic anomalies in this inscription—inverted l, Latinised s, k at the end of sik instead of the g that would be required by the old futhark corresponding to the form of k, and the absence of the nominative singular ending in r—are common in South America. We analysed the reasons for this in a previous work (2) and will have the opportunity to return to the subject in chapter vi. 3. **A sacred Nordic forest** Let us return to our own research. About 500 m south of Cerro Ipir, on the small plain mentioned above, rocks can be seen on the surface of the ground that gave the site its name, Pora Ñu, the Field of the Dead. Some of them do indeed vaguely resemble gravestones with recumbent figures. It seems that thirty years ago the resemblance was more striking than it is today. However, these are only natural outcrops. This does not exclude the possibility that some may have been

carved by King Ipir's men. What makes this latter hypothesis possible is another set, located 100 m from the "tombs", which no one had ever paid the slightest attention to before our study. It is a semicircle of rocks with a maximum height of 3 m, whose arch measures around 17 m (photo S). It is made of natural stones, some of which have probably been moved, but also of geometric blocks that have clearly been carved by human hands. In its centre, there is an artificial cavity (photo 9) opened in a worked rock with two blocks added on top — two more appear to have fallen — from which a spring, now dry, at least in winter, probably emerged. This is suggested not only by the basin-like shape of the lower part of the niche, but also by the small wood surrounding the site, which suggests that the location is more humid than the surrounding area. About 10 m from the semicircle is a large natural stone block, 2.50 m high, into which a seat has been carved facing the centre of the complex. The aligned rocks, the spring, the "pulpit", the trees: these are the characteristics of a distinctly Nordic-style sacred forest. It is known that the Germanic peoples in general, and the Scandinavians in particular, although they had temples, celebrated most of their religious ceremonies outdoors. The Vikings who settled in South America did the same, as evidenced by the sacred forests surveyed fifty years ago by Schwennhagen in Piauí, south of the Amazon, near the impressive place of worship of Sete Cidades (3). It is not unreasonable, therefore, to assert that the presence of a site of this nature in the immediate vicinity of Yvyty Pero is sufficient to confirm the Guaraní traditions that make the hill the "dwelling place" of a pre-Columbian white king. But there is other evidence to support them. Three kilometres northeast of Cerro Ipir is a group of three hills: Cerro Tejú (Lizard Hill), Cerro Guaiví (Old Woman Hill) and Cerro Kysé (Knife Hill). The latter, the smallest of the three, is about 60 m high. At its highest point, its crest consists of a narrow stone bench with vertical sides and a surface covered with engraved signs that form an incoherent whole. One gets the impression of being faced with graffiti drawn, at random, by successive visitors. Its survey is all the more difficult as the ground does not, of course, have a natural orientation, making it often impossible to establish with certainty which is the bottom and which is the top of the drawing. Most of the signs on Cerro Kysé are mere lines, often parallel, sometimes crossed, which could be attributed to the Indians. Similar ones, painted or engraved, are found throughout the Guaraní settlement area in southern Brazil. Two groups, however, have different characteristics. The first (fig. 20) is too schematic in composition to draw any conclusions from it, despite the unexpected triangular shape of its frame. The second (fig. 21), on the other hand, constitutes a complex



FIG. 20 – *Figura incomprendible, en la cima del Cerro Kysé.*



FIG. 21 – *Trazos incomprensibles en un escudo francés, en la cima del Cerro Kysé.*

complex ensemble that — but the resemblance may, of course. Below and to the left are two at the top right, above illegible Tuja Og (see chap. I, 3), which leaves no doubt about this last old futhark or a haglaz (h.) large characters-

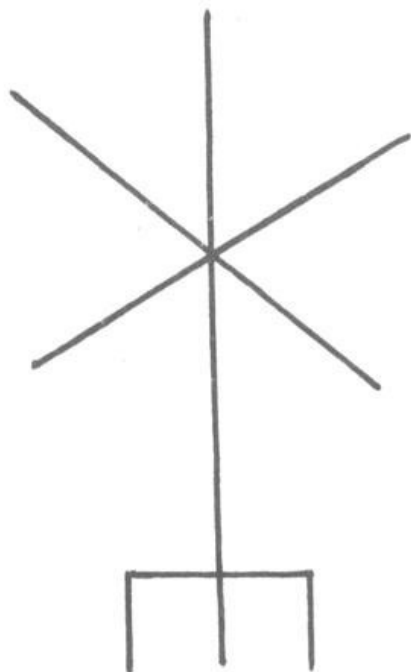


FIG. 22 — *Carácter rúnico en la cima del Cerro Kysé.*

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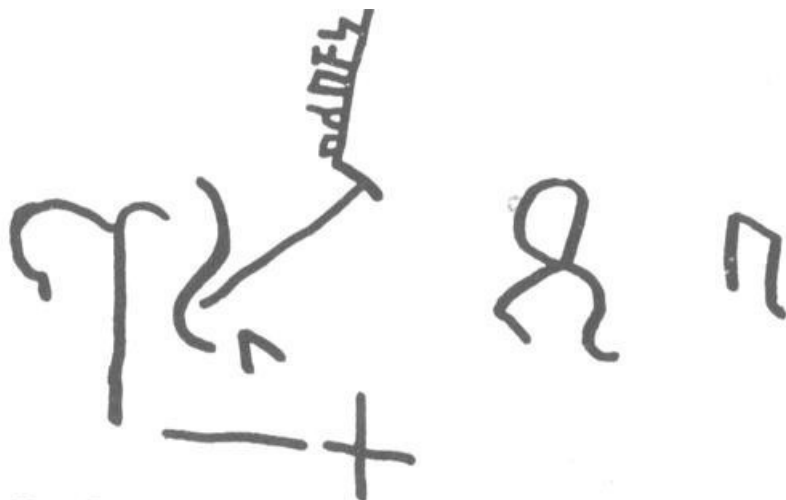


FIG. 23 — *Conjunto de caracteres rúnicos, en gran parte borrados, en la cima del Cerro Kysé.*

res devoid, for us, of meaning (although one of them could be a Latinised solewu (s), of a type we already found (2) in the Posta de Yvytyruzú) a line of small letters that appear to be runic, but whose poor state of preservation did not allow us to identify them with any degree of certainty. Near this group, two signs — an odala (o) and an uruz (u) — are clearly runic. There are three drawings of particular importance. One of them (fig. 24) represents a "stick figure" that we will find again, better preserved and probably better drawn, on a stone block from Cerro Guazú (cf. chap. IV), in the middle of indisputable runic inscriptions. The other is even stranger. It is, in fact, an unfinished pentacle (fig. 25) from which a broken line emerges, at the top of which we see a group of small characters, the first three of which—the others are erased—have a distinctly runic appearance, although it is impossible to transcribe them with certainty. The pentacle, or five-pointed star 51



FIG. 24 — El “monigote” del Cerro Kysé.



FIG. 25 — El pentaclo del Cerro Kysé.

which was unknown to the Vikings of Scandinavia, belongs to the esoteric symbolism of the Western Middle Ages and, more specifically, to that of the alchemists. Its presence on Cerro Kysé could be attributed to the contacts—only one of which has been proven (2)—that took place as early as the 13th century between South America and Normandy. Nevertheless, in the current state of our research, it remains a mystery that we may one day solve. But whatever its origin, it rules out any temptation to attribute all of the inscriptions to the Indians. As for the third figure, it shows us a strange character (photo 10 and fig. 26). Short rays emanate from its round “head” and the kind of aura that surrounds its cylindrical “body”. Perhaps it is

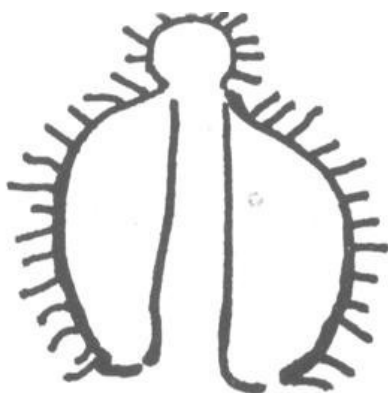


FIG. 26 – El personaje solar del Cerro Kysé.

representación vagamente antropomórfica del Dios-Sol. Pero, por supuesto, no tenemos certeza alguna al respecto.

4. ¿La necrópolis de los reyes de Tiahuanacu?

La confirmación de los datos que poseíamos respecto del Cerro Ipir no tenía, por cierto, nada que pudiera sorprendernos. Hacía años, en efecto, que estábamos buscando la necrópolis que señala una inscripción (fig. 27) que habíamos relevado ⁽²⁾ en la Posta de Yvytyruzú:

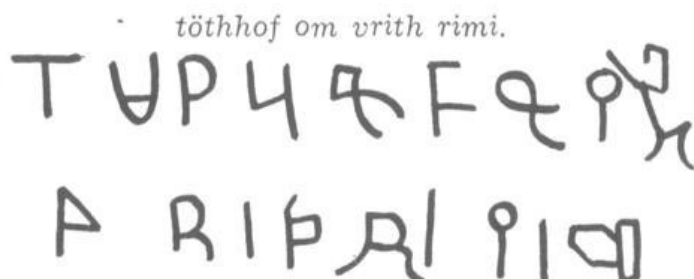


FIG. 27 – Una inscripción rúnica de Cerro Polilla, en la Sierra de Yvytyruzú, que indica la dirección de un cementerio.

a

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That is, Cemetery near (or:

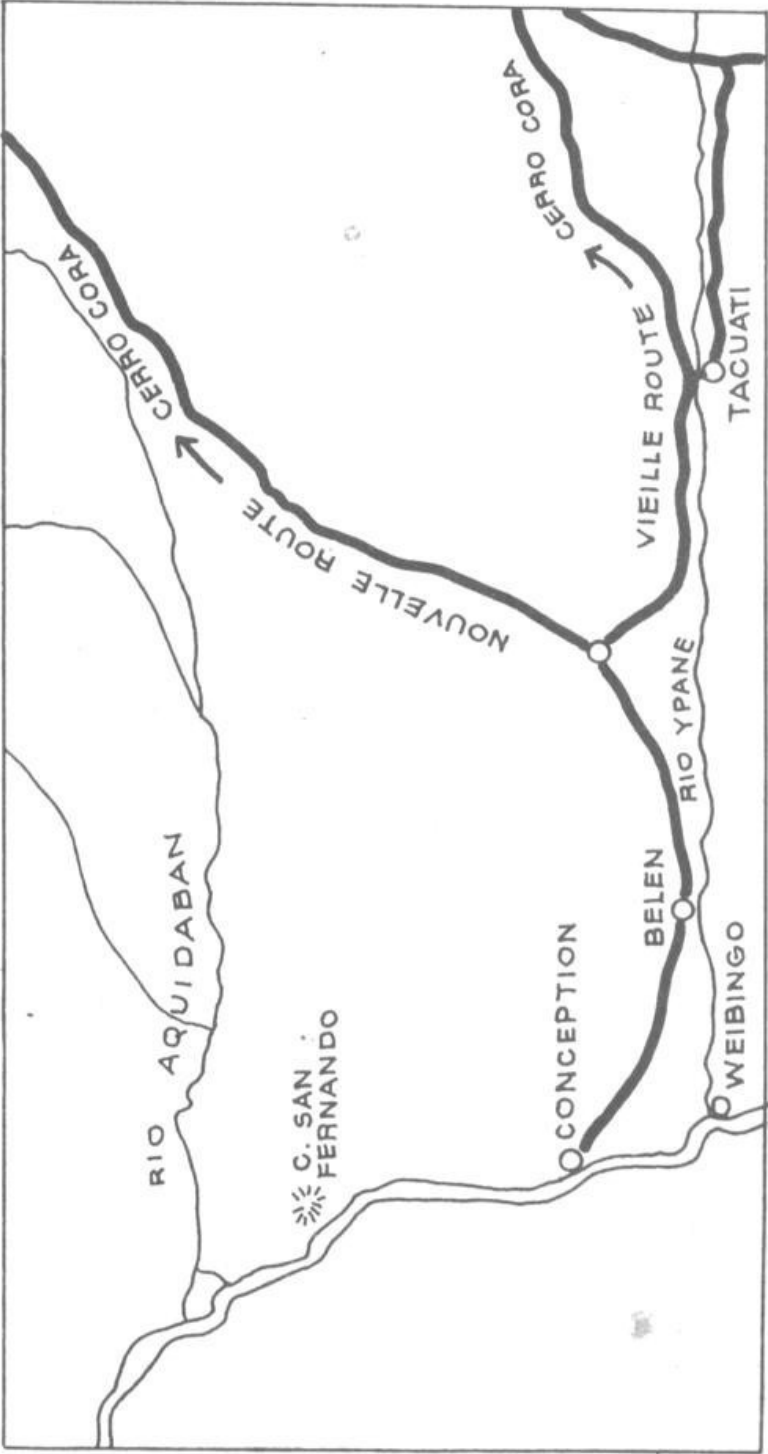
en) the tormented mountain range. The last sign is not runic. It suggests a hand pointing north, that is to say, the direction in which the Viking territory extends from Cerro Cora to Cerro Guazú, where Yvyty stands. But its Guaraní name is identical, as we have already said, to that of Cerro Pelado, at the foot of which the Posta is located. As for the "tormented mountain range", this is a name that would be very appropriate for the Amambay mountain range, which today serves as the border between Paraguay and Brazil and whose foothills extend westward into the region of our discoveries. Due to a lack of resources, we were unable to open the enormous cavity that extends beneath Cerro Ipir and the adjacent plateau. We are not even entirely sure that it is artificial, despite the existence of the slab that serves as its "roof". Perhaps it would have been more prudent not to mention it until it has been opened, as we are well aware that thieves of other people's work are lying in wait. But Cerro Ipir is too important in the context of our search for us not to take the risk of mentioning it here. First of all, it is a Viking site. Located between Cerro Cora and Cerro Guazú, it is part of an imposing complex whose Nordic origin no longer needs to be proven, as we saw in Chapter I and as we will see in Chapter IV. On the side of the hill, there is a runic inscription; in its surroundings, a sacred forest in the purest Germanic style; and, on Cerro Kysé, some characters that are presumably runic and some drawings that cannot in any way be attributed to the Indians. Secondly, if the cavity is indeed artificial, as everything suggests, Cerro Ipir is very likely to be the "cemetery" mentioned in the Posta de Yvytyruzú. The Vikings, at least before their conversion to Christianity, used to burn their dead. But they often made an exception for their great war chiefs, whom they buried under burial mounds. The caves of Paracas, in Peru, where hundreds of pre-Inca mummies were found in 1925, many of which belong to individuals of Nordic biotype, are clearly a transposition of the artificial hills of Scandinavia. It is all the more strange, at first glance, that nothing equivalent has ever been found in Tiahuanacu, the capital of the Viking empire of South America. At first glance only. For if one reflects on the situation in which the Men of Titicaca found themselves in the midst of a huge indigenous population, it is easy to understand that they could not die without losing their divine character in the eyes of their subjects. They therefore had to make the corpses disappear. It was feasible to secretly burn those who, according to custom, were to undergo this treatment, but it was impossible to bury the chiefs in burial mounds that would obviously not have gone unnoticed. It would have been futile to search the region for a "hiding place" similar to the caves of Paracas, located on a peninsula whose access could easily be strictly prohibited. The only solution was to transport the bodies far from the Aymara and Quechua territories. Amambay, on one of the roads leading from Tiahuanacu to the Atlantic, offered the necessary guarantees: the Guaraní who lived there were hated by the Indians of the Altiplano, a hatred that still persists, while their loyalty to the Vikings was such that the latter

had entrusted the custody of their land and river communication routes east of the Andes (»).

^ This is only a hypothesis, of course. To confirm or disprove it, it will be necessary to force entry into Cerro Ipir. If correct, it provides us with an explanation—or one of the explanations—for the powerful garrison that the Vikings of Tiahuanacu, as evidenced by Itaguambypé, maintained at Cerro Cora: its mission was to protect access to the enormous underground necropolis where the dead gods rested^

III The buried temple 1. The "Tupao Cué" 160 km from Cerro Cora, after the raft that allows you to cross the Ypané on your way to Asunción, a small road opens up, passable in dry weather, leading to the village of Tacuatí, 32 km from the route (cf. map, fig. 28). A grass-covered "avenue", where cows, pigs and donkeys roam freely at any time of day, crosses the cluster of wooden houses surrounded by rose bushes and hibiscus and disappears 400 m further on into the jungle that covers the banks of the Ypané. One hundred metres from the gate that closes the entrance to the village, on the right, that is to say to the east, you can see the square, with a small wooden church in the centre, whose external bell tower resembles one of those watchtowers that were used in heroic times to give early warning of Indian raids. This square, measuring about four hectares, is a mere natural meadow that no one ever bothered to level. Irregular mounds can be seen everywhere. They are shapeless, except behind the church, where a mound of earth approximately one metre high forms—or rather, formed before our intervention—a rectangle measuring about 29 metres by 11 metres. Local tradition says that these are the remains of Tupao Cué—an ancient temple or church, in

FIG. 28 — Mapa de la región de Tacuatí.



Guaraní—whose last remains of superstructure — wooden pillars — were set on fire by Brazilian troops in 1869. Informed, purely by chance, during our first expedition to Amambay, of the existence of a "buried village", we took a trip there. The police commissioner, Don Francisco Torres, was very surprised that an outsider knew about it and confirmed the news. Following his instructions, we conducted a survey on the north side of the route, in a place where the grass-covered ground was less elevated than elsewhere. We were thus able to verify the existence of a row of large boulders, one of which bore a sign corresponding to the gebo (g)

runic (•fig. 29). According to various

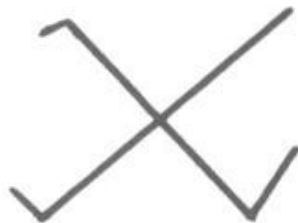


FIG. 29 – *Carácter rúnico en los cimientos del muro norte del templo de Tacuatí.*

accounts, these were the foundations of a wall whose carved stones, located at ground level, had been used thirty to forty years ago by the villagers to build bread ovens. If this information was accurate, it could be assumed that the wall was intact on the other sides of the building, which were better protected. We therefore returned to Tucuatí the following year to verify this hypothesis. First, we had the north side cleared: the alignment extended over 10 m. We then tackled the east side, starting from the north-east corner. We were thus able to uncover a wall of carved stones 58 cm wide by 43 cm high, resting on foundations approximately 80 cm wide on average, made of boulders (photo 11). The blocks, fitted together without mortar, are carved with a precision that suggests the use of metal tools. The wall, perfectly straight, runs north-south with an accuracy not found in the layout of the current church, which deviates significantly from the compass needle. When we arrived, our intention was to completely dismantle the walls and floor of the Tupao Cué. From the outset, we realised that the resources and time available to us would not allow us to do so. The earth, constantly trampled by livestock roaming freely in the "square", was all the harder because it had not rained in Tacuatí for two months. In fact, with two labourers, we were only able to advance 11.40 m, beyond which there was an opening 1.64 m wide at its narrowest point (photo 12), whose two embryonic jambs have semicircular notches, clearly intended to hold wooden pillars. Halfway up the wall, the floor of this entrance is covered with a plank of urunde'y (*Astronium fraxinifolium*), a rot-resistant wood. A piece of lapacho (*Tacoma*, according to botanists), about 2 m long, was found in the rubble from the excavations, located outside the building, at the height of the door. We took a large fragment of the latter to Buenos Aires for study: it is in the process of petrification. We had to interrupt our work at this point, but not before carrying out some surveys that showed us that the wall extended along the south and west sides. We resumed work in 1977. With the help of soldiers from the Cerro Cora Detachment, we cleared the entire enclosure, which we were then able to measure (cf. plan, fig. 30). However, the measurements of the side walls—28.11 m to the east and 28.13 m to the west—are not entirely accurate, since the stones on the north side were removed. On the other hand, we were able to correctly measure the width: 10 m to the south and 10.22 m to the north. The parallelism of the sides is not

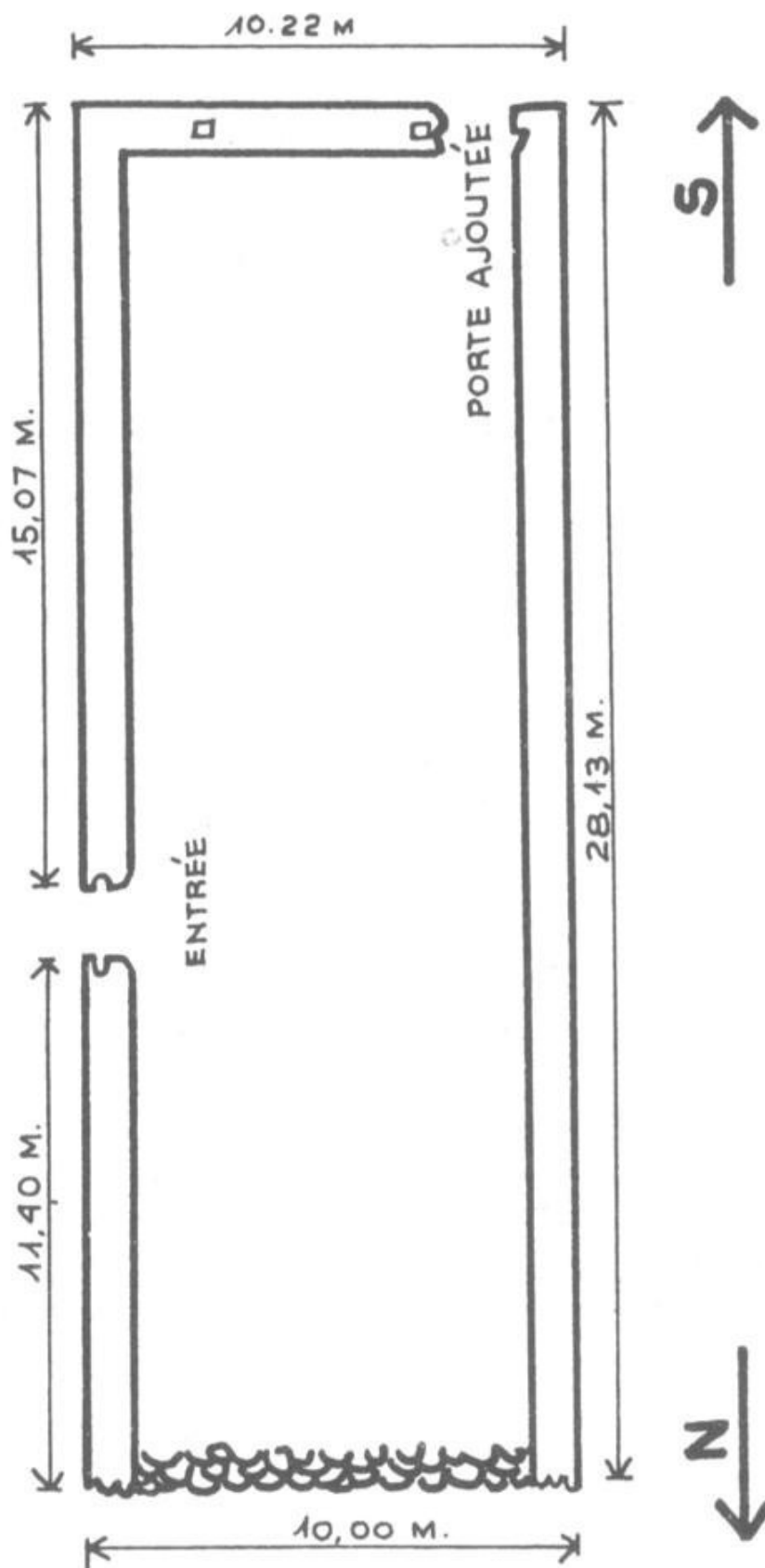


FIG. 30 – *Plano del templo de Tacuatí.*

61

perfect. 60

The south wall of the building, which is slightly wider (60 cm) than the others, and, at 6.50 m, the side walls that extend from it are raised a few centimetres above the rest of the sides. In contrast, the height of the wall at this point is reduced to compensate for a slight progressive elevation of the ground towards the south. There, at the back of the building, a second door 1.63 m wide opens on the right, with a step made of urunde'y wood. Two thick pillars, carved from the same wood, protrude about forty centimetres from the south wall, 2.20 m from the left corner and 2.40 m from the right. Since our second visit to Tacuatí, we knew that the tradition of Tupao Cué was not the fruit of popular imagination. But to whom should we attribute the construction of the "ancient temple"? Not to the Jesuits, for sure. It is a habit in Paraguay to see the hand of the fathers everywhere. This is because the ruins of their missions show us the remains of the only stone buildings constructed during the colonial era. But, on the one hand, the Jesuits never settled in Tacuatí. Their nearest establishment was in Belén, 50 km away as the crow flies and 92 km via Horquesta. We are absolutely certain of this, as the history of the Society in South America is known in minute detail, thanks not only to the works of Fr. Lozano (") and Fr. de Charlevoix (7), to mention only the most important ones concerning Paraguay, but also to the annual letters and reports that, every

year, the provincials sent to Rome. On the other hand, the mission buildings were constructed entirely of stone, which was not the case with the one we are interested in. Nor is it possible to attribute the Tupao Cué to the Guaraní Indians, who did not know how to work with stone, or to the Spaniards. Since the Conquest, apart from the Jesuits, only plank, adobe and, more recently, brick have been used for construction in the interior of Paraguay. However, none of these three materials was used to erect the building in question. If it had been made of planks, the stones in the walls would have been perforated at regular intervals to nail the essential pillars into them, as was done at the door. If adobe had been used, the wall would have been superfluous, since in a tropical region where it rains heavily during the summer, it could only have been a precarious construction. Moreover, the earth covering the foundations did not contain any plant residue, as would have been the case if it had come from crumbling adobe walls. As for the bricks, when dealing with a building several metres high, as in this case, they require the use of mortar, of which we found no trace in the rubble. It would be futile to search Paraguay, outside the cities and even within them, for any evidence of its use as a building material before the end of the last century. And we know that Tupao Cué was already in ruins in 1869. There is only one explanation, then: the wall we unearthed supported walls made of squared logs, in the Viking style. This is confirmed by the wooden pillars on the south wall: the columns that supported the roof of all Nordic buildings. This is an indication of the origin of the "ancient temple". Nothing more than an indication, of course. For a procedure as simple as this one could very well have been reinvented or imitated. But two pieces of information confirm it. The first is the unit of measurement used in the construction of the building. The dimensions of the latter, as expressed above in metres, are, of course, approximate. On the one hand, the stone has deteriorated over the centuries and its irregularities, although not very marked, justify a certain inaccuracy in the measurements we took, which were otherwise made with a simple tape measure. But, on the other hand, it is clear that the builders did not use the metre as a unit of measurement: in architecture, since time immemorial, the foot has been used. But which foot? The question is important, since this unit varied considerably from one town to another. To answer it, let us consider two of our measurements: the height and width of the side walls before the modifications made to the southern part of the building. These are the only constants: the width of the temple varies, as we have seen, and the doors have irregular edges. If the unit of measurement had been the Castilian foot, 27.80 cm, used in Paraguay during the Spanish period, we would have, for the height of our wall, 1 foot 7 inches (44 cm) and for its width, 2 feet 2 inches (60.2 cm), with a difference of more than 1 cm and 2.2 cm, respectively. It is acceptable that time has affected the thickness of the stone. However, it seems inadmissible that it has reduced the width of the wall by 2.2 cm, which is very regular as shown in photo 11. If, on the contrary, it was the Danish foot of 29.33 cm, the unit used by the Vikings of Tiahuanacu (I), that was used, this anomaly disappears. The height of the wall is then, in fact, 1 foot 6 inches (43.99 cm) and its width 2 feet (58.6 cm), with a satisfactory difference in both cases of 9.9 mm and 6 mm, respectively. On the other hand, we now have round numbers (1 foot 6 inches, i.e. one and a half feet, and 2 feet) for a wall along which the dimensions had to remain constant, which is logical. Taken out of context, this analysis would not be very convincing. But we will see that, even without taking into account the construction method specified above, this context is definitive. It includes runic inscriptions, one of which (fig. 31) was found in the rubble of our excavations. It is engraved, in letters about five centimetres high, on a broken stone lying on the ground, halfway up the inner face of the wall and at 25 cm of this one. Its four runes are classic. They belong, the three



FIG. 31 – Inscripción rúnica en una piedra hallada en el curso de las excavaciones en las ruinas del templo de Tacuatí.

primeras al nuevo futhark y la última al futhark punteado (°). Su trasliteración da:

klin.

It is a complete word—surrounded by a curved line that delimits it—whose meaning is unclear, since the words with the same root that we know—Anglo-Saxon *clean*, German *klein*, small—are adjectives. The term probably had another meaning in the dialect (cf. chap. IV) spoken by the Vikings of Tiahuanacu. Another stone, also broken, appeared in the rubble, in the same position as the previous one, but 2 m away from it. It bears a single sign: a Latin cross 9 cm high, whose unequal arms — 1.5 and 3 cm, respectively — deviate slightly from the horizontal, as if to create a lateral perspective effect. The Viking origin of Tupao Cué thus seems to us to be solidly proven. We will see, moreover, that the building was part of a village that other runic inscriptions allow us to identify. It remains to be seen what it was. A temple, most likely, as indicated by local tradition and its dimensions, which are much larger than those of the current church, which, for less than a thousand inhabitants, measures only 14 m by 7 m. But was it a pagan or Christian temple? Its entrance, located on the east side of one of the side walls, and its north-south orientation—rather than east-west like most medieval Christian churches, which face Jerusalem—suggest a place of solar worship. The Latin cross, on the other hand, is Catholic. But although the stone on which it is engraved comes, like those of the building, from the banks of the Ypané, it cannot be ruled out that it was brought there later. However, a cross in a primitive pagan Viking temple should not surprise us in Paraguay, since we know (1, 2) that the country had been partially Christianised around 1250 by a Catholic priest who had arrived from Europe, that the

Guaraní traditions refer to it as Pay Zumé, while the indigenous peoples of the Altiplano call it Thuí Gnupa, or Father Gnupa, in Norse. This would explain the door at the back of Tupao Cué, which is much cruder than the main entrance and seems to have been opened after the temple was built: it was probably the entrance to a sacristy, which was precarious as it had no foundations and was added according to Christian church standards. **2. The Viking village of Tacuatí** To the south of the meadow where the current church and the ruins of Tupao Cué are located, a wire fence marks the boundary of the cemetery, which is accessed through a wooden gate. Just in front of this entrance, a thick rough stone weighing about 250 kg, whose surface stands out against the green background of the surrounding grass, is embedded in the ground, just above the surface. On its upper surface, there is a group of three large runes (fig. 32) which, due to the angular shape of the first two, cannot be confused with Latin letters: raido (r), solewu (s) and isa (i). The nature of this inscription, which is untranslatable, leaves no room for doubt: it can only



FIG. 32 – Una marca de propiedad rúnica en una piedra de Tacuatí.

una marca de propiedad, como las hay en tantos edificios de Escandinavia y Alemania del Norte.

A la derecha del cementerio, también separado de la “plaza” por un alambrado, se extiende un matorral hecho de espinosos y de pequeños árboles achaparrados. La pobreza de esta vegetación se debe, en parte, al hecho que el terreno está sembrado de piedras, a veces groseramente talladas sin la menor preocupación de regularidad, en todo semejantes a las que constituyen los cimientos del templo, salvo que son, por lo general, más grandes. ¿Fantasía de la naturaleza? De seguro que no, pues en vano se buscarían piedras en el suelo de Tacuatí y de sus alrededores inmediatos, hecho de una gruesa capa de tierra arenosa. Las que nos interesan vienen del lecho del Ypané. Debían de servir para algo, pues. De hecho, si la mayor parte de ellas parecen tiradas al acaso, otras permiten reconocer los contornos de casitas, una de las cuales muestra todavía un piso empedrado casi intacto. En uno de los bloques esparcidos, notamos otra marca de propiedad (fig. 33): un perth (p) del antiguo futhark, que acompañan varios caracteres alineados que su mal estado de conservación no permite iden-



FIG. 33 – Una marca de propiedad rúnica en una piedra de Tacuatí.

be A la To the right of the cemetery, also separated from the "square" by a wire fence, there is a thicket of thorny bushes and small, stunted trees. The poverty of this vegetation is due, in part, to the stench of the ground, which is littered with stones, sometimes roughly carved without the slightest concern for regularity, all similar to those that form the foundations of the temple, except that they are generally larger. A fantasy of nature? Certainly not, for one would search in vain for stones in the soil of Tacuatí and its immediate surroundings, which is made up of a thick layer of sandy earth. Those that El perth, in runic ideography, symbolises the jungle. On another stone of the same kind, in the same area, it is a drawing that catches the eye (fig.



FIG. 34 – *Imagen de Odín en una piedra de Tacuatí.*

34). In it, you can see

Above a break that interrupts its outline, the head and neck of a horse that appears to be rearing up, some very deteriorated lines that must belong to the animal's body and its rider, and a circle at the bottom left. The meaning of this lithoglyph would probably have escaped us had we not been able to compare it with another drawing (fig. 38), previously surveyed at Cerro Guazú (cf. chap. IV). It is undoubtedly the same motif: Odin on horseback, brandishing his javelin and, presumably, leaping from one world to another. There was, therefore, and this was to be expected, a cluster of buildings around the temple. The carved stones from its houses must have been used, like those from the north wall of Tupao Cué, by the inhabitants of the present-day village. Three sides of the "square" are now occupied by wooden buildings and the gardens surrounding them: the vestiges of the past have disappeared. To the south, on the other hand, there is nothing but the cemetery and the wasteland we have just mentioned: the foundation stones, removed over the centuries, still remain, at least in part, as they could not be used for much else. 3. **The quiet stream E]** Tacuatí Viking must have been of some importance, as evidenced not only by the size of the temple, but also by the fact that 500 metres to the west, as the crow flies, there is another wooded area whose ground is covered with rough stones from the river. There, too, everything was destroyed. Except, however, for the ruins of a small square building, 2 m on each side, whose foundations — unless they are dry stone walls — are still about 80 cm high. One kilometre from this group of houses, or what remains of them, runs the Tupí stream, a tributary of the Ypané: an insignificant stream, as is, apparently, the waterfall that interrupts its continuity. Waterfall is, moreover, a somewhat presumptuous term, as its drop is no more than one metre, sufficient, however, to form a small natural pool of calm waters. When our first expedition took us there, the police commissioner had brought us there without telling us anything, enjoying our amazement in advance: the waterfall wall is artificial, made of large blocks of carved stone! Needless to say, this is not the work of the current inhabitants of the village, who know nothing about stonework and, moreover, bathe and wash their clothes in the Ypané, nor of their possible Indian predecessors. The discovery of runic inscriptions in the surrounding area and our previous examination of the Aquidabán-Nigui waterfall naturally prepared us to answer the question raised by the new "dam": the Vikings of Tacuatí must have been its builders. Confirmation was not long in coming. Our assistant, Jorge Russo, called out to us: he had just discovered an inscription. On the upper, horizontal part of one of the blocks of the waterfall wall, which was not covered by water—it was winter, the dry season in the tropics—we saw five large characters (fig. 35), clearly legible, topped by four or five smaller signs, almost completely erased. As we were unable to make out the latter, let us limit ourselves to the others: are

runes whose transliteration gives:

toth log.



FIG. 35 – *La inscripción rúnica del Arroyo Tupí, en Tacuatí.*

The th and the l are linked. The t and tness to a later period, after the partial s clear: peaceful stream. Or also, since / the case in the dialect spoken by our ice and burial Further away in the same extremely strange piece of terrain. It is a irly visible under the thorn bushes and have liked to do because of its obvious

artificial nature: the work would have taken weeks and required more personnel than we had available. We therefore had to limit ourselves to gathering the information provided by the police commissioner, whose family farm is located in the vicinity, and several inhabitants of the area. The moat, which is straight, is about 2 km long and isolates a wide strip of forest, bordered by a bend in the Ypané River, which is very deep at this point, as we were able to verify. On the banks of the river, countless signs are engraved in the rock, but they are too faded to reveal their meaning. The ditch in question would not have caught our attention had it not reminded us of a defence method used by the Vikings. In 1951-52, a Danish-Swedish mission carried out excavations at the foot of the Hague dyke, an earthen wall that divides the Cotentin peninsula in Normandy in two. They confirmed the existence of a parallel ditch, at the bottom of which traces of fire were found. In 1953, on Easter Island, Thor Heyerdahl opened a similar ditch that cuts across the Poike peninsula for about 3 km. Indigenous traditions claimed that when the conflict that led to the "short ears" —the

²TOTH: Old Norse, dodra, stream. (This root appears in numerous Germanic place names such as Dudweiler, Duderstadt, Todtnau.) LOG: Old Norse, logn, calm.

population of colour, whatever their origin— had eliminated the "long ears", white men who had arrived from South America, the latter having retreated behind the moat filled with branches which they had set on fire. Alfred Métraux ("), who never missed a thing, had been quick to argue that the moat was nothing more than a natural depression. But the Norwegian expedition found a thick layer of charcoal and ashes 2 metres deep. In both cases, we are faced with the same procedure: a straight trench that enclosed a peninsula and, in the event of an attack, became a barrier of fire. Now, the Ypané meander also constitutes a *sui generis* peninsula, although here the sea is replaced by the river. Did the Vikings of Tacuatí use the same method of defence as their cousins in Normandy and the "long-ears", descendants of the Danes of Tiahuanacu who, in 1290, had set sail from Ecuador to the Pacific islands? It is plausible. But to be sure, excavations would have to be carried out at the bottom of the moat. If traces of fire were found, the problem would be solved. Otherwise, it would remain unresolved. For there is nothing to suggest that the trench, prepared as we have seen, was ever used. Near the trench in question, in the middle of a "pasture", there is a sandstone outcrop about 2 m high, on which are engraved signs, clearly made by human hands, which have no meaning for us. They do not seem to come from the Indians, or at least they are not in the indigenous style. We make this last reservation because, a few hundred metres away, a Brazilian farmer, who had been living in the region for twenty-five years, found an extremely strange burial chamber in a field in 1976. It was destroyed when we examined the site, but from the hole that remained, it must have been shaped like a cube with sides measuring one metre. According to its discoverer, its walls were covered with square bricks measuring about 25 cm on each side and 3 cm thick, some of which bore inscriptions that, unfortunately, we were unable to find. Inside the burial chamber was an earthen urn containing a skull that turned to dust as soon as the lid covering the container was removed. The use of tile-shaped bricks initially led us to believe that this was an indigenous burial site from the colonial era, as the indigenous people were unfamiliar with this material, which the Spanish used to tile the floors of their houses. However, one detail led us to change our minds. The farmer brought us a large fragment of the neck of the urn (photo 13). It features a completely unexpected decorative motif: a torsade made of intertwined terracotta discs applied to the wall of the container. None of the countless Amerindian urns, funerary or otherwise, that fill museums offer such a motif. And the Spanish, of course, did not manufacture funerary urns. We must therefore admit that this is an indigenous work made according to a foreign model. Now, the torsade is, par excellence, the decorative motif of medieval Scandinavian art. It would not be surprising, then, if the Indians who, under the orders of Viking officers, were garrisoned in Tacuatí had copied it from some object belonging to their chiefs. 5.

A lasting settlement Our previous expeditions had provided us with much material evidence of the presence in Paraguay of the Vikings of Tiahuanacu and their descendants. At Cerro Polilla (or Cerro Pelado), we had identified a post station located at a crossroads.

(2): There was probably an inn in the vicinity, but we had found no trace of it. At Cerro Guazú, as we shall see in Chapter IV, the rock shelters we had surveyed appeared to have been used as guard posts and places of worship: everything suggested that a village had been located on the plateau overlooking the hill, but nothing remained of it. In both cases, we were faced with barely modified natural sites which, although frequented for a long time, as indicated by their runic inscriptions, still had the appearance of precarious installations. At Cerro Cora, things were different. The wall of Itaguambypé was reminiscent of the great pre-Inca constructions of the Andean Altiplano. Cerro Ipir, its sacred forest and the underground channels—whose existence remains to be confirmed—pointed out by Fritz Berger suggested an intention to remain. Only in Tacuatí, however, did we find the remains of a lasting settlement. A village whose houses were built on stone foundations and whose temple, measuring some 300 m, rested on walls of carved stone suggests, in fact, a sedentary population of a certain level. We will see, in Chapter VI, what its *raison d'être* was.

IV The world's

largest collection of runic inscriptions 1. The rock shelters of Cerro Guazú In January 1973, the Asunción newspaper ABC Color published a long article that greatly interested us. It announced the discovery by a geologist from the Ministry of Public Works of 157 caves located in various massifs in the department of Amambay. Without seeking in any way to play the role of archaeologist, Pedro González, the geologist in question, could not help but notice the existence, on the walls of some of these caves, of countless inscriptions that were incomprehensible to him. In addition, he had brought back entire boxes of stones engraved or, at least, worked by human hands. The article added that, according to specialists from the (Brazilian) University of the State of Paraná to whom samples had been sent (?), the archaeological site dated back to around 2,500 to 3,500 BC. More important than these fanciful estimates were some poor-quality photos illustrating the statements—extremely circumspect, they were—of Pedro González. For we thought we could make out runic characters in them. This should not have surprised us, since at that time we had already unearthed the urn with runic inscriptions at Cerro Morotí and surveyed the Viking post at Yvytyruzú[^]). As usual, we had neither the time nor the necessary means to conduct an exhaustive study of the Amambay caves. We therefore decided to carry out a simple survey to establish the nature of the inscriptions. It was then that we received an offer from two young Frenchmen, Jean-Pierre Bouleau and Jean-Francois Mongibeaux, the former of whom had participated in one of our previous expeditions, to come and work with us, provided they obtained a grant from the Dotation Nationale de l'Aventure, established by the Guilde Européenne du Raid. The project we agreed upon was selected by the jury, chaired by the famous polar explorer Paul-Emile Victor. Timely information led us to choose as our objective the Cerro Guazú massif, which, it was said, contained several caves of special interest. It is a somewhat irregular truncated cone, whose plateau measures about 70 km in average diameter and whose flanks drop steeply into the surrounding jungle. It is located about a hundred kilometres from the small town of Pedro Juan Caballero (see map, fig. 73), from which it can be reached by a 90 km dirt road, which can only be used by horses and, during the dry season, four-wheel drive vehicles, and which leads to the Celestino Rojas ranch. To reach the first caves, there are 14 km of a trail opened in 1972 by Pedro González's team and closed again in September 1973, to the point that our collaborators preferred to abandon their horses and make the journey on foot. Accompanied by an Indian guide, they thus reached the area where the caves had been marked. Five of them — more precisely, rock shelters — were located during the first two days of work, and the corresponding trails were opened with machetes, with constant attacks from countless wild bees. Three days were devoted to photographing the shelters, which we will describe briefly.

with the names we gave them: 76 *Shelter under Odin's rock*. About thirty metres wide and 5 metres deep at its deepest point. The wall is made up of large blocks of grey stone that appear to be granite, topped with a mixture of volcanic rocks welded together in lava (puddingstone). Numerous figures engraved on detached blocks; a few alphabetical inscriptions on the wall. *Altars rock shelter*. 60 metres wide and about ten metres deep at its deepest point. The wall, 40 metres high, is made of a layer of red sandstone about fifteen metres thick, topped with puddingstone. Numerous alphabetical inscriptions across its entire width, up to a height of 4 m. *Rock shelter of the Caballo*. About forty metres wide and around 20 m deep at its maximum. Sandstone wall 4 to 5 m high, topped by a layer of puddingstone that forms a real roof. Hundreds of inscriptions, both alphabetical and other, can be seen in the sandstone, sometimes overlapping. Above some of them, a wretch recently carved a large "CERRO GUAZU". *Shelter under the Buen Bebedor rock*. This is a small cave 4 or 5 m deep and 1 to 1.50 m high, with an entrance measuring about 6 m. Geological composition similar to that of the two previous shelters. Numerous alphabetical inscriptions. Rock shelter of the Fallen Stones. About thirty metres wide and ten metres deep at its maximum. Geological composition similar to that of the three previous shelters. Sloping ground, strewn with fallen stones. A few large inscriptions, very faded and covered with a kind of greenish sediment. All the inscriptions in the first three shelters could be surveyed, despite extremely poor lighting. A flash failure meant that only one photograph could be taken in the fourth, but fortunately it was an excellent one. It was impossible to survey the fifth without highly specialised equipment that was not available, either during the expeditions carried out by our collaborators or during our subsequent quick inspection. Back at the ranch, Celestino Rojas asked Jean-Francois Mongibeaux and Jean-Pierre Bouleau if their guide had shown them the "Round House": this was not the case. The Indian confessed that he had not done so for fear of the "white monkeys who shoot arrows": the Guayaki. The threats of his employer and the promises of our collaborators finally persuaded him, after countless refusals, to agree to take part in a second expedition the following month. After reaching the site of the rock shelters previously studied, the three men, well armed, climbed onto the plateau and crossed its southern spur for about 7 km, cutting a path with machetes without much difficulty through vegetation that was much less dense than that surrounding the massif. They then descended

It is located in a kind of hollow covering ten hectares, overgrown with lush vegetation. In this ravine grow the reeds that the "white Indians" periodically come to cut to make their arrows. Hence the guide's justified fears. The expedition finally reached the "Casa Redonda" at the foot of the southern flank of Cerro Guazú without any unpleasant encounters. It is a gigantic monoped dolmen made of an oval block of puddingstone measuring 30 and 10 metres in diameter, respectively, placed on top of a sandstone base 20 to 25 metres long and 6 metres wide. This "mushroom", about 10 m high, is completely covered with bushes and vines that fall to the ground. Its base bears numerous inscriptions, in very poor condition, which were surveyed despite very poor lighting conditions. We do not know whether this dolmen is natural or artificial. In favour of the first hypothesis, we note that the same geological duality appears in four of the five shelters under rock previously described; in favour of the second, that the two rock layers do not appear to be welded together and that there are gaps of 20 to 25 cm in height between them. The vast majority of the hundreds—or thousands—of alphabetic inscriptions and figures that adorn the walls of the shelters and the base of the dolmen are lithoglyphs, chiselled into very soft sandstone. It is not surprising, then, that most of them are now extremely deteriorated and almost completely erased. To make matters worse, numerous overlays have often aggravated the destructive work of time. Thus, many alphabetical inscriptions have become illegible or, at least, could not be deciphered with the desired degree of certainty. Others, very clear, have remained incomprehensible. However, sixty-one were translated by Professor Hermann Munk, a runologist at our Institute of Human Sciences. They constitute the largest runic collection known to date, with no equal even in Scandinavia. These are runic inscriptions. The characters they are made up of are identical to those we previously recorded at Cerro Morotí and Cerro Polilla in Paraguay (-;) and at Sete Cidades in Brazil (:{}). Most of them belong to the classical futhark; some to the Anglo-Saxon futhorc. Others are archaic and were no longer in use at the time of the ancient futhark. Still others are, on the contrary, late and even strongly Latinised. We saw in a previous work (3) that the mixing of the futharks was due to the period of Viking migration to America. In 967, the date of their arrival in Mexico, the dotted runes began to mix with the new futhark. The old futhark, although eliminated at the beginning of the 9th century, had not disappeared without a trace, and some of its characters appear in much later inscriptions in Scandinavia. The contribution of the futhorc can be explained by the presence of Danish Vikings in England for three centuries. As for the Latinised letters — t, o, s, w, and a p that is almost the same shape as in our cursive writing — they clearly come from the arrival of P. Gnupa in South America around 1250 (2). There remain the archaic signs which, it seems, were never used in Scandinavia and which belong to some local futharks of continental Germania. It should not be forgotten that the runic "alphabets" were not fixed as the Latin and Greek alphabets have been for millennia. Each region, each tribe, had its own, which evolved according to the contacts and imagination of the few literate people of the time. On the other hand, the Vikings of Tiahuanacu were not pure Danes. They came from Schleswig, where German influence was very strong, without the somewhat shifting border separating Denmark from Saxony marking a cultural break between related peoples whose tribal identity and feudal organisation had none of the national characteristics we know today. At the beginning of our research (1), the presence of Danish and German words in Quiche Maya and Quechua had led us to think of an ethnic mixture, and we have no reason to retract this, as this is still one of the characteristics of Schleswig today. But this mixture was deeper than we had imagined at the time. The hundred or so inscriptions found in Paraguay and Brazil that could be translated allowed Professor Munk to establish that the language spoken by the discoverers of Central and South America was not pure Norse, but an intermediate dialect between Norse and Old Low German, whether it had been used as such in Europe or had been formed in the New World as a result of seven centuries of common life. Further research may one day make it possible to reconstruct the dialect in question and establish its lexicon and grammar. For the time being, the translation of the texts surveyed can only be done — as is also the case for numerous European runic inscriptions, called "continental" because they do not belong to the Scandinavian peninsulas — on the basis of words belonging to Old Norse and other known Germanic languages, and even from the Indo-European roots of words that we do not find anywhere else in the form they have here. Professor Munk therefore had to rediscover the meaning of each sentence as we do with a message written in "telegraphic style", in

function of the order of terms whose grammatical sequence was often unknown. This was an extremely delicate task, which sometimes leaves room for doubt. The transliteration of the runes used to engrave the texts was not always easy either, not only because of the mixture of futharks and various graphic anomalies, but also because of numerous ligatures. Nevertheless, we had no difficulty whatsoever in subsequently reconstructing the "alphabet" that constitutes what we might call the "South American futhark" (fig. 36). To do so, we analysed all the translated runic inscriptions from Paraguay and Brazil, and not only those from Cerro Guazú. We did not consider inverted or misaligned characters, which are also found, albeit less frequently, in classical Scandinavian texts, to be variants. On the other hand, we disregarded some unique aberrant forms, clearly due to the engraver's imagination or inability in the context of a long process of graphic degeneration, which is normal if we consider that the Vikings of Tiahuanacu spent, three hundred years in America before resuming sporadic contact with Europe—only one proven instance, in 1250—at a time when runic writing was no longer used there but merely survived. The South American futhark comprises twenty-five letters, one more than in the old futhark, compared to sixteen for the new futhark, twenty-eight for the dotted futhark and twenty-eight, and later thirty-three, for the futhorc. The multiplicity of the forms of some of their characters pro-



FIG. 36 – El futhark sudamericano.

comes, as we have
er chose freely among them
re other to predominate in a
wo cases, however, it seems

that our conclusions should be different: those of the e and the
o. Each of these vowels is represented by seven forms, which we could reduce to six, some of which are sometimes used
together in the same inscription. This suggests that they expressed nuances of pronunciation in a dialect different from 'classical'
Norse, which must have evolved over the centuries, if only through the influence of the indigenous languages — Quechua,
Aymara and Guaraní.
— which the Vikings of Tiahuanacu evidently used in their dealings with the Indians, who were forbidden — at least this was the
case in Inca Peru — to learn the language of their masters. 2. **Odin, a drakkar and a riddle** The rock shelter we named Odin
is very poor in alphabetical inscriptions: only one (iig. 37)



FIG. 37 – Un antropónimo rúnico en el Abrigo de Odin en Cerro Guazú.

could be deciphered and
translated. It is composed of runes of classical design, with a ligature that is no less so. Its only anomaly is the extremely small
size of the last letter, joined to the previous ones by a slight curved stroke, as if the engraver had wanted to indicate that it
belonged to the group despite its small size and thus correct an error. Its transliteration gives: iolf - otasu. Iolf is, like Olif, Olf and
Alf, a Viking diminutive of Adalwolf, the Germanic name from which they come, probably that of the last Inca emperor, the
usurper Atahualpa, and certainly our first name Adolfo. Otasu is also a very common anthroponym in Scandinavia:

Son of otter ³ This inscription, isolated as it is, would be sufficient, if necessary, to "sign" —and perhaps it is a double signature— the cloak and certify the origin of the men who used it. But in this field, we have even more satisfactory evidence. On one of the detached blocks, there is an engraved drawing, very similar to the one we found in Tacuatí (see chapter III), representing a horseman. The man, who is holding the reins of his mount in his left hand, is brandishing a weapon. Although his silhouette is extremely



FIG. 38 – Imagen de Odín, montado en su caballo Sleipnir, saltando de un mundo al otro. Abrigo de Odín, en Cerro Guazú.

burnt, badly damaged, as clearly shown in figure 38. The horse, drawn in a childlike style, jumps from a small globe to a larger one. It has six legs, which allows us to identify it: it is Sleipnir, Odin's steed. Therefore, the rider is the god himself, carrying his javelin Gungnir. Perhaps the jump from one balloon to another symbolises the passage of the Vikings from Europe to America. This interpretation is reinforced by the fact that, on another block of the same shelter, we see what can only be the somewhat idealised image of a drakkar (fig. 39). A mammal's head, wolf or fox, on a swan's neck and body, is how a Viking, lost in the jungle, might imagine a ship he had probably never seen. There remains a strange drawing, engraved on a whitish block. It represents the grotesque silhouette of a puppet that seems, like Odin's horse, to have come out of a child's imagination. photo



FIG. 39 – Imagen estilizada de un drakkar en el Abrigo de Odín, en Cerro Guazú.

14). To his left — to the right in the photo—is a line drawing that appears to be devoid of any meaning. We would not have given any importance to this strange character if it did not also appear on a ritual shield from Chancay, Peru (photo 15). Professor Munk considers it to be one of those cryptograms, very few of which, incidentally, have been interpreted in our time, that rune engravers sometimes enjoyed drawing. Here, it is even

³OTA: Old Norse: to hear; Norse and Old German, ottar; Anglo-Saxon, otor: otter. SU(N): Old Norse, sunr; Gothic, sunus; Anglo-Saxon, Old Frisian and Old German, sunu: son.

would have gone to the joker. The decomposed drawing (fig. 40), whose transliteration gives liotesa, would mean:

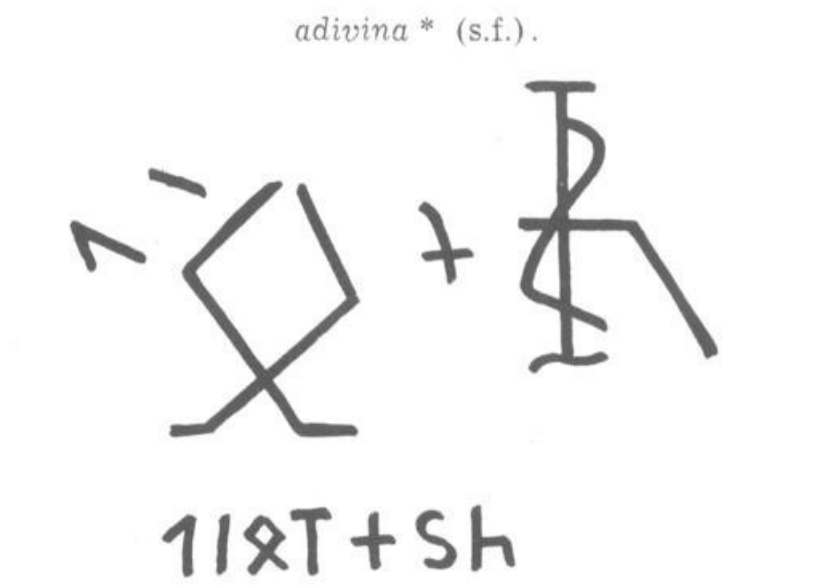


FIG. 40 – Descomposición en runas del personaje del Abrigo de Odín, en Cerro Guazú.

fortune teller ⁴ (n.f.).

of death In front of the Shelter of the Altars are two roughly worked stone blocks, which are practically identical in shape. Everything seems to indicate that these are sacrificial stones, too small for human beings to have been sacrificed on them. Both have a series of deep notches on one side, most of which were probably used to drain the blood of the victims. Others are easily recognisable runes. Thus, on one of these altars (photo 16), the rune of death can be clearly seen on the left; below and to the right of it, a hagalah (h), the rune of blessing and greeting; and in the centre, a solewu (s), the rune of the Sun and victory (fig. 41). We know that runic characters have,

3. The altars



FIG. 41 – Runa de la muerte y otras en uno de los altares de Cerro Guazú.

in addition to their phonetic value, one or more aerophonic names, meaning that they begin with the sound they represent, and sometimes a symbolic meaning (rune of Life, Death, Fidelity, etc.). Each sign therefore has one or more meanings and thus constitutes an ideogram. Their interpretation, however, is almost always subject to caution, due to the multiplicity of runic nomenclature, and the utmost prudence is required. It must be recognised, however, that Death, Blessing and the Sun or Victory are concepts that are not uncommon on a Viking altar. On the second sacrificial stone (fig. 42), a group of three runes can be seen in the centre and slightly to the left: eihwaz, fehu and uruz. The first (e long), which appears in the old futhark but was no longer in use at the time, belongs to a Germanic series whose origin is lost in the distant past. It symbolises law and justice. The aerophonic names fehu and uruz mean, respectively, goods and virility.

isolated, below a isolated sign the

⁴LIOTESA: Old Norse, hijōta; Anglo-Saxon, hieotan; Old English, hliotan; Old German, Hozan: to divine, to prophesy.



FIG. 42 – Runas en uno de los altares de Cerro Guazú.

derecha del altar es la runa mannaz, hombre, símbolo de la vida, con una forma poco común que no deja de recordar al tridente de Fosite, aquí más claramente representado que en el friso del Tuja Og (cf. cap. I, 3).

Dos de las inscripciones del abrigo confirman que los bloques en cuestión son realmente altares destinados a los sacrificios. Una de ellas (fig. 43), grabada en un medallón



FIG. 43 – Criptograma del Abrigo de los Altares, en Cerro Guazú.

whose colour is much darker than that of the surrounding rock, is a cryptogram that Professor Munk, with the reservations imposed by all cases of this kind, breaks down as follows: 'thurisaz, isa, odala, ansuz and two solewu. Four odalas follow in succession. The first group gives, in transliteration: thi o as s. Thi means 'to you' in Old Norse. As, 'Ase' is the generic name for the main gods in Scandinavian mythology. The odala is the rune of Odin; the solewu, that of the Sun. We therefore have: : Atí, Odin, God Sun.

A ti, Odín, Dios Sol.

La repetición de una runa tiene, en ideografía rúnica, un valor encantatorio. Tal vez en este sentido tengamos que interpretar los cuatro odala —Odín— que completan la inscripción.

La duda legítima que subsiste frente a ese conjunto críptico desaparece si consideramos otro litoglifo del mismo abrigo. Está constituido por media docena de líneas, la mayor parte de cuyos caracteres, desgraciadamente, están muy deteriorados. Sólo son claramente legibles (fig. 44)

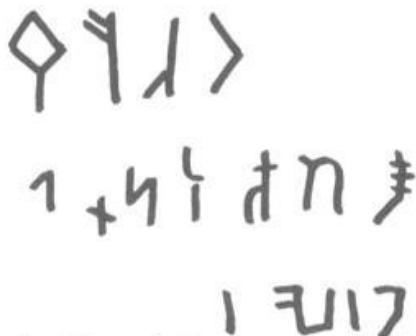


FIG. 44 – Inscripción rúnica en el Abrigo de los Altares, en Cerro Guazú: el sacrificio.

two separate groups, one above the other, at the top left of the inscription, and a third at the bottom right. Its transliteration is easy, despite some linked runes: ofak les that uile ifuil. 89 That is to say, literally ⁵: sacrifice leave this

⁵ OFAK: Old Norse, offra: to sacrifice. LES: Old Norse, lata; Gothic, leían; Old Frisian, leía: to leave. THAT:

Old Norse, at; Gothic, ata; Anglo-Saxon, aet; Old German daz: this. THIS. UILE: Old Norse, hvila; Gothic weillan;

May the stubborn one endure. Or, in a freer translation: May this sacrifice be lasting. Ifuil, the stubborn one—a name or nickname—seems to be the signature of the ensemble, although another word, indecipherable, is engraved below. In the Horse Shelter we find another inscription of a religious nature (photo 17). It is of particular importance in the context of our research. Not because of its text, which is classical, nor because of the cryptographic composition of its last two words, which seems to be a characteristic of divine invocations, but because it is the work of a professional runic engraver. From this point of view, at least as far as we know at present, it constitutes a unique case in South American runology. The transliteration of the lithoglyph in question leaves no room for doubt, although the artist did not hesitate to sacrifice graphic rigour to his desire for harmony: kallil olif ull uli. Olif is, as we have already seen, one of the diminutives, common in the Viking era, of the name Adalwolf. Ull is the god of hunters in Germanic mythology. The meaning of the whole is⁽⁶⁾ Olif, brave man, to Ull (protector) of the inheritance. A lithogram (painted inscription) of the same nature adorns the base of the Cerro Guazú dolmen

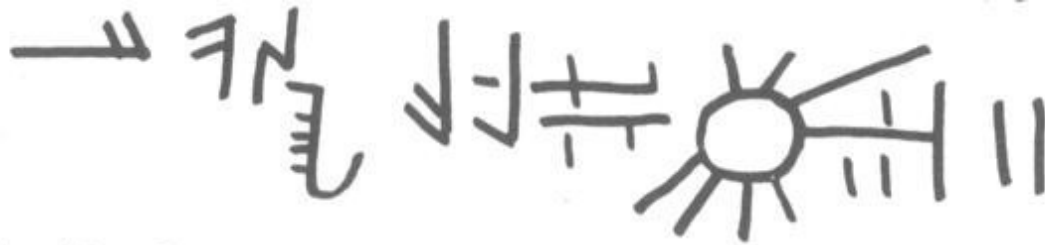


FIG. 45 – *Sol radiante e inscripción rúnica en el pie del dolmen de Cerro Guazú.*

Se lee, a la izquierda de un Sol radiante, no sin dificultad en razón, aquí también, de un grafismo que expresa más preocupación artística que rigor:

os leuo liuth.

Lo que significa **::

Himno del Dios-Sol.

El Ase por antonomasia es el Dios solar Odín.

(fig. 45).

4. War and victory The Vikings of Cerro Guazú had more than one reason to place themselves under the protection of their gods. Not only did the jungle make life difficult for these Norse people, but so did the enemy —

Old German, wilon: to continue, to last. IF: medio atenían, ifer:

serious. UTL: Old Norse, vili; Gothic, wilja; Old Frisian and Anglo-Saxon, milla; Old German, millo: will.

⁶ KALLIL: Old Norse, karl. brave man; Norse,

kall, old man. (IL is probably a suffix whose meaning escapes us.) ULI:

Old German, ul, inheritance, ancestral domain of a family, tribe or race.

OS: graphic variant of As, Ase. Cf. above. LEUO:

Old Norse, Old Frisian and Anglo-Saxon: fo.f; Old German, lob: praise; (from the Indo-European root leubh). LIUTH: Old Norse, tíodh: magic formula; Old Saxon, lioth; Old German, ʒ »od;

Anglo-Saxon, eod: song, poem; hence: LEUO LIUTH: song or poem of

praise, hymn.

⁷ UIK: Old Norse, vega; Gothic, weifcan; Anglo-Saxon and Old German, wigan: to fight. UINA: Old Norse, vinda;

Gothic, windan; Old German, wintan: to return. US: Old Norse, Gothic and Anglo-Saxon, ut; Old German, uz: from, in the sense of "since, outside of". LUTH: Old German, lud: glory. THI:

Old Norse, thi: to you. ATE: Old German, atto; Gothic, atta: father. KLE:

Old German, kliban: to be fixed, to adhere. UF:

Old Norse, yfir; Gothic, ufar; Old German, in/ber: on, above: Old Norse, ofan; Anglo-Saxon, ufan; Old German, obana: above.

Evidently, certain very warlike Indians from the region must have imposed frequent battles on them (which, incidentally, was certainly not to their displeasure). We find evidence of this in some inscriptions at Abrigo del Caballo that relate to war. One of them consists of two lines of very well-drawn characters, inscribed in a kind of oval medallion (photo 18). Four or five signs at the end of the first line could not be transliterated. What remains is: uik uina klok us luth thi... ate kle uf thi. The last three characters of the second line (the group th does not represent a thurisaz: it is formed by the letters t and h) have nothing to do with the thi, "to you", of the previous sentence or proposition and are incomprehensible to us. The whole, however incomplete, is no less clear ⁽⁸⁾: War has returned from Klok. Glory to you... Father, stay above... Klok, whose meaning escapes us, must be a place name. If, in the face of a possible attack, the writer recommends that his father, probably elderly, remain on the plateau, which is easier to defend because there is water there, where the Vikings must have had their houses and, perhaps, a fortress, another message from the same shelter indicates that measures had been taken to defend its access points. We read, in fact, despite two groups of runes quite difficult to transliterate (fig. 46):

sunol ui ekath luk left loip.

Vale decir *:

Sunold y Ekath, vigilad el sendero en pendiente de la izquierda.

Sunold ("hijo fuerte") y Ekath ("portador de espada") son nombres de persona. Falta la d final del primero, trátese de una variante o de una falta de ortografía.



FIG. 46 – Inscripción rúnica en el Abrigo del Caballo en Cerro Guazú: la guardia. Wars usually end in demonstrated once again by two rather fanciful shapes. However, more delicate. It literally means

⁽⁹⁾Victory shines like gold on the mountain. " Shine like gold" is probably an idiomatic expression. If this is indeed the case, we have: Victory shines like gold on the mountain. The second inscription, also in the same shelter, is engraved just below the first one, on a narrow strip of stone (fig. 47). It is quite deteriorated, except for in the

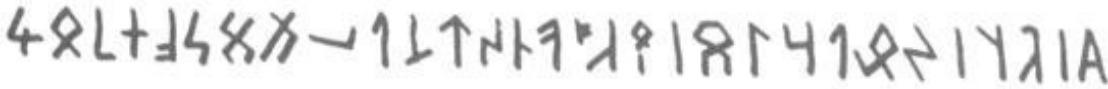


FIG. 47 – Inscripcion rúnica en el Abrigo del Caballo, en Cerro Guazú: expediciones y victoria. regarding

its last legible characters. It has the peculiarity of including three Arabic numerals, including a 5 which, according to medieval usage, has the shape of our 4, as in one of the dates we noted earlier in Cerro Morotí (2). Its transliteration gives: 5 olefs 8 og 7 lits no faföiol kluo sig a... And its translation: 5 plus 8 and still 7 expeditions (to) Faföiol. Victory shone The etymology of /lits indicates, for this word means "journey". However, in the context of military operations, "expedition" seems more appropriate. Faföiol, whose meaning escapes us, must be a place name. 5. **Some anthroponyms** As always in runic epigraphy, we find numerous anthroponyms in Cerro Guazú, some of which simply consist of one or two names or nicknames —three in one case— while others, more scarce, begin with ik, I, in the manner of the *jegformlen* of Danish runologists. Let us limit ourselves here to mentioning a few of them. In Abrigo del Caballo, we found a lithoglyph, legible despite four ligatures (fig. 48), composed of three well-known names: oljsa og nethl olui. Oljsa is still used today in Germanic countries, with the form from Alisa (in Spanish. Alicia). Nethl o. more

⁸ UI: Old German, wio: like, as well as. LUK: Old German, luogen; Old Saxon, lofcon; Anglo-Saxon, loción; Modern English, to loofc: to look. LEFT: Anglo-Saxon, ly-ften; Modern English, left. LOIP: Old Norse, hiaupa; Anglo-Saxon, hieapan; Old Frisian, hiapa; Old German, loufan: to run, to jump; Modern Scandinavian, löipe: ski slope.
⁹ OLEF'S: Old German, li-f: more (from which, in modern German, cl-f, eleven —from einlif, one more— and zwolf, twelve —from zweüif, two more—). OG: Old Norse, og: and. LITS- Old Norse, leid: Old Saxon, leda; Anglo-Saxon, íad: direction? ca-mino, journey. NO: Old Norse, naúh: Old Saxon and Old German, noh: still. KLUO; cf. above. SIG or sik: idem.



FIG. 48 – *Un antroponímico runico en el Abrigo del Caballo, en Cerro Guazú.*

Exactly, Nethel (the omission of the e does not change the pronunciation) has become Ethel. Oluin (the final n is missing, but this does not make the transcription any less clear) has been transformed into Alwin. Og, as we know, means 'and' in Old Norse. Just below, slightly to the right, on the surface of a stone block, we read: list followed by a rune of life (fig. 49). This term is one of the many names of Odin and means ⁽¹⁰⁾ 'The wise one'. Let us also mention, still for the same shelter, an inscription whose spelling, careful in its own way, is one of the most unorthodox (photo 20). However, its transliteration leaves no room for doubt: malisku or izot. Malis means exactly "letter painter". We know that in Scandinavia it was used, depending on the case, to express the action of "engraving runes" the verbs writan,



FIG. 49 – *Un antroponímico runico en el Abrigo del Caballo, en Cerro Guazú.* hoggva and rista, to engrave, or faihian, to uired the more general meaning of "to write" p ("), which must have undergone a similar evolution, since at Cerro Guazú, the vast majority of the

ILLUSTRATIONS

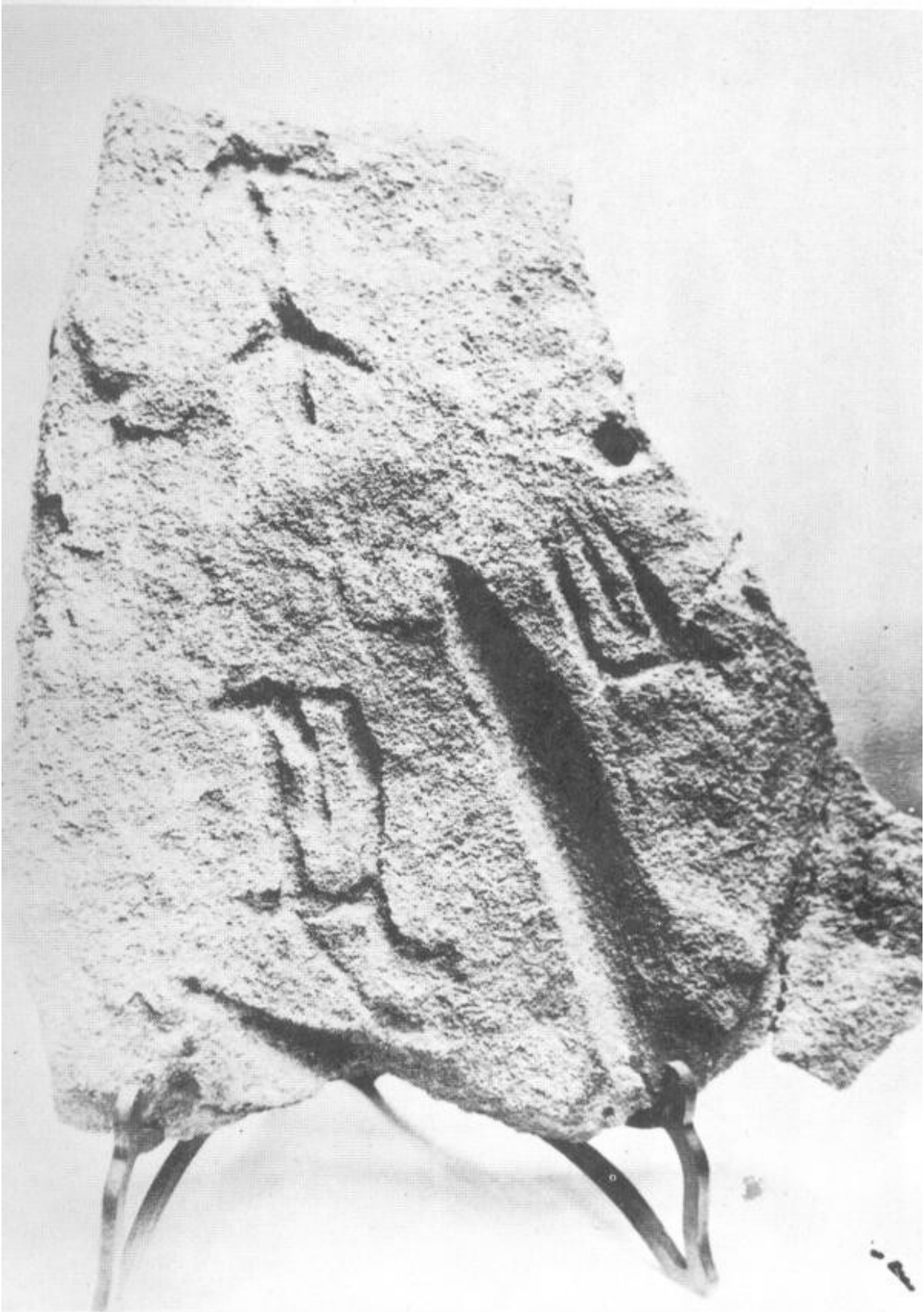
¹⁰ LIST: Old Norse and Old German, list: to know.



1. *Fortaleza de Cerro Corá: la plataforma de observación.*



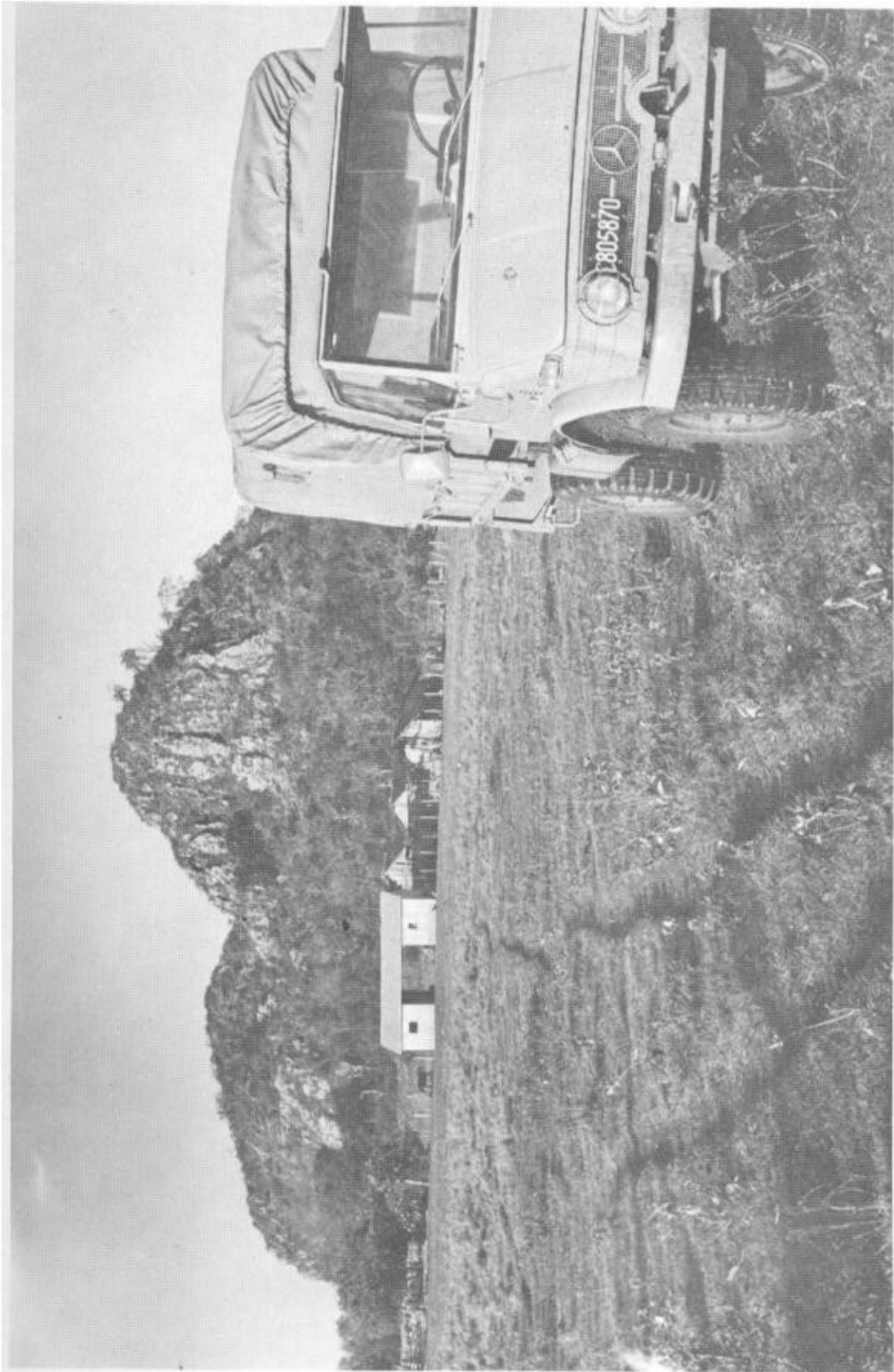
3. Fortaleza de Cerro Corá: un aspecto de la muralla de piedras labradas, desmantelada por la vegetación.



5. Cerro Corá: doble runa de la muerte en el friso del abrigo bajo roca del Tuja Og.



6. Cerro Corá: inscripción rúnica y tridente de Fosite en el friso del abrigo bajo roca del Tuja Og.



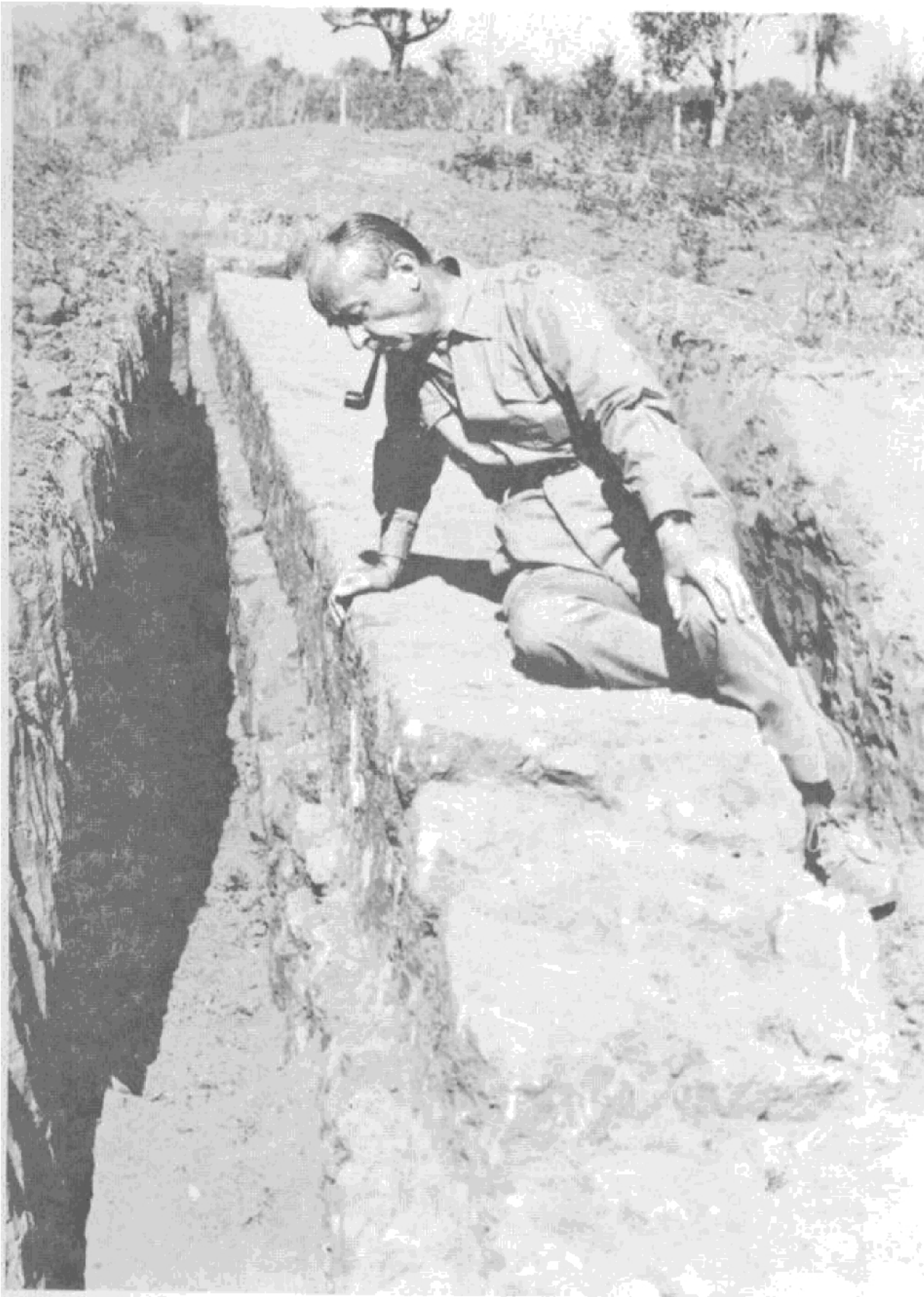
7 El Vந்து Perö a Corro Inir



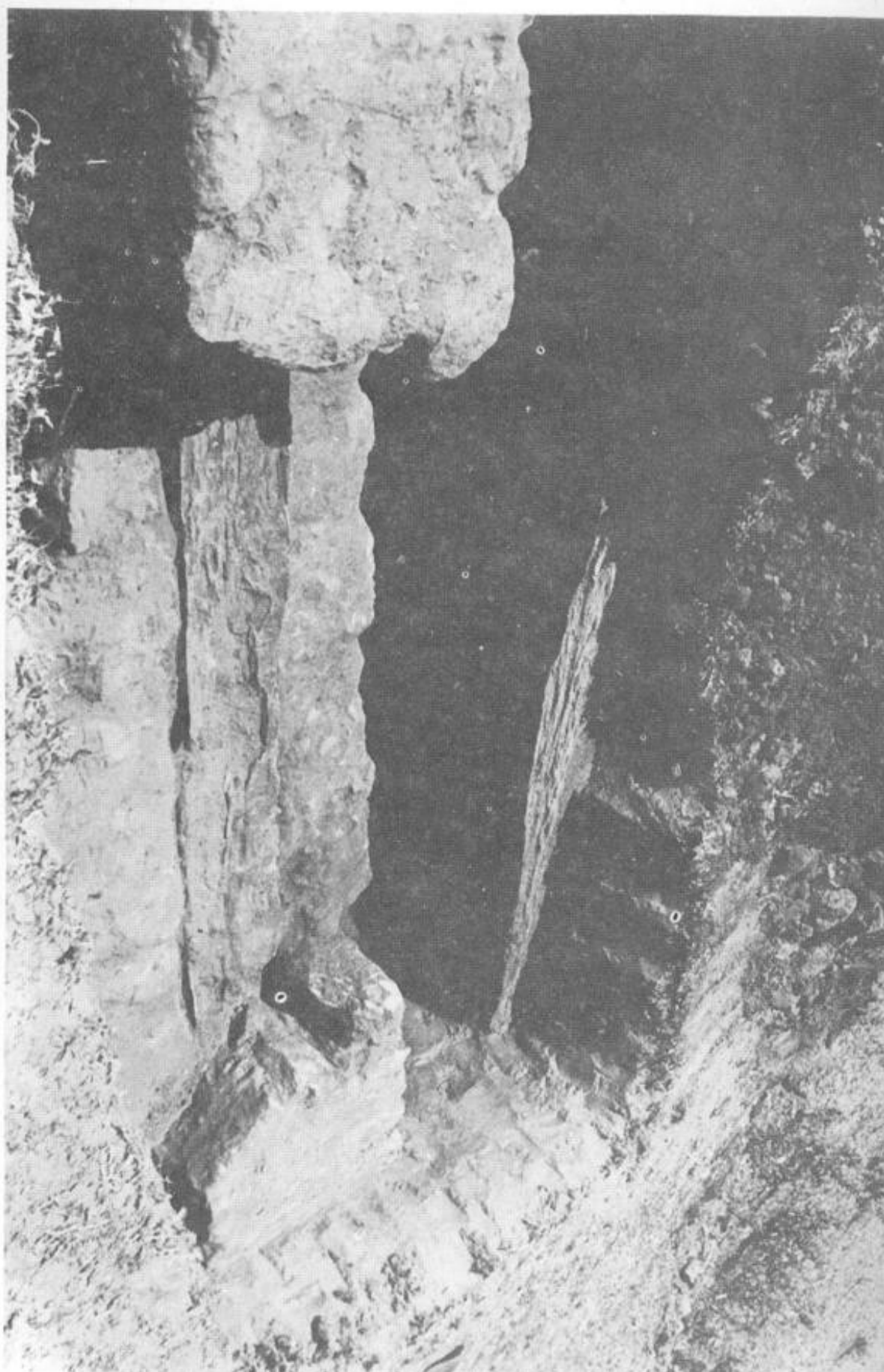
9. Parte central del bosque sagrado del Cerro Ipir.



10. *El personaje solar del Cerro Kyse.*



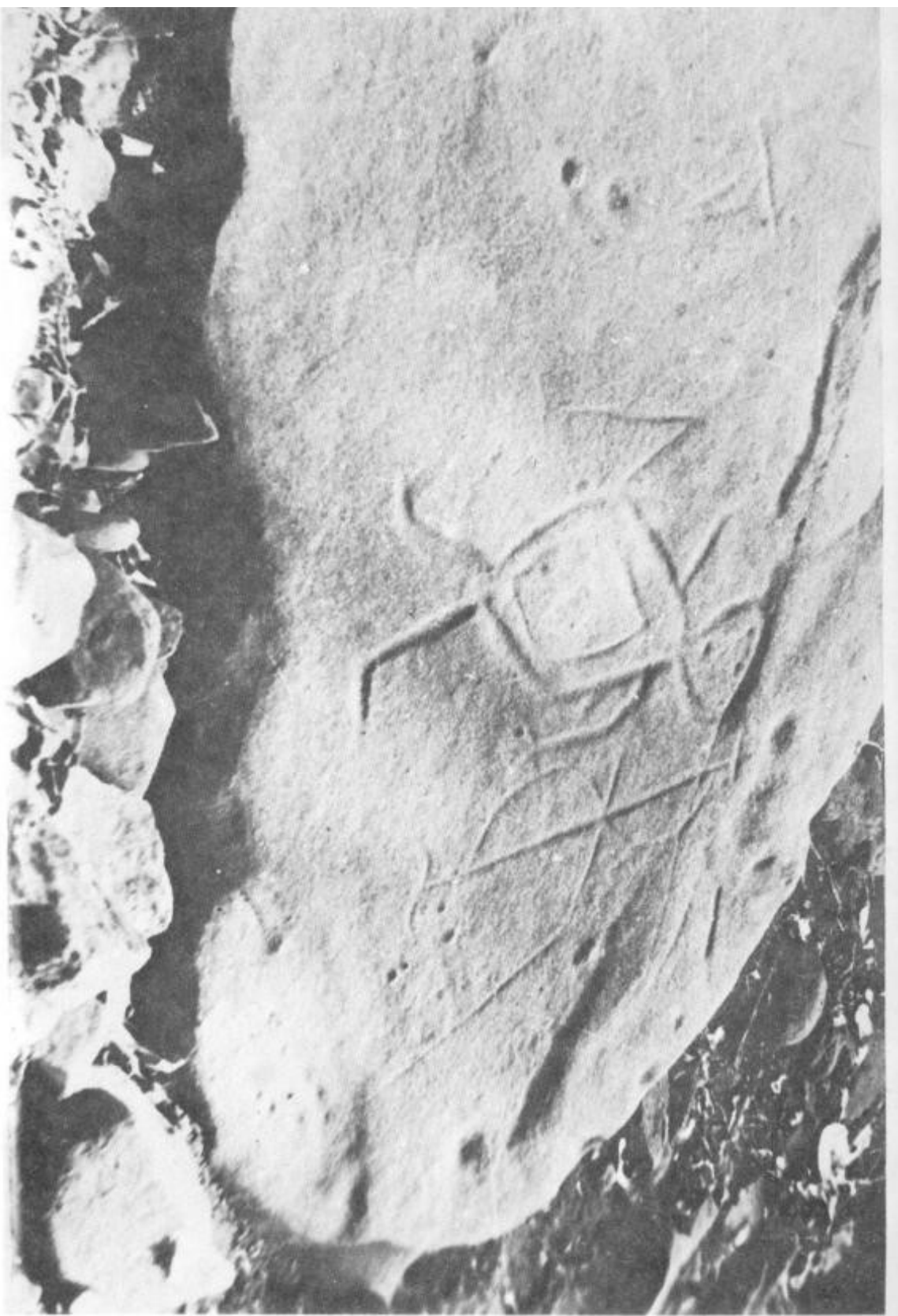
11. Professor Jacques de Mahieu examining. during the course of the excavations, the foundations of the temple of Tacuati



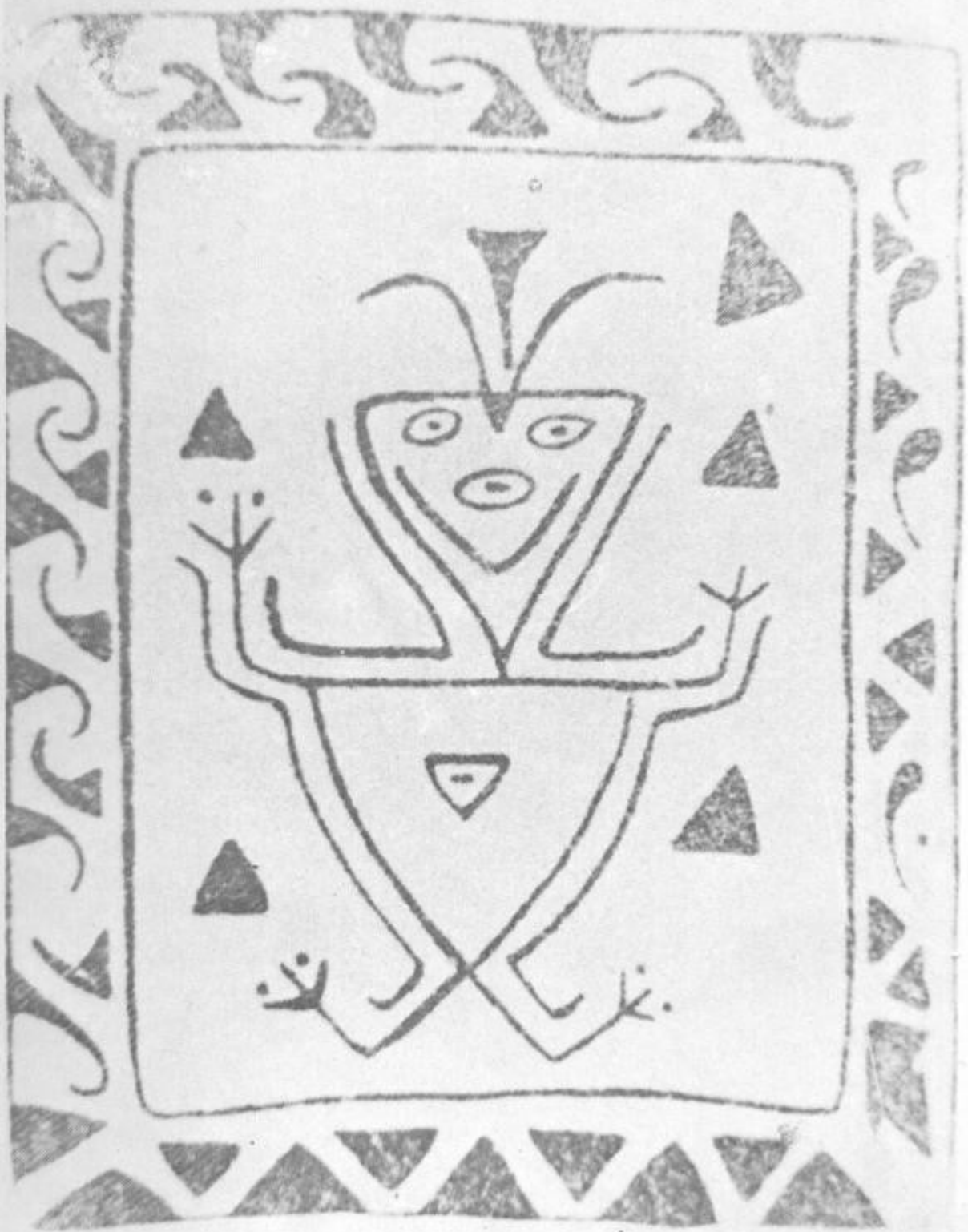
12. *La entrada del templo de Tacuati.*



13. Fragmento del cuello de la urna funeraria de Tacuati, con su torsade de estilo nórdico.



14. El personaje del Abrigo de Odín, en Cerro Guazú.



15. *El personaje del Abrigo de Odín en un escudo de Chancay, Perú.*



16. Uno de los altares de Cerro Guazú.



17. La inscripción rúnica de Olif, en el Abrigo del Caballo de Cerro Guazú, obra de un grabador profesional.



18. *Una inscripción rúnica del Abrigo del Caballo, en Cerro Guazú: la guerra.*



19. Una inscripción rúnica del Abrigo del Caballo, en Cerro Guazú: la victoria.

20. *Una inscripción rúnica del Abrigo del Caballo, en Cerro Guazú: el grabador de runas.*





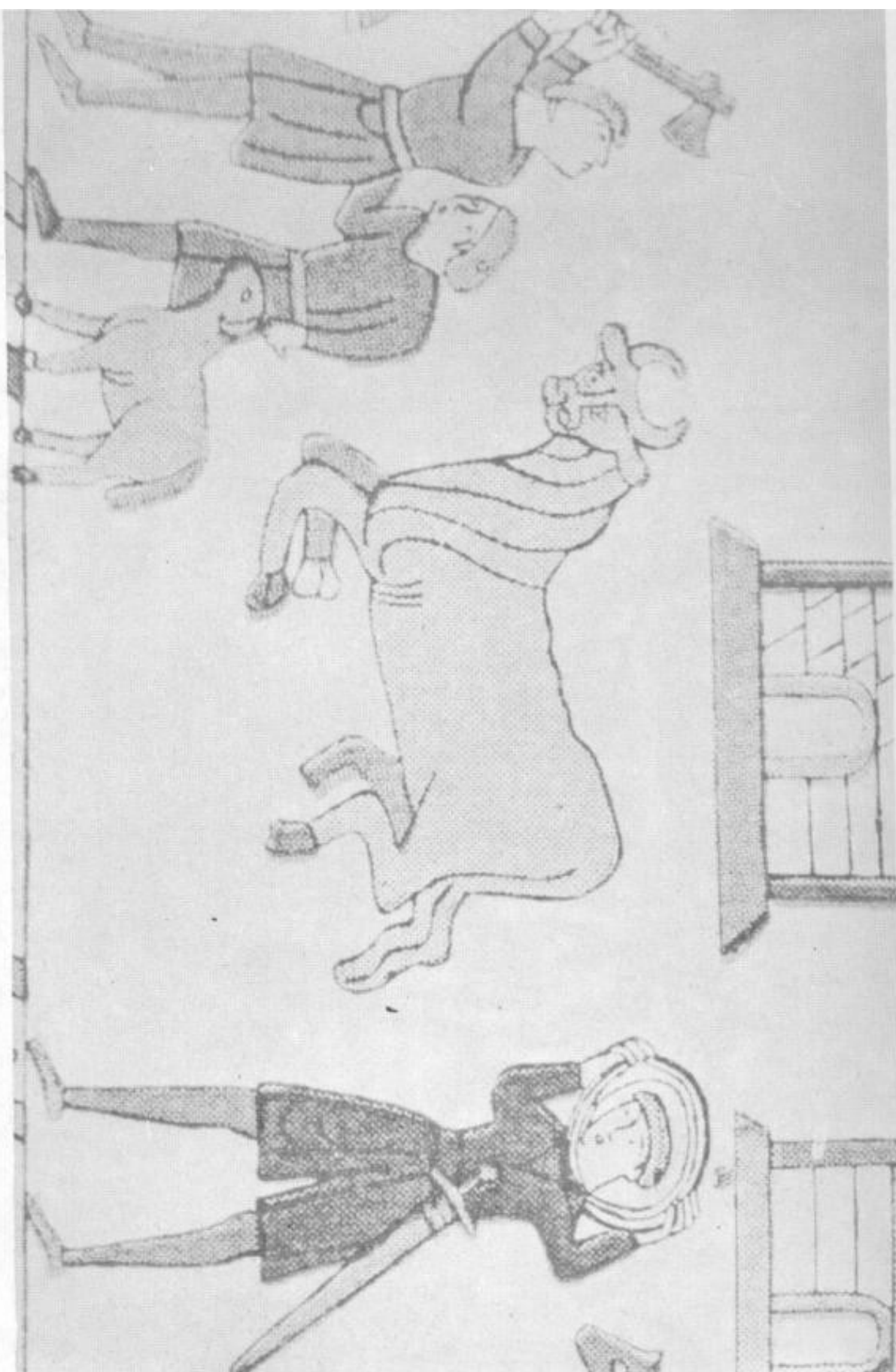
21. Una inscripción rúnica del Abrigo del Caballo en Cerro Guacá: Gimil el Rizado.



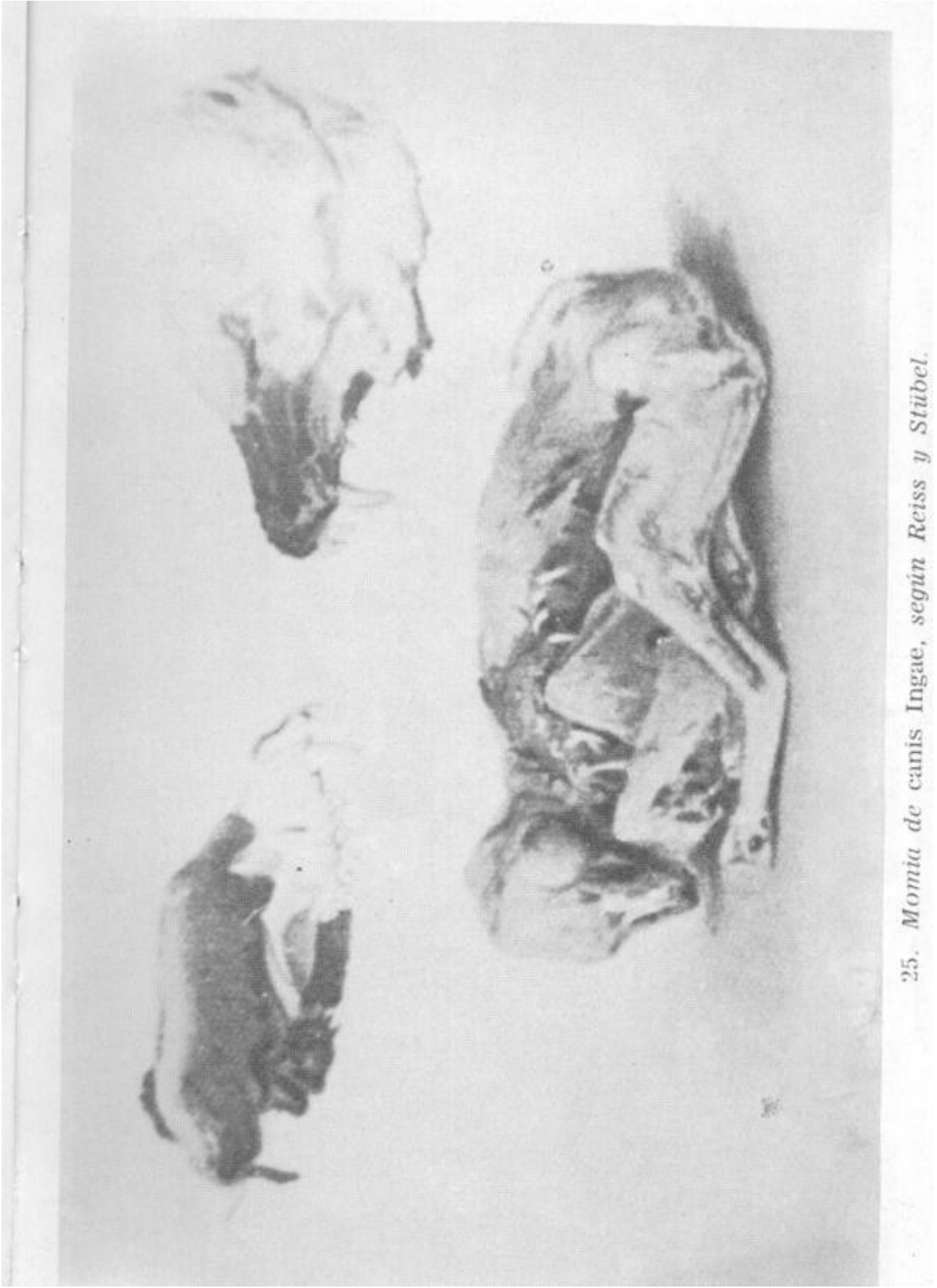
22. *El caballo de armas vikingo de Cerro Guazú.*



23. *El terrier de Cerro Guazú.*



24. *La vaca normanda del Tapiz de Baieux*



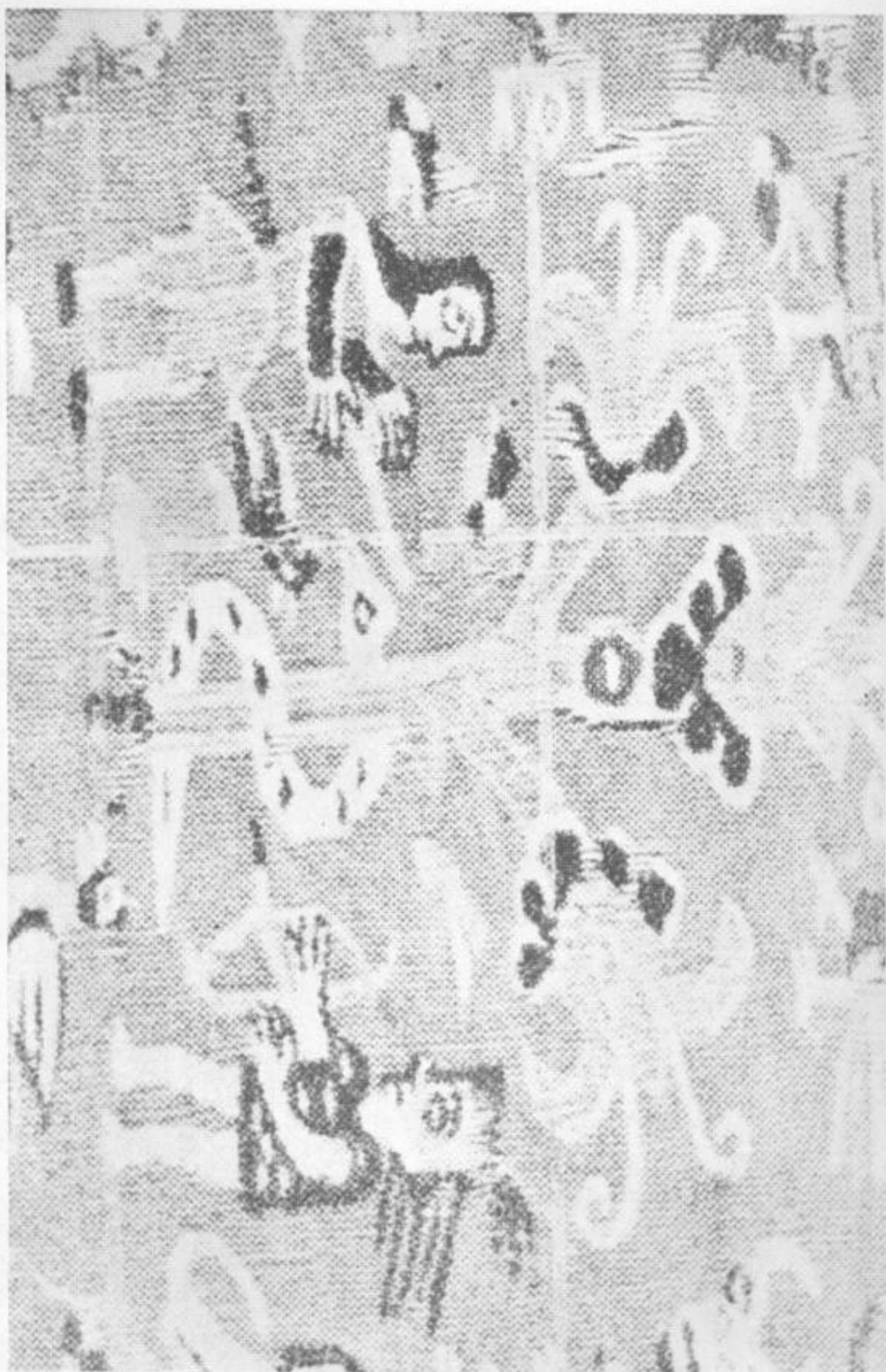
25. *Momia de canis ingae, según Reiss y Stübel.*

26. El percherón del unku de la isla de la Luna, lago Titicaca.





27. El toro del unku de la isla de la Luna, lago Titicaca.



28. *El europeo del unku de la isla de la Luna, lago Titicaca.*



29. El dios escandinavo Thor, cubierto de un sueste.
(Bibliothèque Nationale, Paris.) Grabado del siglo XIII.

those that have survived to this day, are engraved. Hence the translation ¹¹ Small writer and iron (point). Here, 'writer' should be understood in the primitive and general sense of the term. The whole does not constitute an anthroponymic, but it had the same function for those who knew the runic engraver in question. Also in Abrigo del Caballo, a lithoglyph that, like the previous one, shows a real artistic sense on the part of its author, is composed of two groups of extremely irregular characters which, due to their presentation and ligatures, almost constitute a cryptogram (photo 21). Professor Hermann Munk gives us the following transliteration: ginil gilokal. Ginil is a person's name; gilokal, a nickname. Hence (¹²) :Giniif the Curly. Another anthroponym from

¹¹ MALIS: Gothic, mela: letter; meijan: to write; Old Germanic man; mal: sign, point; modern German, Moler, painter. K.U: diminutive. O: Old Norse: og, y (the 9 is missing, possibly due to an oversight by the engraver). IZOT: Old German, iserin: iron.

¹²GI: prefix which, in all Germanic languages, expresses meeting, sum, integrity. LOK: Old Norse, U>fckr; Old Frisian and Old Saxon, lok; Anglo-Saxon loce (pronounced Toke);

same coat also offers a appearance semi-cryptographic (fig. 50). such as, by moreover more,



Fig. 50 – *Un antroponímico rúnico en el Abrigo del Caballo, en Cerro Guazú.*

signatures. We read without the slightest difficulty ils, fairy of the woods, in Old German. This is a feminine name that has been preserved to this day in a slightly modified form: Use. Let us also mention two nicknames: bliki-f. the
Brilliant * (fig. 51), whose prime-



Fig. 51 – *Un antroponímico rúnico en el Abrigo del Caballo, en Cerro Guazú.*

ra runa es incompleta o latinizada y cuyas tres últimas, ligadas, constituyen una especie de rúbrica de pretensiones artísticas; y mouei, el Valiente ** (fig. 52), cuya última runa está borrada.



Fig. 52 – *Un antroponímico rúnico en el Abrigo del Caballo, en Cerro Guazú.*

foot of the dolmen, a jegform, very clear despite three ligatures, catches our attention first (fig. 53) ik tulakat. That is ¹³ At the ¹⁴ : I, offspring of a cat. This refers to a woman, since tula is feminine. A name of this kind should come as no surprise. Hysteria has preserved for us that of Cenn Caith, Cat's Head, Irish prince of the century i-
"a. J. C.

Old German, ioc; loop, curl (of hair). AL: suffix. ¹³ BLIKIF: Old Norse, blikja, to shine; Old German, blie, lightning. MO: Old Norse, modhr, anger; Old Frisian, Old Saxon and Anglo-Saxon, mod; Old German, muot: ardy, courage. WEI: Old Norse uinr; Old German, win: friend of, lying down. ¹⁴ IK: Old Norse, ik, I. TULA: Old German, toldo: corolla of a flower. de] Old Germanic dul, to sprout, to blossom; Irish, deū, branch. KAT: Old Norse, ketta; Old Frisian, fcdtta; Old German, kazza: cat. . &

Gata, principe irlandés del siglo I^a. J. C.



FIG. 53 – Un antroponimico rúnico en el pie del dolmen de Cerro Guazú.

Siempre en el zócalo del dolmen, también encontramos los antroponímicos uilte **, el Indomable (fig. 54) y

tulou giul:



FIG. 54 – Un antroponimico rúnico en el pie del dolmen de Cerro Guazú.

Giuk (más correctamente Giuki), grabado de modo semicriptográfico (fig. 55), es un nombre nórdico conocido.



FIG. 55 – Un antroponimico rúnico en el pie del dolmen de Cerro Guazú.

We have just seen that tulo, here in the masculine form, means "offspring". The u poses a problem that can only be solved if we see it, somewhat arbitrarily, as an abbreviation or reduction of uin. If this hypothesis is correct, we obtain the following literal meaning: Giuk, the friend of the offspring. The Offspring, in Scandinavian mythology, is the god Heimdall, "Born of the Earth". We would thus have: Giuk, the friend of Heimdall. 6 . **Some messages and an enigma** Let us conclude this sampling of the translated inscriptions from Cerro Guazú by reproducing five more of them, four of which represent messages of various kinds, while the last one offers astronomers a problem that we assume would not be difficult for them to solve. In a small engraved medallion from the Abrigo del Caballo, we read (fig. 56);

alf nui.



FIG. 56 – Una inscripción rúnica en el Abrigo del Caballo de Cerro Guazú.

A group of signs e ¹⁵: New river. Another

which is escapes us Em-

¹⁵ALF: Norse, alf, river. NUI: Old Norse, nuath, nua; Gothic, niugis; Old Frisian, me; Old Saxon, niwi; Anglo-Saxon, niwe niowe; Old High German, niwi, Middle German, niuwe; Modern Danish, ny (pronounced nii): new.



C E B Q U P S h 1

FIG. 58 - La inscripción rúnica del Abrigo del Buen Bebedor, en Cerro Guazú.

FIG. 59 — Una inscripción rúnica en el pie del dolmen de Cerro Guazú.

horizon" line, a large star can be seen. Three ligatures do not prevent the text from being transliterated with certainty: *elis kuk nas sa*. The final *s* of *nas* and the initial *s* of *sa* are confused by haplography, as is customary in classical runic epigraphy. Translation ¹⁸: The other vagabond

¹⁷LAF; Germanic, iap; Anglo-Saxon, tapian: to drink; Norse, l apia: Old German, laffan: to lick. UAL: Old Norse, vel, val: Gothic, waila; Anglo-Saxon, wei; Old German, wola, wala, vuela: well. KITH: Old Norse, geta, to obtain; Old German, ir-getzan, to make forget; modern German, ergötzen, to entertain, to cheer up. NUAL: Old German, hnua, nuoa: cleft.

¹⁸ELIS: Old Norse, *elja*, the other, the competitor; Gothic, *nljis*; Old German, *eī*: other. KUK: Old German, *geugaron*; modern Tyrolean dialect, *geigein*: to wander. ÑAS: Gothic.

sows moisture. It seems that the "other vagabond" that brings abnormal rain is a large comet, schematically represented next to the inscription. If this is indeed the case, astronomers should be able to tell us in which year, from the 11th to the 15th century, the period of Viking presence in South America, such a meteorological phenomenon took place, catastrophic enough for the inhabitants of Cerro Guazú to have deemed it appropriate to leave a written record of the event. This implies, moreover, a level of scientific knowledge on the part of the latter, which is also attested to by the map of South America brought to Dieppe around 1250 by the Vikings of Tiahuanacu (5) and reproduced in 1507 by Martin Waidseemüller. 7 . **A place of retreat on the northern route** The runic complex at Cerro Guazú, of which we have only surveyed a part, clearly shows that the area was frequented by the Vikings for a long time: the number of inscriptions, their varying degrees of deterioration and, above all, the superimposition of some of them, not to mention the walls entirely covered with ornamental engravings — especially harmoniously intertwined tree branches — prove this beyond any doubt. However, we do not see any permanent construction here: neither a temple, as in Tacuatí, nor a wall, as in Cerro Cora. The village must have been located on the plateau, where there is abundant water, but its houses could only have been made of wood, since nothing remains of them. Cerro Guazú, therefore, was not a parcha, a post station located at a crossroads, like that of Yvytyruzú. Firstly, because we do not find there the equivalent dej, 'signpost', which characterises the latter ('-), but above all, as we shall see in Chapter VI, because the road that leads to it is nothing more than a dead-end branch of the northern route. The rock shelters probably served as outposts for the garrison that protected the village, located in an insecure region, as evidenced by the inscriptions referring to war. During the long hours on guard duty, the warriors carved drawings into the soft rock and, those who knew how to write, names, invocations to the gods, messages and even, to pass the time, cryptograms similar to those found in Scandinavia and continental Germany. The small altars seen in one of the shelters show that the latter was used—or also used—for religious ceremonies and that sacrifices were offered to the gods there, as in Yvytyruzú (2). We will see later what the purpose of this complex was. For now, let us simply mention that the drawings of animals on the walls of the shelters are of particular importance in the context of our research. They contribute decisively to solving one of the most exciting problems posed by the history of South America. V **Horses, dogs and cattle in pre-Columbian America 1 . Unexpected animals** When the Cerro Guazú survey was carried out, we had already known for years that the Vikings of Tiahuanacu had frequented Paraguay. The discovery of runic inscriptions in Amambay provided us with new evidence of this — and what evidence! — but it was not surprising. The image of the six-legged horse at Odin's Shelter was also easy to explain in the context of our previous conclusions, since it was merely a local adaptation of a mythological being whose form had been preserved in religious iconography, and even in tradition, over the centuries. All the more so since this animal is barely recognisable. But we were startled to observe, in the series of photos taken by our collaborators at the shelter that owes its name to it, the drawing of another horse, completely different. The lithoglyph in question (photo 22) shows us, in fact, an animal with very pure lines: a work of art, despite the simplicity of the stroke — or, in part, thanks to it. At first, as we mentioned in our press release about our discoveries at Cerro Guazú, the authenticity of the drawing seemed highly questionable: its lines are much clearer than those of the surrounding inscriptions, in a tropical region where patina forms very quickly. But who, in our time, not to mention in the previous months, could have engraved such an image? Certainly not one of the forest-dwelling Guayakí people who frequent the area, nor the only Paraguayan who lives there, Celestino Rojas, who is full of respect for his country's cultural heritage. We doubted very much that the geologist who had discovered the rock shelter had the necessary artistic talent. On the contrary, it was quite possible that some barbarian had traced over such a surprising but barely visible drawing with a sharp point. This hypothesis proved to be correct. A photographic enlargement revealed, in fact, beneath the contemporary trace, a line as patinated as those of the adjacent lithoglyphs. A personal examination carried out later at the site confirmed the age of the primitive drawing. This is also confirmed by the silhouette of the animal itself, which is very different from that of the small Creole horses of the region. We are looking at a horse of a great breed, as evidenced by its noble bearing and slender legs, whose thinness, a natural consequence of an unfavourable climate, reinforces its elegance. Could we identify this breed? Yes, thanks to an anatomical detail that is immediately apparent: an exceptionally small head. This is the most striking characteristic of the war horses bred by the Scandinavians in the Middle Ages. An example (fig. 60) will show us this better than a long explanation. Apart from its thinness, the conformation of the animal depicted in Cerro Guazú is exactly what one would expect from a Viking. The authenticity of our horse is indirectly supported by the recent drawing, this time without superimposition, which appears just below it. This is, in fact, an unfinished and not very accurate sketch of a reproduction of the dog (photo 23) engraved on the same wall, but difficult to reach, whose patina attests to its age. As it is not possible to inflict the same damage on this latter lithoglyph same treatment as the preceding one,

; Old German, naz: moisture. SA: Gothic, saian; Old German, saen; to sow.

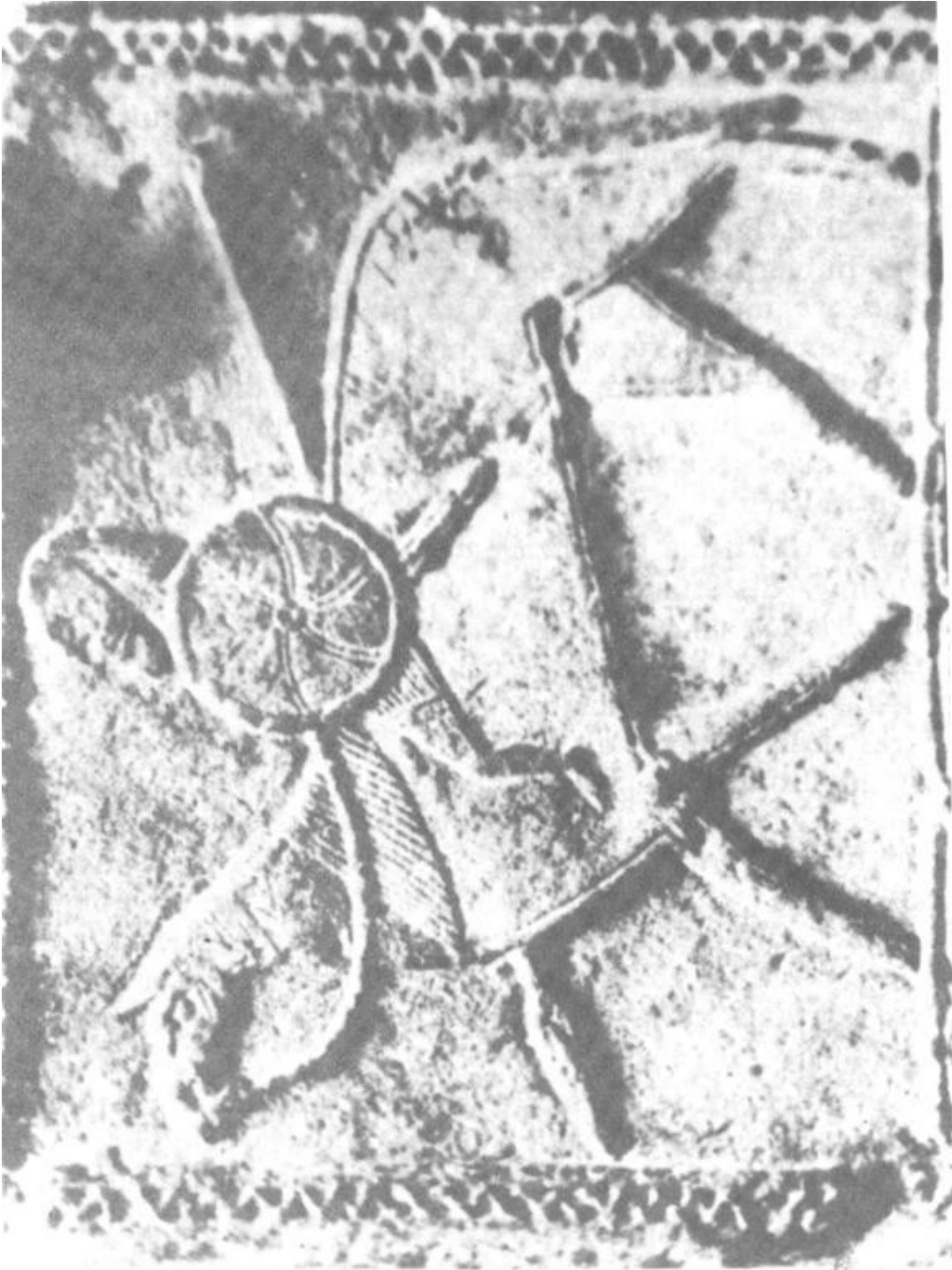


FIG. 60 Tipo de caballo de armas vikingo.

The barbarian tried to copy it but, for one reason or another, gave up immediately: perhaps because his first attempts made him foresee failure. This dog is not just any animal. Without the slightest hesitation, every film buff — we conducted several experiments in this regard — recognises it as a terrier. It has a compact body, a straight tail and, above all, a large, long head with a rounded skull and square muzzle, which characterise most varieties of the breed. It would be futile, however, to try to compare it to any of the latter, which are of recent origin. But it is important to note that all terriers seem to descend from the old broken-haired terrier of Ireland and that all its varieties, historical and contemporary, come from the latter country, Scotland and Wales. Now, we know that the South American Vikings came precisely from the British Isles. It is not surprising, then, that they brought with them dogs—great hunters and fierce fighters, like today's Airedale, which belongs to the breed—that they must have valued very highly. On the other hand, as Madeleine Friant Cn) writes about the *Canis Ingae*, which we will discuss later, "the wild *Canis* of South America, with the sub-genera *Chrysocion*, *Cerdocion* and *Notocion*, very different from our wolf [*Canis fcanis*) *lupus* L.], differ considerably in their general appearance from both the *Canis Ingae* and the domestic dogs of Europe. It is therefore impossible to accept that the Dog of the Incas comes from South American wild dogs." Nor, even more so, our terrier, which is even more distant and clearly belongs to a well-differentiated, typically European breed. We find the Cerro Guazú dog again in a drawing by Fritz Berger (fig. 61), who describes it as a tiger, although it is wearing a collar. The animal, of which we can only see its characteristic head, neck, part of its body and the outline of one of its front legs, is chasing an unidentified mammal, slightly smaller than itself.

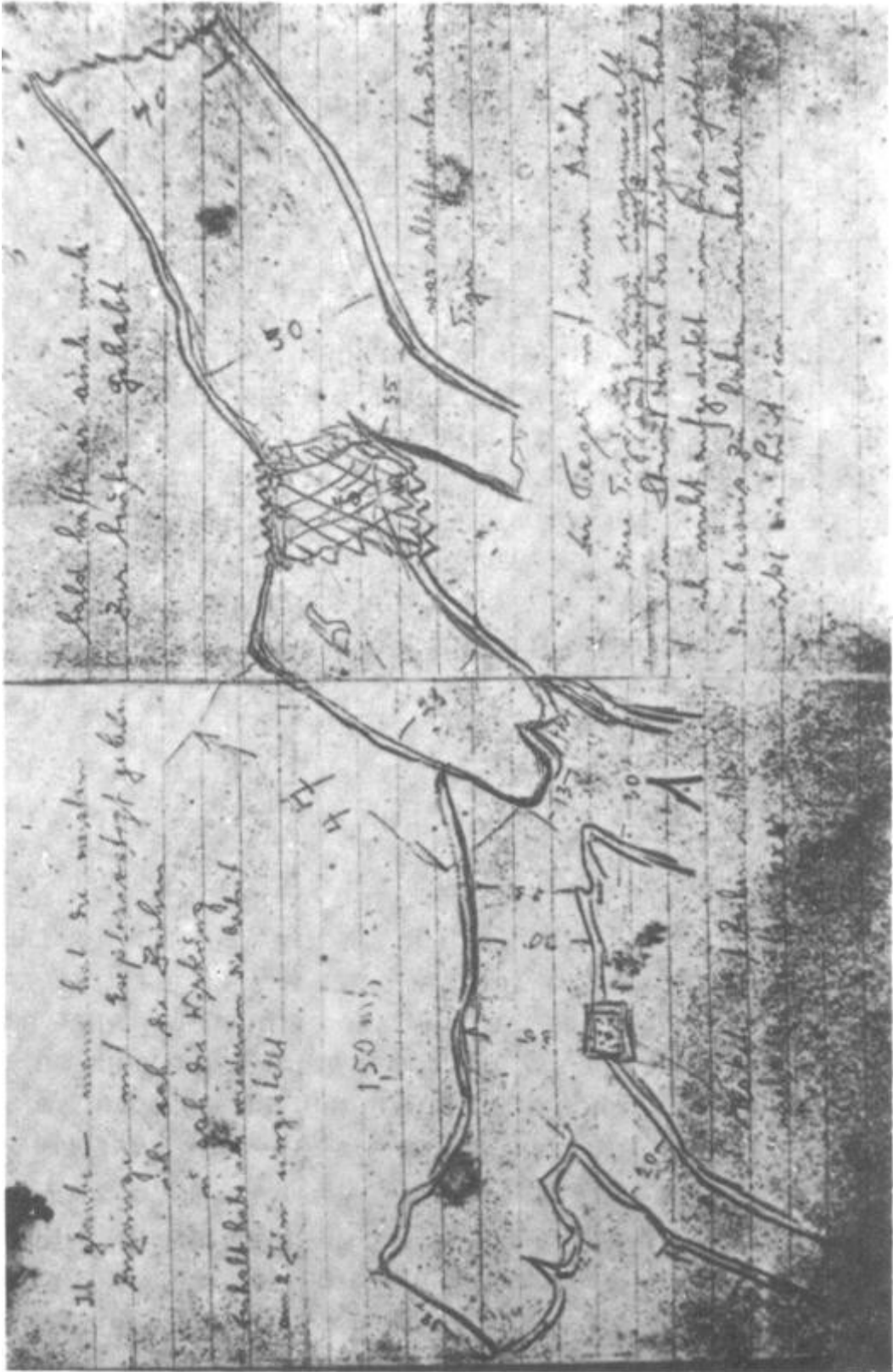
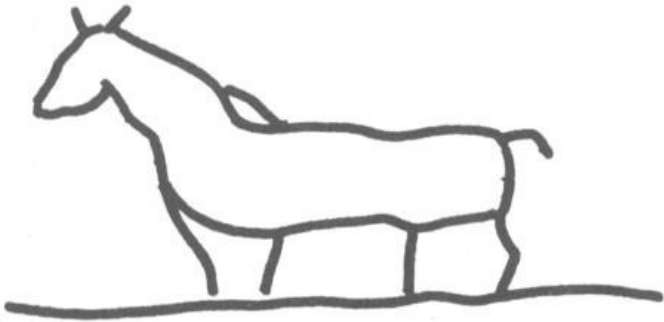


FIG. 61 Dibujo de un perro en los alrededores del Cerro Ipir, según Fritz Berger.

Berger

He claims to have discovered it engraved on the ceiling of a "room" whose location, unfortunately, he does not specify, in the Cerro Cora region. It should be noted that we have never found a dog wearing a collar in Paraguay outside of cities. It therefore seems unlikely that this could be a contemporary lithoglyph. If it were, the coincidence with our terrier would border on the miraculous. In the Abrigo del Caballo de Cerro Guazú, a third unexpected animal joins the horse and dog we have just described. Above and to the right of the inscription in photo 18, we find the silhouette of a bovine animal (fig. 62) that is easily



g. 62 – Dibujo grabado de una vaca normanda en el Abri-go del Caballo, en Cerro Guazú.

identifiable by its or its short legs

short legs and embryonic horns. One aspect of its anatomy, however, does not fail to surprise us: its small head on a neck that is swollen at the base and tapers and rises much higher than in the breeds we know today, even in females, whose necks are always less solid than those of males. This detail

solid body,

could make us doubt the species of the animal if we did not find it again in the medieval Bayeux Tapestry (frame 24) which, as we all know, illustrates the conquest of England by the Normans, cousins of the Vikings of Tiahuanacu. **2. The dogma of the post-Columbian horse** Why are we startled by the image of the horse of Cerro Guazú? Because it contributed powerfully to destroying one of the dogmas of conformist American studies: that equines were imported into the New World by the post-Columbian Spanish, as were cattle (except for bison) and poultry (except for turkeys). This exceptionally persistent legend arose from a misapprehension by the conquistador Juan de Garay, who in 1580 travelled from Asunción to the Río de la Plata with the aim of founding a city there, Buenos Aires, on the site of the fort built in 1536 by Pedro de Mendoza and abandoned a few years later. As they approached their destination, the expedition members were surprised by "the existence of large herds of chucaro ponies, descendants of the horses and mares abandoned when the previous settlement was depopulated (12)". Nothing could be more implausible than such an origin. Thanks to Ulrico Schmidel (4), who was part of the expedition, we know all the details of Mendoza's expedition very well. We know, in particular, that the governor and captain general had brought only seventy-two horses and mares from Spain. On the other hand, the three hundred sailors and two thousand three hundred and fifty soldiers—Castilians and Germans—who served under his command experienced months of hunger, to the point that, according to Schmidel, they resorted to eating rats and "even their shoes and leather". The chronicler even mentions some cases of cannibalism. Of course, they had already devoured numerous horses (fig. 63), killed or wounded in the course of incessant fighting with the Indians who besieged the fort, or simply too tempting: all of them, probably, since none reached Asunción when the final retreat took place. On the other hand, even though a few dozen horses, females, had managed to escape males and

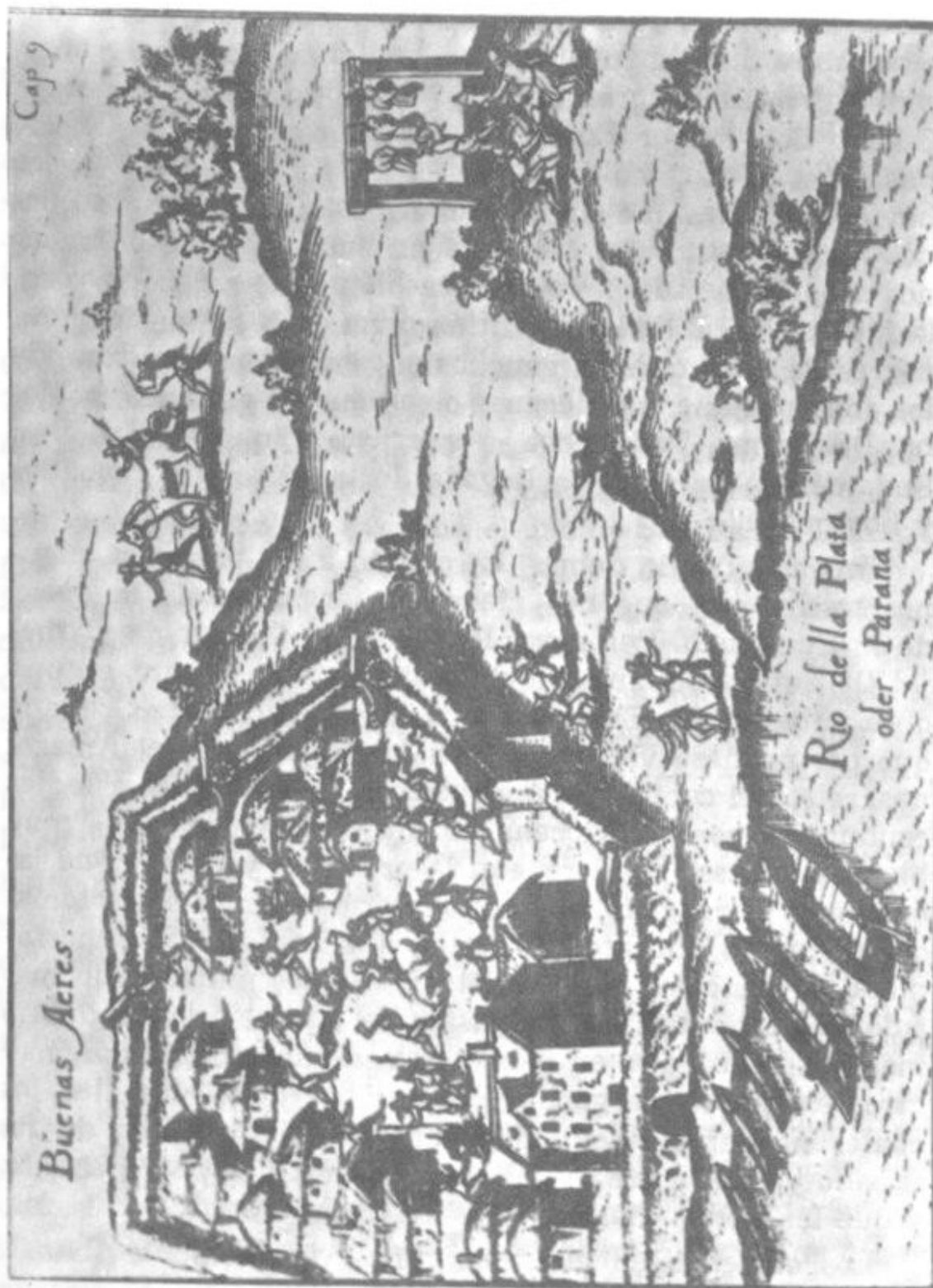


FIG. 63 – *Matanza de caballos y escena de canibalismo en Buenos Aires. Ilustración del relato de Schmidel, edición de 1602.*

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of the indigenous people and reproduce, it would have been very difficult for them to become the "large number of herds" mentioned by Garay in forty years. It is even more impossible to attribute this same origin, as so many historians do, to the wild cattle that abounded in the surroundings of Buenos Aires, since Mendoza "had not shipped cattle on board his ships. However, as early as the 16th century, the future capital of Argentina lived off the export of cowhides that the gauchos obtained by capturing the animals that populated the pampas by the tens or hundreds of thousands. Everything leads us to believe, then, that there were already horses and cattle in South America before the arrival of the Spanish. We also have some evidence regarding the former from chroniclers of the Conquest era. For example, that of Father Gaspar de Carbajal (13), whom we have already quoted in relation to another matter in a previous work (3). The chaplain of Orellana's expedition, which was the first to travel down the Amazon in 1542, recounts the battle between the Spanish and the Indians led by a dozen "naked" women who were "very white and tall". He recounts, with the precision and heaviness of a court clerk, the interrogation of a chieftain, taken prisoner during the battle, who had had the opportunity to penetrate the territory of the "women without husbands". Let us reproduce a passage from his statement: "He [the Indian] said that in this land, as we understood, there are camels that carry loads, and he says that there are other animals, which we did not understand, that are the size of a horse and have the hair of a jeme and a cleft pear, and that they are tied up and that there are few of them". The camels in question

survive the hunts

They were clearly llamas, camelids that are used as pack animals in the Andes. As for the other animals, they can only be horses, despite the discordant detail of the length of their hair, probably due to the difficulties, pointed out by Carbájal, that the Spaniards had in understanding their prisoner. No other animal in America matches the characteristics mentioned by the chaplain. The fact that the latter did not recognise the species from the description given to him, which makes his account more reliable, is obviously due to the inconceivable nature of the chieftain's statement: there could not have been horses in America before Columbus... Another testimony comes from the chronicler João Felipe Betendorf (14), who recounts the two expeditions carried out in 1676 and 1679 from San Luis del Marañón, where he himself resided, in the current state of Piauí, Brazil. At that time, this territory had not yet been conquered, and only two bandeirantes had arrived, one from São Paulo, Domingos Jorge Velho, and the other from Bahia, Domingos Alfonso Sertão, better known by his nickname Mafrense, who had conquered small fiefdoms there. However, in both cases, the explorers heard from the indigenous people about white men who rode on horseback across "immense plains" covered with "beautiful meadows" (1-'). Perhaps these were just Portuguese people whom history does not remember. But since we know (3) that there was a significant non-Indian population in the region in the 17th century, which must not have been as mixed as it is today and which, in any case, with its still blond hair, must have been considered white by the indigenous people, we have the right to wonder if it was not them who were being talked about. In one case, we are told of the Amazons, whom we know (;f) to be the descendants of Viking women who escaped the massacre on the Island of the Sun and who are said to have owned animals whose characteristics, with one minor exception, are those of horses; in another, white horsemen settled in a region where the Vikings had an important place of worship, one of whose statues is that of a man on horseback (3), and where their descendants still live today. We cannot, therefore, fail to ask ourselves the question: did the Vikings of America have horses? Let us begin by correcting ourselves. We said in a previous work (a) that the Scandinavian ships that reached Panuco, in the Gulf of Mexico, in 967, had probably been blown there by a storm. "Culterreux's assumption" (19) a friend, an old sea dog, kindly wrote to us. "Seven ships as unwieldy as drakkars, if they had been blown off course by a violent wind, would have scattered without the slightest hope of ever reuniting on the high seas. On the other hand, no one sets out on an adventure with several ships: it would be pointlessly multiplying the risks. Therefore, Ullman's fleet, like Columbus's later fleet, knew where it was going." All this seems obvious to us now. The most plausible hypothesis, under these conditions, is that the fleet was following the path of a drakkar that had previously been blown by a storm onto the American coast. This is how Leif Eiriksson reached Vinland, which had been sighted unintentionally a few years earlier by Bjarni Herjulfsson. However, it cannot be ruled out that the Vikings knew about the "New World" from the Irish, who already had settlements in America in the 10th century ('), or even from the descendants of Scandinavians who had taken refuge there during the great migration of 1200 BC. If this were the case, and the reasoning seems convincing, it could only have been an expedition of conquest. It seems, in fact, that we must rule out any immediate intention of colonisation. For, in the latter case, the drakkars would have transported "livestock" to Mexico, as did those of Thorfinn Karisefni in the early 11th century, who set out to settle in Vinland, and we find no traces or memories of cattle in Central America. Ullman had therefore set sail with the aim of seizing an 'island', well aware that its population was numerous and combative, since he had taken with him some seven hundred men and women, the latter accompanying the warriors, as was the custom, and very capable of wielding the battle axe and javelin. Under these conditions, he had surely taken horses with him, as the Vikings always did when it was not a mere fishing expedition or commercial voyage: war horses, *thoroughbreds and* light horses, like the one at Cerro Guazú. We now understand better why the Men of Tiahuanacu traced, over some 3,000 km, the Peaviru, the "Soft Road" that led from the Altiplano to the Atlantic: the Indians walked or ran, but the whites had horses. Had we not already found in Paraguay, in one of the ceramic fragments unearthed at Cerro Morotí (:i), a sign very similar to one of the characters on the rongo-rongo of Easter Island, representing a man on horseback? Our analysis sheds new light on the cave paintings of indigenous origin in Peru—particularly in Kelkatani, near Lake Titicaca—and Argentina, which depict horsemen. For example, the one in Zapagua, in the Argentine province of Jujuy, which a brochure from the Ministry of Tourism defines as an illustration of "the struggle between the aboriginal and the conqueror" (1), despite the fact that the character on horseback wields a javelin, a weapon that the Spanish did not use at that time, for the simple reason that all horses were necessarily post-Columbian. However, Jujuy belonged to the Tiahuanacu empire, and one of the Inca Royal Roads crossed a region where the presence of horsemen before the Conquest should come as no surprise. Some ethnologists and archaeologists, without the data that our research has allowed us to establish, dared, courageously, to break the taboos of conformist science. Dick Edgar Ibarra Grasso (17), for example, with regard to lithographs depicting horsemen discovered by Pedersen in the Patagonian province of Neuquén, does not hesitate to write that "they appear to be indisputably pre-Columbian". To tell the truth, he was already prepared for such a conclusion, as he had identified —and reproduced (17)— a piece of Mexican pottery, undoubtedly pre-Hispanic, which also depicts a horseman. The man's body is broken in half, but the animal, despite its overly short legs, originally mounted on wheels, is easy to recognise, and the saddle it carries leaves no room for doubt as to its species. With regard to Mexico, in 1896 the French historian Eugène Beauvois gathered together the facts and traditions recounted by chroniclers of the Conquest (18), and his essay, which we will simply summarise here, leaves little doubt as to the memory that the Aztecs and Mayans had retained of the horse they had once known. He recalls that the Indian Tezozomoc (la) and Father Diego Duran (2") recount, in almost identical terms, that Moctezuma, when he learned of Juan de Grijalba's landing, "had the Spaniards, their ships, their weapons and their horses painted; however, upon examining the images of the latter, he noticed their resemblance to animals depicted in ancient paintings and called mamaza by the Mexicans." This word is the plural of mazatl, deer, in Nahuatl, from which comes the name castilian mazatl, deer of Castile, which the Indians gave to the horse after the Conquest. The emperor had taken particular notice of an ancient painting preserved in Xochimilco, in which "knights were seen on tonacamazatl, which are their mounts, like very large deer and powerful stags," according to Tezozomoc (li1). Father Duran adds that Moctezuma "was terrified... to see white people on horses that were like very large deer, called tonacamazatl" (w). And he was astonished to see the resemblance between the Spaniards and the horsemen of old. The chronicler Dávila Padilla (-") recounts, on the other hand

¹⁹ An untranslatable French expression that seafarers use, usually jokingly, to refer to country folk.

On the other hand, seventeen years before the arrival of the Spanish, that is, in 1502, chalk drawings had been made on the wall of a steep rock located in Tanazolapa, in the current state of Oaxaca, depicting white men on horseback, dressed in ancient clothing and wearing caps, as well as Castilian chickens. The outdated clothing indicates, as Beauvois rightly notes, that the artist had not used Columbus's men as models, who, in 1502, had made some incursions into the coasts of Honduras and Panama; but, moreover, he did not have horses on board his ships, as Las Casas expressly states (2a). In Yucatán, the horse was called tzimin. Beauvois translates the word as "tapir": this confusion is due to the ambiguity of the Castilian word danta or anta, which applies to both the American pachyderm and the moose. In fact, he quotes Father Alonso Ponce (23) in a footnote, who writes: "There are some tapirs near the Lagartos River, which they call tzimines, and they call horses the same thing, because they say they look very similar." Nothing looks less like a horse than a tapir. On the contrary, the moose is a large deer, like the tonacamazatí of the Nahuas, and that is what is meant here. Father Ponce, who visited Mexico from 1584 to 1589, writes elsewhere: "It is suspected that the indigenous people of Yucatán had knowledge of the horse; in fact, a stone was exhumed from the garden of the cloister in Mérida on which a horse's leg was carved, or rather imprinted, in memory of which the friars had it embedded in a wall of that garden." Other testimonies confirm this suspicion. In 1861, an American traveller, Stephens Salisbury (-'4), saw two life-size horse heads lying on the ground near ruined buildings in Xuyum, near Mérida. And Las Casas recounts that in an unspecified region of Guatemala there was "an idol in the shape of a horse's head whose eyes had been removed and from whose empty sockets blood seemed to flow perpetually, which, it is said, was a remarkable sight to behold".

3. **The dog of the Incas** We have even more solid evidence, in addition to the terrier of Cerro Guazú, of the existence in pre-Columbian South America of dogs of recent European origin. Their breed has survived to this day, and Inca tombs have yielded numerous well-preserved mummies of individuals belonging to it, especially in Ancón, on the Peruvian coast, in the province of Atacama, now part of Chile, and in north-western Argentina. We owe to Tschudi the first description of the Inca dog, which he classified in 1844 with the name *Canis (canis) familiaris* L. *Ingae*: small head, very pointed muzzle, small, erect triangular ears, solid body, short limbs, very long tail curving up towards the head, and thick, coarse, dark reddish coat with blackish waves; an aggressive animal, even when faced with stronger opponents, but with unpredictable reactions. However, it was a dog that had been crossbred with individuals belonging to European breeds imported by the Spanish. The mummies from the Inca period, on the other hand, allow us to know exactly the characteristics of the primitive animal, which differs from the current one in that it is taller, has a shorter tail and fairly uniform suede-coloured hair. The study of the Ancón mummies was carried out in 1885 by A. Nehring, who distinguished three varieties of *Canis Ingae*: *pecuarius* (sheepdog), *vertagus* (herding dog) and *molossoid* (bulldog). At the same time, W. Reiss and A. Stübel published a colour drawing of the *pecuarius*, which we reproduce here (photo 25) in black and white. However, it was not until 1942 that a taxonomic analysis by Madeleine Friant and H. Reichlen provided the solution to the problem of the origin of *Canis Ingae*. This analysis covered not only the animal's external appearance, but also its anatomical characteristics, based on two mummies, one of them complete, brought back from the Atacama Desert in 1905 by the Créqui-Montfort and Sénéchal de la Grange expedition. After confirming that the animal in question — of the *pecuarius* type — could not possibly be descended from the wild dogs of South America, the authors set about establishing its parentage. They were struck by its anatomical resemblance to the small sheepdogs of Neolithic Europe. Ruling out *Canis Gilardoti* Hue from Lake Morat in Switzerland, some of whose characteristics are too different, they settled on *Canis (canis) familiaris* L. *palustris* Rut., dating from the late Neolithic period (2000 BC) and of which numerous skeletons were discovered in Bundsó, on the island of Ais, Denmark. The anatomical similarities were striking: overall dimensions, narrow forehead, high cranial cavity, remarkably wide palate, and short jaw with a well-defined convex lower edge. For a specialist such as Madeleine Friant, who belonged to the Laboratory of Comparative Anatomy at the Muséum d'Histoire Naturelle in Paris, there was no doubt: the dog of the Incas was necessarily descended from a Scandinavian sheepdog, of the Bundsó type. No one else has ever questioned such a solidly founded opinion. It remained to be explained how *Canis palustris* had managed to travel from Denmark to South America. At the time—1950-1965—the publications by M. Friant and H. Reichlen (2S) (1950) and M. Friant (n,2'-) (1955-1965) lacked the data necessary to do so. The latter, however, formulated a hypothesis that came as close to the truth as possible: "everything suggests that the dogs of the Vikings, about which we have no details, were the descendants of the Neolithic dogs of Scandinavia, especially those of Bundsó. At the beginning of the 11th century, when the victorious Indians took considerable booty from the Vikings, they surely seized dogs, which they took with them on their nomadic journey to South America. And it is the dogs of the Vikings that we find again, under the name of 'dogs of the Incas', before the arrival of the Spanish at the end of the 15th century." Expressed in this way, based on what was known in the first half of our century about the colonisation of America by the Vikings, this hypothesis is rather implausible. First of all, there is no evidence that the Norwegian Vikings who founded the settlements in Vinland possessed animals similar to the 'bog dog' of Bundsó. Furthermore, it is unlikely that the Algonquians of present-day New England, with whom Leif Eiriksson and his brothers had relations, sometimes friendly and sometimes violent, at the beginning of the 11th century, and the descendants of the first colonisers for several centuries, ever had the slightest contact with South America. And it is somewhat unreasonable to assume, without even a shred of evidence, that the Viking dog passed from tribe to tribe to Mexico and then to Panama, from where the rafts of the Inca merchant fleet could have taken it to Peru. For those of us who know that Danish Vikings had settled in Tiahuanacu, the explanation for the presence in South America of a descendant of Bundsó's dog is obvious. What would be surprising is if Ullman had not taken dogs with him when he set out on his expedition or if his successor, Heimíap, had abandoned them, while struggling to load horses onto his umiakes as he set sail again on the Pacific. The dog of the Incas is indeed descended from the Danish *Canis palustris*, as Madeleine Friant conclusively established, but it is natural that it arrived in Peru with the Vikings of Schieswig, like the Amambay terrier.

4. **The horse and the bull of Tiahuanacu** In the Altiplano, the Spanish found neither cattle nor horses, and the indigenous people, judging by the chronicles, had not even the faintest memory of these animals. We even believe, although the interpretation of their feelings is very subject to caution, that Atahualpa's warriors were frightened by the horsemen, whom they took to be beings of an unknown species, half-men, half-beasts. From this we must conclude that the horses brought by the Vikings had disappeared from the empire of Tiahuanacu. These animals of Nordic origin had probably degenerated.

in the Altiplano. There must have been very few left in 1290, at the time of the final defeat of the Island of the Sun ('). It can be assumed that some of them were killed by the aggressors and the rest were used to flee by the survivors, including the women who would eventually become the Amazons (3) and whose descendants still seemed to have some at the beginning of the 16th century. We would have to stop our analysis here if, at the end of the last century and in the early years of this one, some pieces of a very particular type of weaving had not been discovered in Inca and pre-Inca graves on the Island of the Sun and the Island of the Moon (Koati), both located on Lake Titicaca, some pieces of fabric of a very particular type, most of which, found by the American archaeologist Adolph Bandelier, belong to the collections of various museums in the United States. The very fine wool threads that make up the weft go around the cotton threads of the warp. The motifs represented — flowers, animals, characters, Tiahuanaco signs and symbols — appear identical on both sides of the fabric. This is a very sophisticated technique, long lost at the time of the Conquest. One of these pieces is of particular importance to us. It was discovered in 1904, unfortunately by an unknown person, in a tomb on the Isla de la Luna that was "untouched and undoubtedly pre-colonial," according to Arthur Posnansky, to whom we owe the magnificent colour reproduction that illustrates, outside the text, an unobtainable quarto brochure (3J) 123. The author is not always reliable. But the authenticity of what appears to be a piece of unku (a sleeveless shirt worn before the Conquest) does not seem debatable and, moreover, is only disputed on the basis of a priori arguments. Its workmanship would be sufficient to date it. The unku of Koati —let us call the piece of fabric in question that, for simplicity's sake— measures 55 cm long by 47 cm high. It is composed of nine strips of varying widths. From top to bottom, these are: a narrow strip with a yellow background dotted with cantuta flowers—a small carnation related to the European carnation—among baskets of fruit, roosters, and other birds; a wider strip with a brown background bearing three lines of Tiahuanaco signs and symbols; a large stripe with a red background, whose motifs we will describe later; a stripe with a brown background, with three lines of Tiahuanaco signs and symbols; a narrow stripe with a blue background, with birds, monkeys and baskets or vases of flowers. Everything is then repeated in reverse order, except that the final yellow strip contains, in addition to the motifs of the first, baskets of cantuta flowers. The two main bands are identical in composition, but some of their motifs offer slight variations: for example, an animal looking to the right in one and to the left in the other. This repetition allows us to study all the figures, even though some of them, in one band or the other, are damaged. The central theme of the unku is a parody of the temptation of Adam and Eve. At the foot of a tree, a naked man and woman are seen offering fruit... to a monkey. The biblical serpent is also present, coiled around another tree: two men, an Indian and a European, are attacking it, one with a bow, the other with a sword. A crowned mermaid, with a fish tail as it should be, plays the guitar. An Indian woman, on her knees, makes a libation before a kind of fountain from which emerges a two-headed bird, from whose beak lightning emerges. Below this motif, an Indian standing in profile appears, in the lower band, to be holding a black dog covered with a small yellow blanket by a leash. In both bands, the various motifs, including the secondary ones that we have not mentioned—or not yet—are repeated, starting from the centre, to the right and left, with some variations and omissions. Among the main motifs, we see, very well represented, sometimes with humour (some monkeys have human faces), the most diverse animals: birds of all kinds, monkeys, foxes, deer, fallow deer, rabbits and felines. Next to the central fountain are two quadrupeds: one on the left, which looks a bit like a sheep, but with a white head and legs and the rest of its body grey; the other on the right, which vaguely resembles an Asian camel, although the second hump is located on the rump. Finally, in each strip, there is a white horse (twice) and a bovine animal of the same colour. It goes without saying that no Christian would ever have had the idea, or the audacity, to replace the serpent with a monkey to personify the Devil and that, if a pagan had dared to do so after the Conquest—which already excludes the technique of weaving—he would have had certain difficulties with the Holy Inquisition. Hence, the author of the "cartoon" was a pre-Columbian pagan who had heard the myth of the Garden of Eden and illustrated it in his own way, probably because he found it highly implausible that a serpent could physically offer fruit to anyone. The reptile is there, but it is kept at bay by a European and an Indian, symbolising the alliance of the races against the Devil. To this unorthodox conception of the Temptation, the artist added two more characters in keeping with his own beliefs: the mermaid (lauraku, in Aymara, the language of the Indians of Titicaca), wife of the god Ekabo, who sings credibly of the unexpected victory of Good over Evil; and the Indian woman who makes a libation to the two-headed bird —the tarapaka of the indigenous people— perhaps as a token of gratitude. It should be noted that the mermaid is of European origin, but this did not prevent her from appearing in the mythology of Tiahuanaco. As for the guitar played by our unku, the Vikings were familiar with it, since they traded assiduously with the Arabs who imported it to Spain in the 11th century and, on the other hand, supplied mercenaries to the emperors of Byzantium, who were in constant war with the Muslims. That leaves the animals. The American species are here in their place and therefore pose no problem. The sheep and the camel — if they are indeed a sheep and a camel — are barely recognisable. The artist could only represent them in this way on the basis of a verbal description or, at best, a rough drawing. After the Conquest, he would have seen sheep and the Spanish would have described the dromedary to him, not the Asian two-humped camel, which the Vikings, on the other hand, knew very well, since one of the Swedes' routes through Russia ran down the Volga to the Caspian Sea. Perhaps, moreover, the 'camel' in our unku is nothing more than a vicuña with overly short legs, that is to say, one of the camelids of the Altiplano. There is no doubt, however, about the perfectly drawn horse (photo 26), especially since it is wearing a saddle blanket. It is a powerful animal, like those used in the Middle Ages not only as beasts of burden and draught animals, but also as war horses, the only ones capable of bearing the weight of a knight and his armour. Even today, we find its type in the Percheron of Normandy, the Bouicnnais and the Norwegian Fjording, for example. Is it a coincidence that the latter has white hair, like the horse of the unku? The bovine animal depicted on the same piece of fabric (photo 27) also leaves no room for doubt. The general shape of the body, the prominent bones of the haunches, the long, feathery tail and the horns all match. The two images we have of it vary somewhat. In the upper strip, the animal, seen from the side, has its head bowed, facing the observer, and an angry expression. In the lower band, on the contrary, it has its head held high and appears placid. The relative thinness of the body, the absence of udders and the aggressive appearance shown in the upper image allow us, without much risk of error, to see it as a bull and not a cow, which is otherwise irrelevant to the problem at hand. What interests us, in fact, is the origin of the animal. In terms of its silhouette and colour, it has nothing in common with the bison, which, moreover, only exists in North America. Is it possible to take our analysis further? Yes, thanks to a detail of the utmost importance: the short, flat face of our bull. This is a characteristic exclusive to the

Germanic cattle breed, about which one specialist (31) writes: "The Germanic type differs from that of the Netherlands in the configuration of the face: the Germanic type has a short face rather than an elongated one. The supra-nasal bones are flattened, the profile slightly concave, and the muzzle broad. Below the eye there is a fairly deep depression, which is particularly noticeable when the head is viewed from the front. These cattle breeds have a tendency to accidentally produce individuals with 'bulldog heads'. The Unku bull fits this description very closely, and even the latter characteristic is occasionally noticeable in this breed. It differs from the Norman breed in only two respects: its horns are straight, rather than horizontally curved and pointing forward; its coat is white, rather than yellow and pale red with extensive white speckles. However, these current peculiarities may be nothing more than variations obtained by breeders over the last few centuries. This is certainly the case if we consider, on the one hand, that the native Norwegian Telemarken breed, which still exists, has a white back and belly and straight horns and, on the other hand, that the cow in the Bayeux Tapestry (Cfoío 24) has exactly the same 'half-moon' horns as our bull. The reference to the Telemarken breed is not arbitrary. In fact, in the aforementioned work, we read the following about the Germanic type: "Samson has placed the cradle of this breed in the Germanic regions of the Baltic, and from there it was introduced into the regions of Central Europe by the Norman invasions. Today, these cattle are only found in their pure form in Normandy. However, in Germany, the red Holstein breed is included within the Germanic type, although it has been influenced by the Dutch type, which can be seen mainly in the shape

from the head... M. Mallèvre believes that today only Normandy cattle can be considered a pure breed. This confirms what we already knew about the Vikings' custom of transporting livestock on board their ships when they went to settle in a foreign country. They did so from Europe to America and from Scandinavia to Normandy. It is logical, then, that the bull from Unku and the cow from Cerro Guazú belong to the breed they raised. Conversely, the fact that these latter cases involve Germanic-type cattle firmly establishes that their presence is due to the Vikings of Tiahuanacu, whether they transported them themselves or commissioned the Normans to do so after contact was re-established in 1250. 5 . **Normans in Tiahuanacu** Let us now consider the characters. The naked man and woman have nothing to teach us. The Indian woman is dressed as the indigenous women of the Altiplano still are. The two Indians wear the traditional unku, very short on the archer, which is logical. He wears the *borla*, a ribbon that covers the forehead and holds the hair in place; the other wears a round hat. The bow of the first, very poorly drawn, is small: it is the Norman double-curved bow (') used by the civilised peoples of Mexico and Peru, unlike the primitive Indians who used, and still use, the large two-metre bow with a single curve, the Amazonian bow. The European (photo 28) wears yellowish breeches and, over a black shirt, a matching sleeveless jacket with flared skirts and a white collar that rises to the chin. In two of the figures, he is bareheaded; in the other two, he wears a round hat identical to that of the Indian with the dog. A costume from the same period, although quite different, appears on a keru found on the Copacabana peninsula, on the shores of Lake Titicaca and opposite the islands of the Sun and the Moon. Keru are drinking vessels shaped like a cup with a slightly open top. The ones we are interested in—there are about three hundred of them—are made of wood and decorated with polychrome designs using a very particular technique. The artist carved his designs deeply into the wood and then filled the hollows with resins—mainly—and other substances of different colours. This resulted in a kind of cloisonné sui generis. At the time of the Conquest, this technique had not been completely forgotten, but it was in decline and did not take long to disappear. However, it cannot be ruled out that some of the keru that have been preserved were made after the arrival of the Spanish. This is certainly not the case with the one whose motifs we reproduce (fig. 64). In it, we see a European man and an Indian woman, who has two keru in her hands, seemingly inviting him to toast. The man is wearing a red jacket with hanging tails and a yellow cape. A collar, similar to that of the European in the unku, covers his throat. The brim of his hat, raised at the forehead, descends very low at the back. This is a costume quite different from those worn in the 16th century or later.

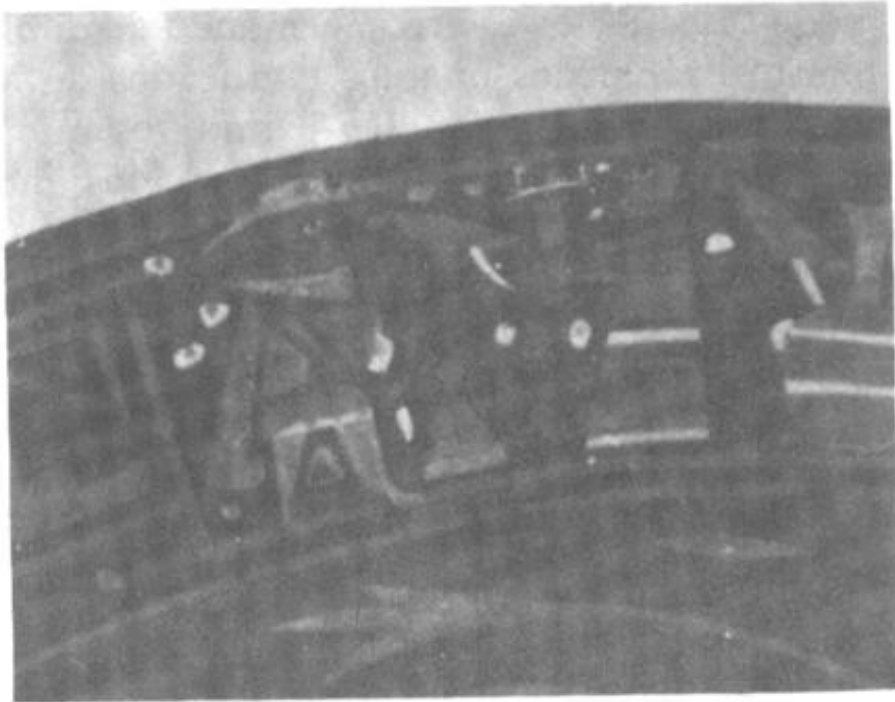


FIG. 64 — *El europeo de un keru de Copacabana, lago Titicaca.*

osnansky (•'") rightly points out that we are woefully uninformed about the dress of medieval burghers. The painters, engravers, miniaturists, and sculptors of the period show us almost nothing of

effect, but rather to high-ranking figures and, sometimes, to peasants. Otherwise, only in castles did fashion bring about noticeable changes from generation to generation. In cities, merchants and artisans wore a kind of "sleeved tunic" that "reached to the middle of the thigh" and "breeches that were tied above the knee" (:!•;). A cloak was often added to the ensemble. A few illustrations, some of which can be seen in the work just mentioned, show us that among the wealthy bourgeoisie, the coat took on the appearance of a suit with skirts, sometimes sleeveless. It is therefore somewhat bold to write, as Posnansky does, that the European in the unku is dressed like a 14th-century Venetian and the character in the keru like an Italian, Spanish or Portuguese merchant from the 12th or 13th century. Let us simply say that breeches, doublets and capes were garments commonly worn by the medieval bourgeoisie. One detail allows us to rule out the southern origin of the costumes in question. What the keru character wears on his head is not, in fact, the round Indian hat worn by the European in the unku, but a sueste, a waterproof sea hat, raised at the front to resist the wind and sloping down at the back so that rainwater and splashes from the waves do not penetrate the neck. Fishermen on the Atlantic coast, from Norway to Brittany, still use it today. It probably comes from the Vikings: a medieval illustration from the Prose Edda shows the god Thor wearing a sea hat (photo 29) that closely resembles both the keru's sueste and its contemporary version, despite being shorter at the back. Everything leads us to believe, therefore, that the Europeans depicted in their textiles and vessels by artists of the Inca period were Normans. Were they sailors who had accompanied Father Gnupa around 1250 (•J), or merchants who later frequented the Atlantic coast of South America, where the Vikings of Tiahuanacu had bases (;;)? We will see in the next chapter. Neither the unku nor the keru we have just discussed can therefore be attributed to Spanish influence. Nor can the vase in fig. 65, where swastikas appear alongside condor heads in the purest Tiahuanaco style, or the one in fig. '66, in which we see a kind of medieval knight facing a fantastic animal that is found in Peruvian ceramics and is reminiscent of the wolf Fénrir in Scandinavian iconography, even though, as we know, wolves are absent from South American fauna. The man is clad in padded cotton armour. He wears a kind of metal helmet with a visor — raised — which, in Western Europe, would date from around 1350. In his left hand, he holds a shield of a type of all unknown; in the

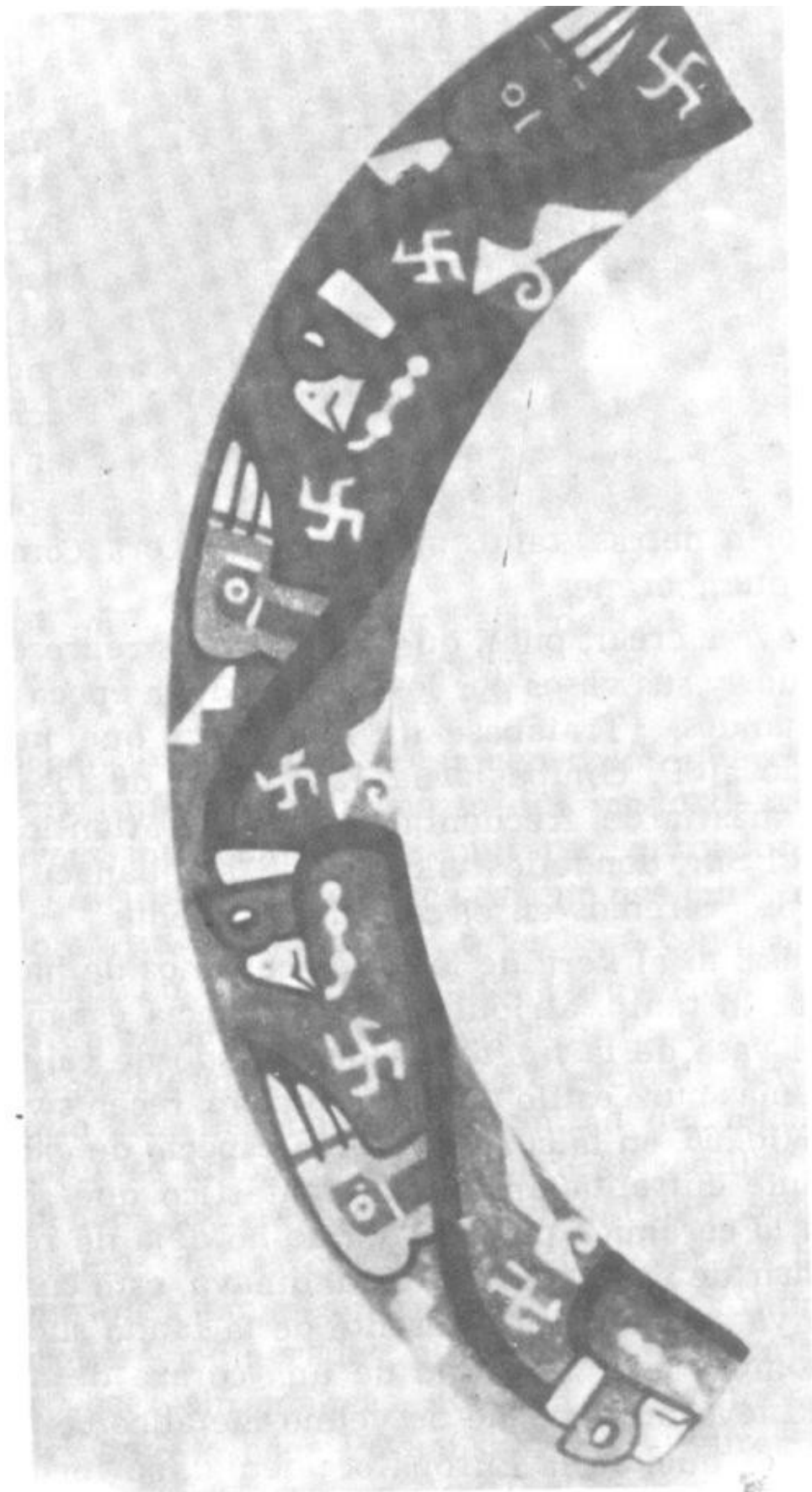


FIG. 65 – Swástikas en un keru de Copacabana, lago Titicaca.

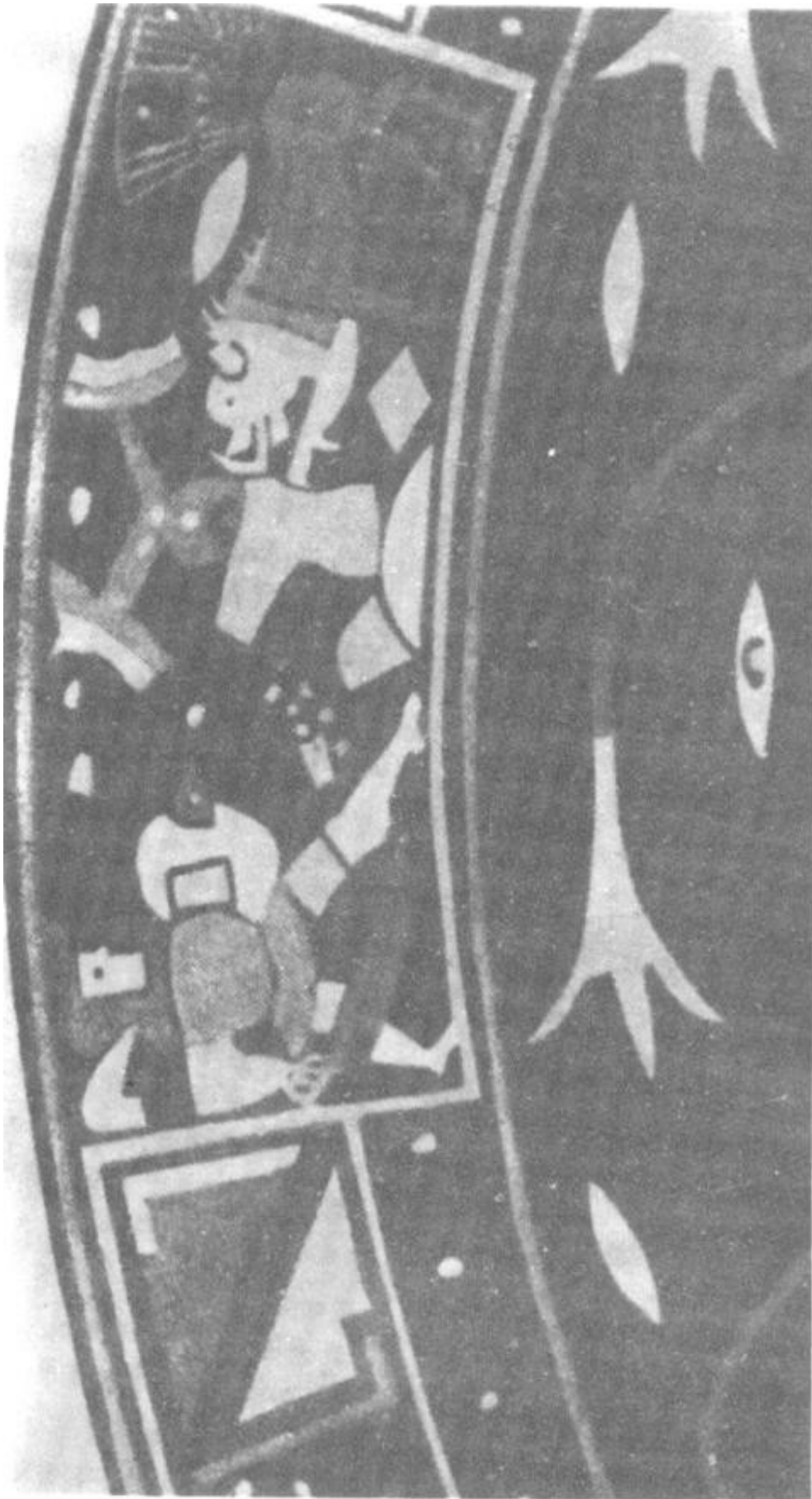


FIG. 66 *El caballero y el lobo en un keru de Copacabana, lago Titicaca.*

On the right, a sword, no less strange, resembling an enormous kitchen knife. Judging by his clothing, this warrior is neither Spanish nor Indian. Nor is he a man-at-arms from the European Middle Ages. We can only see in him the fruit of a historical reconstruction, based on traditions distorted by time. The artist tried to illustrate one of those countless medieval legends that describe the combat of a knight with a fantastic animal, the incarnation or instrument of the Devil. But, although he had references to the Norman men-at-arms who, in the second half of the 12th century, had arrived in Tiahuanacu with Father Gnupa or on subsequent voyages, he was unaware of the details of their clothing and armament. Except that, at that time, the Europeans had adapted to the environment and, in particular, had replaced their metal armour, which was too heavy for the rarefied atmosphere of the Altiplano, with cotton armour, sufficient to protect them from the indigenous arrows. In any case, it is significant that the knight in question bears Tiahuanaco symbols in the shape of an S on his arm—the runic solewu symbolising the Sun and Victory—and that an uruz—uro—is painted on the tree behind which the wolf takes shelter, a Nordic symbol of virile strength. Let us not forget that, while the Normans who arrived in South America around 1250 were Christians, the Vikings of Tiahuanacu had retained their ancestral beliefs, and it was from the contact between the two faiths that the religious syncretism of the Incas was born. Another keru (fig. 67), found, like the previous ones, in Copacabana, is even stranger. Its cloisonné band shows us, above cantuta flowers and a row of Tiahuanaco signs, a great lord of the Inca period—perhaps the emperor himself—carried in a sedan chair

by high dignitaries of the empire and preceded by a herald of equally high rank. In front of him, facing him, an Inca holds a halberd in his left hand and swings a sling with his right. Two severed, bloody heads lie on the ground to the right on a white canvas.



FIG. 67 – Armas imperiales incaicas en un keru de Copacabana, lago Titicaca.

The second part of the keru's decoration features, as its main motif, a coat of arms surmounted by a metal breastplate—the articulated joints are clearly visible—of the type used in Western Europe from the 13th century onwards, whose helmet is enhanced by a double red crest and whose arm wields a sword. In terms of its shape, this coat of arms is not Spanish. It could be French if its lower edge were not reduced to two straight lines at an angle. It is divided into two fields. At the top, in black, is a korikenke, the sacred bird of the Inca emperors, with outstretched wings and open legs, in the manner of the eagles of European heraldry, flanked by two stylised trees; at the bottom are two upright snakes and a jaguar topped by an unidentified geometric figure. Two korikenke with folded wings hold the shield, while two others, in flight, reminiscent of Odin's two ravens (fig. 68), carry various imperial attributes in their beaks. At the foot of the shield, two standard-bearers incas are located in magical circles, similar to

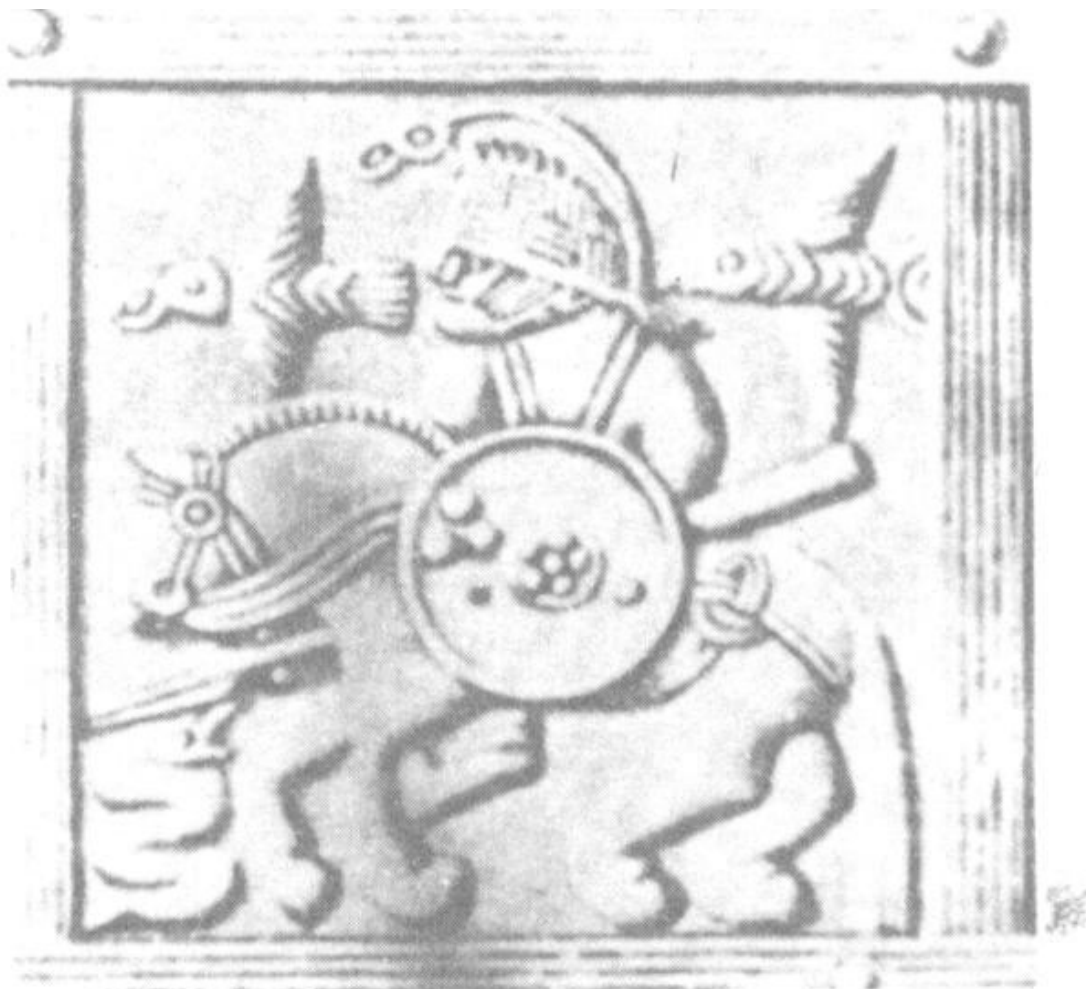


FIG. 68 – *Los dos cuervos de Odín.*

Vikings considered protectors. Among them were three cantuta flowers. This shield is not the only one of its kind that we know of. The mestizo chronicler—so to speak—Phelipe Guarnan Poma de Ayala, grandson of Emperor Tupak Yupanki on his mother's side, reproduces, among the five hundred drawings, tracings made with a goose quill, which illustrate his work (1:;) sobre el imperio de los incas, dos blasones (fig. 69) donde encon-



FIG. 69 – *Armas imperiales incaicas, según Poma de Ayala.*

frames, in the "one, e] korikenke, the jaguar, the snakes, the tree and a tassel roal, and, in the other, a Sun strangely endowed with whiskers, the moon, a wandering Sun resembling those of Cerro Guazú, and the image of the "idol" of Pakari Tampu, the village from which Manko Kápak had set out to reconquer the empire and where his father, fifty years earlier, had welcomed P. Gnupa (2). In both cases, the shield is French. Let us return to our 'keru. Is it reasonable to attribute a post-Columbian origin to it? Certainly not. No Indian would have dared, the day after the Conquest, to challenge his conquerors by reproducing, on an everyday utensil, scenes showing the emperor in all his glory and, even less so, by attributing to him a coat of arms, characteristic of the Spanish nobility. Strictly speaking, however, one could accept the idea that an indigenous artist might have done so at the request of a conquistador interested in collecting works of art of typically Inca inspiration: but there was certainly no shortage of authentic pieces, and the Spanish were bent on destroying them. Furthermore, the keru in question is

found in the excavations of Copacabana, on the shores of Lake Titicaca, which the Castilians only discovered very late and where they never settled: therefore, it had belonged to an indigenous person. Let us admit, however, for a moment, that the coat of arms responded to the engraver's intention to 'ennoble' the Incas by adapting the coat of arms worn by the Spanish lords, and this for his own satisfaction. It must be acknowledged that it was a strange idea to assimilate their divine emperors to the enemies who were destroying the empire with fire and sword. But, in this hypothesis, which coat of arms would our artist have copied? Obviously, the Spanish one with a rounded tip, and not the French one, which no conquistador carried. And he would not have placed a helmet seen in profile on top of it, when Castilian arms show theirs from the front, and even less so a half-armour with a sword brandished, which is only found in Germanic countries. As for the coats of arms of Poma de Avala, it is even more inconceivable, if possible, that the chronicler would have Hispanicised images that he only drew to preserve the traditions of his race, without publishing them. And there is no need to fear any confusion on his part: he was a man of exceptional culture. If, moreover, he had distorted reality for one reason or another, it would be the Spanish coat of arms that we would find here as well. Everything leads us to believe, then, that our kerú is authentically pre-Hispanic and that the Incas carried coats of arms, replacing our European figures, but on a French shield, with their own symbols. Where could such knowledge have come from, not only of this coat of arms, but also of the European armour that the Spanish did not use in America? Obviously, from the Normans, as we shall see in the next chapter. But the knight, in his armour, could only fight and even move around on horseback, and to support the 200 kilos he weighed, with the metal shell of his mount, he needed a powerful animal, like the one depicted on the unku of the Island of the Moon. The pre-Columbian authenticity of the latter thus seems to be confirmed.

6 . **The end of a legend** The engraved horse, dog and cow that we discovered among the runic inscriptions of Cerro Guazú definitively resolve the problem of the presence of animals belonging to European species in Central and South America. There was already solid evidence of this, of course, particularly the Mexican statuette of a horseman, unfortunately incomplete, and the mummies of Canes Ingae, which in their anatomy closely resemble the dog of Bundsó. Other evidence was less convincing, such as the horse and bull from Isla de la Luna, because although everything pointed to the pre-Columbian origin of the piece of fabric in question, some people nevertheless denied it. It is almost impossible to do so today, since the doubt arose precisely from the representation of animals "that could not have existed in America before Columbus", even though, on the contrary, they did exist, as we have just demonstrated. Under these circumstances, it is not surprising that some pre-Columbian keru, whose dating is thus confirmed, bear swastikas, a typically Aryan symbol that the Scandinavians used extensively, European characters, mermaids or coats of arms.

139 The drawings at Cerro Guazú give us even more information. Not only do they depict a horse, a dog and a cow, but also a Viking horse, an Irish dog and a Norman cow, which allows us to pinpoint the chronology of the arrival of these animals in America. When they set out on expeditions of plunder or conquest, the Vikings used to take with them war horses that matched the characteristics of the drawings discovered at Cerro Guazú. There were undoubtedly some on board Ullman's drakkars, and it is not surprising that their memory was preserved in Mexico until the arrival of the Spanish. Only their memory, for the Vikings certainly did not abandon them when they re-embarked. These animals must have been extremely useful for the journey through Venezuela and Colombia, and although their subsequent transport aboard wolf-skin umiakes must have posed a serious problem, they reached Tiahuanacu and were then used for over two hundred years to travel the Psaviru, the "Soft Road" that led to the Atlantic via Paraguay, before being used for the escape of the defeated whites on the Island of the Sun. This is why the Incas did not have horses, while some specimens still survived in the Amazon in the 17th century and, perhaps, in Piaui a hundred years later, and entire herds, returned to the wild, populated the pampas south of Paraguay, at the time of the second founding of Buenos Aires by Juan de Garay. Our terrier, which belongs to a typically Irish breed, confirms what philology had already taught us about Ullman's starting point: the Danish colonies in the British Isles. On the contrary, this is not where the cattle whose traces we find in South America came from: if Ullman had brought them with him from Ireland or the English Danelaw, they would have belonged to an Irish breed (Kerry, Ayr, Bretia) or an English breed (Shorthorn) of the Dutch type. However, at Cerro Guazú, we find the image of a Norman cow, similar to the one depicted on the Bayeux Tapestry. It is therefore necessary that the cattle were brought later from Normandy, either during the return voyage of the ship or ships with which the Vikings of Tiahuanacu re-established contact with Europe around 1250 and which, as we know (1,"1), tccaron to the port of Dieppe, or by the Norman ships that soon afterwards established permanent trade with South America (:1). This is confirmed by the figures on the unku of Isla de la Luna — a European in somewhat Indian-style clothing, a Norman bull and a heavy horse —, the figure of the sailor, covered with a sueste, on the keru of Copacabana, and others. Incidentally, we now know why Mexicans at the time of the Conquest remembered horses and not cattle. Nothing remains of the legend created by the Spanish, probably in good faith, regarding the post-Columbian origin of European animals in America. And this is not one of the least important contributions of our research.

VI The marks of the Southeast 1 . The strange Lansquenete On 6 January 1536, fourteen ships—some say twelve—under the flag of Castile entered the Río de la Plata. It was a private expedition, like all those carried out by the Spanish in the West Indies. Under the terms of the capitulation signed between the crown and him, its leader, Don Pedro de Mendoza, had received authorisation from Charles V to discover and populate the lands adjacent to the enormous river reached twenty years earlier by Juan Díaz de Solís, who was to sail "as far as the Pacific". He undertook to cover all the expenses of the expedition. In return, the Emperor conferred on him the title of adelantado and captain general and recognised his right to retain four-fifths of any booty he might gather, not to mention various commercial privileges. Mendoza had a considerable fortune at his disposal, which, according to malicious gossip, came largely from the sacking of Rome. Perhaps it was not enough, after all, to fully finance such a costly enterprise. Or perhaps this career officer had doubts about his own ability in the commercial field. The fact is that he had partnered with Jacobo Welser and Sebastián Neithardt or Neudhart, bankers from Nuremberg, one of whose ships, loaded with trade goods, was part of the fleet. This is why, among the three hundred sailors and two thousand three hundred and fifty soldiers who had embarked in Seville, there were one hundred and fifty Germans and Dutchmen. We owe the account of the adventure to one of them (I). Ulrich Schmidel has often been portrayed as a mere mercenary. Nothing could be less plausible. He was a soldier, to be sure, and he took pride in it, as did any free man of the time. But a simple mercenary would never have been able to leave us such precise memoirs as those in which he describes, in a lively and cheerful style but devoid, whatever anyone may say, of any naivety, his eighteen years of exploration and combat. Not only could Schmidel read and

He could write, which must have been exceptional among the mercenaries of the 16th century, and he expressed himself in correct German, still legible today despite its archaisms, rather than in the Bavarian dialect of his native country. Furthermore, his account shows that, although he had not learned a word of Spanish, he had at least a basic knowledge of Italian and French — he systematically writes *Nostra Signara d'Assumption* instead of *Nuestra Señora de la Asunción* — and a good knowledge of Latin, since he uses a word that is not common in this language to refer to the Amazons (*Amazon, is*) and declines it correctly according to the German preposition that precedes it: *zu den Amazonibus*, in the dative, for example. Everything leads us to believe, in accordance with Hans-Jürgen Wóhier's hypothesis (: "1), that our "landsknecht" was, in reality, an agent that the expedition's commanders had slipped in among the soldiers supplied to Mendoza. Having arrived in America aboard a Welser ship, he would return to Europe, thanks to the intervention of his partner, Neithardt or Neudhart, and the Fugger representative in Seville, Christoff Kaiser, on a ship belonging to a certain Johann von Hielst, an agent of the Erasmus Schetz firm in Lisbon, who, at the request of the latter's representative in San Vicente, lavished on him, considerable marks of respect that were not accorded to a soldier of fortune. And Schmidel, upon arriving in Seville, was received by "the counsellors of His Imperial Majesty," to whom he delivered a letter from Domingo de Irala, governor of the provinces of the Río de la Plata, and, if we are to believe it, a personal report. This analysis of the chronicler's actual functions is of more than anecdotal interest. Schmidel travelled up the Paraná with the remnants of Mendoza's troops, except for the handful of men who remained in Buenos Aires. In Paraguay, he took part in the four expeditions launched from Asunción towards Peru. And, although throughout his account he expresses a soldier's concerns about supplies and indigenous women, he also gives us precise information about the routes taken, the distances travelled and the local place names. It is important for us to know that this information comes from a man of some culture and not from a simple mercenary. Reading Schmidel's little book forces us to rectify everything that has been written about the itineraries followed by the expeditions of Juan de Ayolas, Alvar Nuñez Cabeza de Vaca and Domingo de Irala, and, previously, by Alejo García. Historians have almost limited themselves, on this point, to repeating the account left to us by Ruy Díaz de Guzmán (3"), and we unwisely followed their example in a previous work (2). We repeat, then, that García, Ayolas and Irala had travelled up the Paraguay River to Cerro San Fernando, located near the ports of La Candelaria and San Sebastián, a short distance from a promontory with a very distinctive shape, the Pan de Azúcar, while Cabeza de Vaca and Hernando de Ribera had reached, further north, the Xarayes lagoon, to the south of which the former had founded the village of Puerto de los Reyes. From this we had deduced, as everyone else had until now, that the Spanish expeditions had entered the Chaco, towards the west, some from Cerro San Fernando, at 19° latitude, and others from a point further north, around the 17th parallel. We did not know then that, as far as the former were concerned, Guzmán had confused two points that were very distant from each other. There are, in fact, two Cerros San Fernando on the banks of the Paraguay. One of them, now Cerro del Triunfo, is located near Pan de Azúcar, La Candelaria and San Sebastián, on the right bank of the river. But we found the other much further south, almost on the Tropic of Capricorn, exactly at 23° 10' and on the left bank: currently Cerro Tres Hermanas. We had noticed the latter on the maps of Levinus Hulsius and Diego de Torres, but had not paid any attention to it. Otherwise, we had only read Schmidel's account in an extremely poor Spanish translation (:i"): among other things, the translator had seen fit to replace the place names mentioned by the author with those that appear on current or at least recent maps, not without making more than one mistake. This is why we had not realised that Hulsius' map, which we reproduced in our work on the pre-Columbian geography of America C'), takes its toponymy for Paraguay from Schmidel. It is to Pistilli, a surveyor, that we owe the correction of Guzmán's error: the confusion between the two Cerros San Fernando. The real breach of trust committed by Schmidel's translator then became apparent to us, and we obtained a facsimile edition of the latter's original text (4). We were thus able to easily reconstruct the two correct itineraries of the Spaniards. **2. The roads to Potosí** Let us leave aside the expeditions that took the northern route: that of Antonio de Cabrera, which only advanced for four days in the Chace, that is, in the region that extends west of the Paraguay River; that of Alvar Nuñez Cabeza de Vaca, which had to retrace its steps after eighteen days of marching; and Hernando de Ribera's expedition, which travelled up the Paraguay River to the Sierra de Paressis and then, after seventeen days of progress through a swampy area, reached the village of Orthuesi. These futile attempts to reach Peru via the Xarayes lagoon are beyond the scope of our study. Let us simply mention that Orthuesi seems to come from the German *Orf*, meaning region, and the Quechua *huasi*, meaning house(s), a word that, in turn, derives from *hus*, which has the same meaning in Norse. This toponym therefore means "Houses of the Region": it was a staging post on the pre-Inca road that linked the Altiplano with a point of great strategic importance for the communications of the Viking empire. The Sierra de Paressis constitutes, in effect, the divortium aquarum between the basins of the Río de la Plata and the Amazon, and it was not without good reason that the Danes of Tiahuanacu had installed part of their "Guard of Honour" (:!) there, some Arawaks whose descendants still exist, thus placing a barrier between the Guaraní of the south and the Tupí of the north. What interests us here are the itineraries of the expeditions from Cerro San Fernando del Sur, located very close to the Tropic of Capricorn, that is, according to Schmidel (fig. 70), twelve leagues north of the village of Weibingo, whose name, as we have seen in two previous works ('-, •"), comes from the Norse *vej*, road, and *vink*, sign, or *vinkekl*, angle, and therefore means "Sign of the Road" or, more likely, "Bend in the Road": the point where travellers going up the river from Paragua'y, now Asunción, had to turn left, towards the west, to take the road that led through Potosí to Tiahuanacu, the capital of the Viking empire. Weibingo, which Alvar Nuñez Cabeza de Vaca calls Ypananié, was located at the mouth of the Ypané River, at 23° 35' latitude. There is no doubt about this. On the one hand, the first maps of Paraguay (•") show the village at the height of the tropic (23° 27'), Hulsius' map shows it slightly to the north, and Diego's map shows it slightly to the south.

Diego de

Paraguay, our adventurer recruited a thousand Guaraní and led them "towards the west to discover and explore the lands from which beautiful garments and metal objects were brought, both for war and for peace". The brave troop travelled up the Paraguay River to Cerro San Fernando, entered the Chaco, crossed the current Bolivian province of Santa Cruz, reached the foothills of the Andes and penetrated Inca territory — the Spanish had not yet occupied Peru — as far as Tomina and Tarabuco. But the Charcas, vassals of the Incas, repelled what was a veritable invasion army. García turned back with a rich booty of gold and silver and returned to Paraguay, where hostile Indians slaughtered the white men of the expedition. Contrary to what was said and what we repeat (2), the Cerro San Fernando at which point the Portuguese sailor had left the river was not the one in the north, but the one in the south, near Weibingo. Schmidel gives us decisive testimony in this regard when he tells us that Juan de Ayolas, who set out in 1539 to follow García's trail, travelled up the Paraguay River to Weibingo, near Cerro San Fernando, in the region where the Payaguáes (or Paiembós) Indians lived. There, he ordered three of his five brigantines to be dismantled and instructed the men—including Schmidel—whom he left aboard the other two to wait for him for four months. He did not return. It was later learned from the Indians that he had advanced far into the Chaco and then, due to the hostility of the natives, had retraced his steps, despite which he had been killed along with all the Spaniards who accompanied him. In this part of his account, Schmidel specifies that Weibingo was 80 leagues from France, Asunción and Cerro San Fernando, "which resembles Bogenberg", 12 leagues north of that "last village of the Carios", Guaraní allies of the conquistadors. Bogenberg is a hill located near Straubing on the Danube, the chronicler's hometown. It was also via Cerro San Fernando del Sur that Domingo de Irala twice entered the Chaco in search of Ayolas—in 1539, even before knowing that the probos had been killed by the indigenous people, during an expedition that he had to interrupt due to rain after twenty-six days of travel, and in 1548. There is no doubt: "a high, rounded hill called San Fernando, where the already known Payaguáes dwell," writes Schmidel. Now, the Payaguáes had their villages west of San Fernando del Sur, on the other side of the Paraguay River, and the description of the hill coincides with the chronicler's previous comparison, since Bogenberg means "Hill of the Arch," thus a rounded hill. Schmidel also points out that in 1548, the Spaniards' 130 horses had travelled upriver by land, which would not have been possible if Irala's starting point to the west had been Cerro San Fernando del Norte. We should add that the expedition members, 36 leagues away, encountered the Naperúes Indians, whom Hulsius' map places west of San Fernando del Sur and Weibingo. It is known that Irala's second expedition achieved its objective. It reached the foot of the Andes mountain range, in the encomienda of Pedro de Anzures. Contrary to what has often been said, Irala could not have been unaware, fourteen years after Pizarro's conquest of the country, of the presence of the Spanish in Peru. But this did not make him any less disappointed when he found that his compatriots already occupied the lands of gold and silver—the region of Potosí—that he coveted. He sent his lieutenant Nuflo de Chaves to Lima to negotiate with the viceroy, but he ultimately had to return without having achieved anything. He found his ships again a year and a half after his departure. Of the four expeditions that entered the Chaco via Weibingo, two reached the Sierra de la Plata, near Potosí, without major difficulties. Another failed only because of the hostility of the indigenous people, and the last one because of adverse weather conditions. This was the right path, in the true sense of the word: "On the first day we set out," writes one of Irala's companions in 1539 in his anonymous account (:!7), "we found the right path, and another day we found the path flooded and in poor condition, so much so that there were many days when we could not find dry land to rest... [due to] the rain that fell every day." It was, in fact, a mapped route that the summer rains—the expedition took place in February—had made impassable. Let us note, in parentheses, that 34 leagues from France south of Ypané and 46 leagues north of Asunción, Schmidel points out another river, "as wide as the Danube", which, in the text of the Hulsius edition (4) and on the accompanying map, is named Stuesia. This place name is neither Castilian nor Guaraní. Professor Hermann Munk sees it as a distorted compound of Sturz, waterfall, cascade, in German, and aa, running water, river, in Norse (Old High German, ahawa). Schmidel's manuscript is written in Gothic cursive, a script in which the r and e are easily confused. Its editor, Hulsius, faced with a term that, however Germanic it may have been, was not German, had misread it. Moreover, do we not find in the same work a place name, no less unexpected, with two forms, one of which can only be explained by a reading error: Froenirtiere, on the map, with a corrected t, and Froemidiere, in the text? This interpretation of Stuesia is reinforced by the fact that there is indeed a waterfall above the mouth of the river in question — today's Jejuí — near the village that our chronicler calls Lübaric Sabaie — and not Lüburic Saba. As we wrote elsewhere, due to the poor condition of the Hulsius map at our disposal, this place name is clearly of Germanic origin. 3. **From Weibingo to the Atlantic** In a previous work (2), we reconstructed the network of pre-Hispanic roads in southern Paraguay. We were able to do so thanks to our discovery of a portolan chart engraved on the "signpost" of the Viking post at Cerro Polilla —or Cerro Pelado—, located in the Sierra de Yvytyruzú. We saw that, through this veritable roundabout, the Peaviru —Soft Road— led from Paragua'y —"river of the men of the sea" in Guaraní!—, present-day Asunción, to the Atlantic coast, slightly north of Santa Catalina Island, via two routes, one of which passed through the confluence of the Yguazú and Paraná rivers and the other through present-day Puerto Adela. This last detail is thanks to Professor Pistilli, who corrected and completed our cartographic work on this point, as on many others, in a detailed study, still unpublished, which he kindly gave us a preview of. This Peaviru, which had numerous branches, had been constructed in an extremely ingenious manner; the Vikings had planted certain grasses in clearings in the jungle that prevented—and still prevent, as some sections of these roads remain, particularly in the Caaguazú mountain range—the thorny bushes and shrubs from growing back (2). Does this mean that, in order to travel from the Atlantic to Tiahuanacu—or to Potosí—it was essential to pass through Asunción and then, between this city and the Andes, take the road that ran along the Pilcomayo River or go up the Paraguay River to Cerro San Fernando? At the time of the Conquest and long afterwards, yes, of course, because the Spanish were completely unfamiliar with the north of the country. We know that, on the contrary, the Vikings had a village at the mouth of the Ypané, 12 leagues, let us repeat, south of Cerro San Fernando, opposite which, on the other side of the Paraguay River, began the road that led to Peru. One might think that this village was nothing more than a port of embarkation or disembarkation for travellers arriving from the Altiplano and heading towards it. This was undoubtedly one of its reasons for being. But it also controlled the mouth of the Ypané. Today, this river is almost unnavigable, despite the fact that armadillas travel down it, but perhaps this was not the case hundreds of years ago. Furthermore, Weibingo closed off the Paraguay River to the south of the road that came from Tiahuanacu and extended eastwards to the Atlantic. This road still exists. It no longer begins in the vicinity of Cerro San Fernando, but in Concepción, a city of 30,000 inhabitants located between Ypané and the hill in question. Its layout was modified in several places when

the construction of the road that, via Belén and Horqueta, still connects Concepción with Pedro Juan Caballero and its twin city, the Brazilian city of Ponía Pora, despite the fact that another road has replaced it from the latter town to Cerro Cora. One of its branches, at the height of the current Horqueta, crossed the Ypané, passed through Tacuatí and reached the road that, from Lüberic Sabaie —today Barranquerita— skirted the Stursia River (now Jejuí) and its tributary, the Aguaray Guazú, and arrived Cerro Torín, to the Amambay mountain range, which ran through Ñuverá to present-day Pedro Juan Caballero (cf. map, fig. 72). The name Torín is neither Spanish, Portuguese, nor Guaraní. Could it be a slight deformation of Thoring, "lineage of Thor"? This is the opinion of Professor Pistilli, a profound expert on Guaraní toponymy. From Ponía Pora, the Peaviru del Norte flowed through what is now Brazilian territory towards the town of Dourados, reaching the village of Ivinheima on the banks of the river of the same name, crossing the Paraná at Presidente Epitácio and joining at Ourinhos, with the branch that, via Puerto Adela, led from Asunción to the Gulf of Santos, or San Vicente as it was formerly known. When Ulrich Schmidel left the Paraguayan capital in December 1552 to embark for Europe, he travelled up the Paraguay River to Lüberic Sabaie, took the Stursia road (our Jejuí) and, via Cerro Torín, reached the Paraná at Puerto Camargo. From there, he travelled up the river a distance that he exaggerates (400 km instead of a little less than 300) —which is not surprising since he was making the journey for the first time

vez y no disponía, evidentemente, de instrumentos de medición—

inhabitants, not Indians, of the riverbanks, prior to the arrival of the Spanish and Portuguese. The place name leaves no doubt as to its origin: it was Vikings who had discovered a tree in the region—probably the mbocaya palm (*Cacrocomia tatai*), still used by the Guayakies—whose wood had the same properties as European iva and who must have established a village of craftsmen specialising in the manufacture of bows. 4 . **The Amambay lock** In Horqueta, let us take the old Pedro Juan Caballero route, which, as we have already seen, overlaps most of the pre-Columbian road. About 5 km before it meets the new route, which at this point follows the old route, a little east of Cerro Cora, we see, on the right, on the western flank of Cerro Tupa, the "shield" we mentioned in Chapter I. Let us continue for a few hundred metres and we will see, on the left, the Tuja Og, whose inscriptions we have surveyed, with its platform for worship and, we can now confirm, observation. In other words, the road passed, and still passes, between two hills where traces of the Viking presence have survived to this day. We will then reach the point where the old route merges with the new one, where the Viking road, coming from the south, turns at a right angle to the east. Directly opposite is the Itaguambypé, or more precisely, its southern tip, with the tower from which the entire region can be seen (see map, fig. 37). The fortress, therefore, controlled the communication route, vital to the Vikings, which led from Tiahuanacu to the Gulf of Santos. Its location was certainly not chosen at random. The area probably suffered periodic incursions by hostile Indian tribes that may not have belonged to the Guaraní race. In any case, it would have been difficult to find a better location for a fortification than this point, where the road changed direction radically. The fortified enclosure of Itaguambypé covered some fifteen hectares. It could therefore shelter, in caso de alerta, miles de familias: las de los auxiliares guaraníes que, en

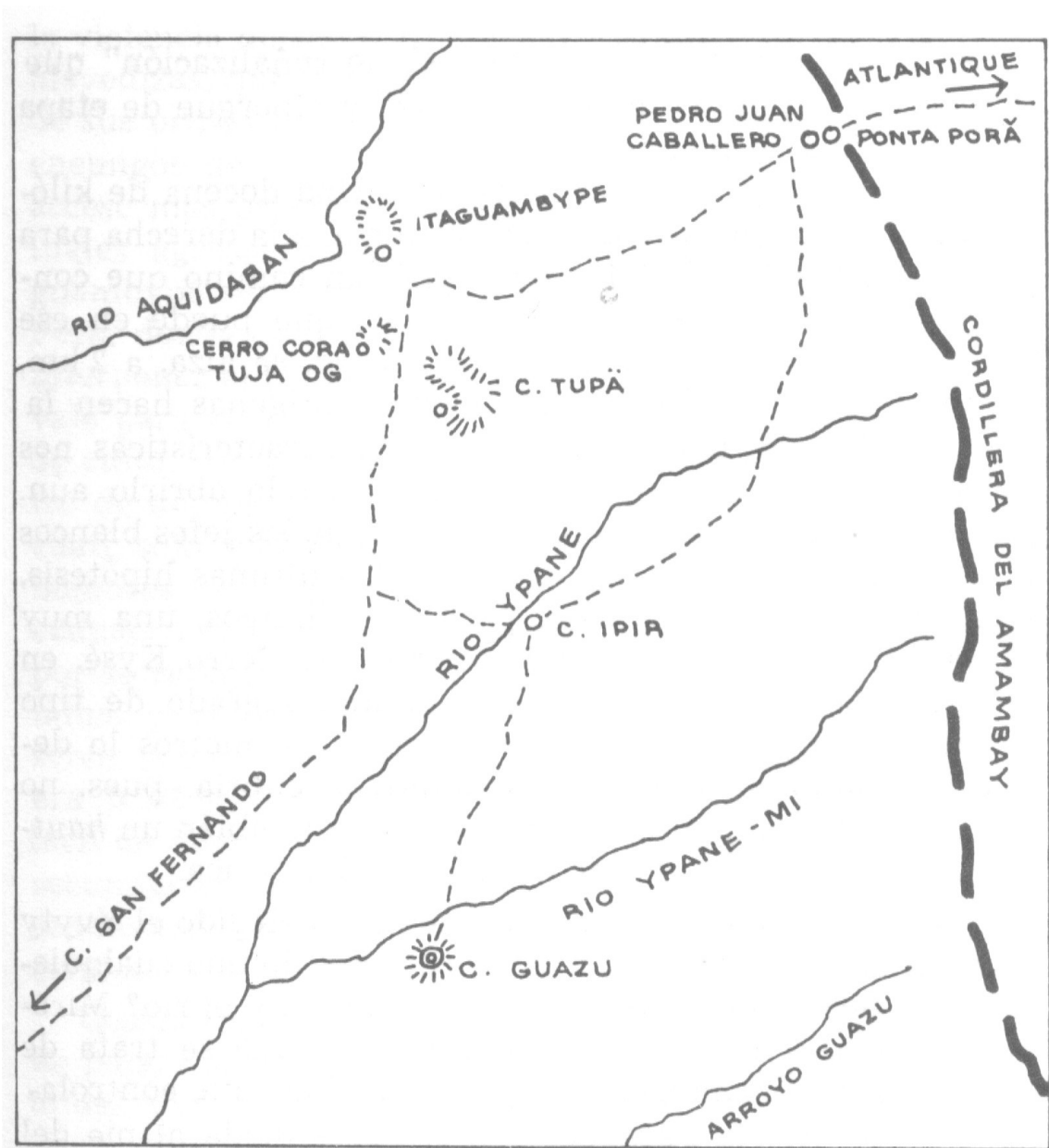


FIG. 73 – Mapa del complejo de Cerro Corá.

reaching Cerro Cora, on the right for those heading towards Itaguambypé, there is a road that leads to Ypané. On the other side of the river, which can be crossed at this point, at least today, stands Yvyty Pero, 2 km away. Indigenous traditions consider it the "dwelling place of the white king Ipir" and its characteristics led us to believe, although we have not yet been able to open it, that it was a necropolis: perhaps that of the white chiefs of Tiahuanacu. Whether or not these latter hypotheses are accurate, the fact remains that the hill was of very special importance to the Vikings: the inscriptions on Cerro Kysé, in its surroundings, and above all the sacred Nordic-type forest that

In times of
ians, was required to
surrounding area. At
of its inscriptions does
post" announcing the
en kilometres before

We discovered a few hundred metres away that this is clearly demonstrated. The Itaguambypé therefore covered not only a vulnerable point on the road, but also a *hautlieu*, necropolis or not, of the Men of Titicaca. One question remains: why was Yvyty Pero, located beyond Ypané, chosen instead of any of the hills that rise between the road and the river? Let us look at the map (fig. 72) and we will see that this is a constant. Weibingo, the important village that controlled the crossing of the Paraguay River, was not located at the foot of Cerro San Fernando, where the Atlantic road began and opposite which the road from Tiahuanacu arrived, but on the other side of Ypané. Tacuatí, no less important judging by the size of its temple, was not built on the banks of the road, but also south of the river, 2 km away at this point. Itaguambypé, at least in relation to Cerro Ipir, therefore follows the general rule. This is, moreover, quite understandable from a military point of view. Despite its shallow depth, the Ypané is very difficult to cross on foot due to its strong current and the slippery, shifting stones that cover its bottom. The slightest defence of one of its banks is therefore effective. However, for the enemies of the Vikings, the road was the most practicable access route: all around, the jungle presented potential attackers with an almost impenetrable obstacle. The Itaguambypé served as a military base and a place of retreat. But where there were only unfortified villages, it was prudent to place the river between them and the enemy. The same reasoning applies to the Yvyty, a necropolis and probably a place of refuge, where we find no trace of permanent defences. As in Weibingo and Tacuatí, there must have been only a wooden fort there that the men — every man was a warrior, regardless of his usual occupation — could use in case of attack from the rear. But the main danger came from the road, and the river provided an effective barrier against it. The jungle, for its part, prevented any movement of troops. Only individual infiltration was possible through it, which was easy to detect and even easier to repel. The secondary roads that ran through the villages were mere paths, which should not have been difficult to block. That leaves Cerro Guazú. The hill is located 50 km south-southeast of Cerro Cora and 40 km southwest of Yvyty Pero. For those coming from the north, it is necessary to cross the Ypané and then its tributary, the Ypané-mi, to reach it; for those coming from the west, the Ypané below the confluence of its two arms. To the east and south, there is nothing but jungle, even denser than elsewhere. The position, therefore, is the same as in the previous cases: the river served as a natural defence. For the road that led — and still leads — to Cerro Guazú came from Cerro Cora, then from the north, passing through Yvyty Pero. The enormous truncated peak on whose flanks we found the countless runic inscriptions, the most important of which we studied in Chapter IV, was therefore linked to the Viking base whose stronghold was Itaguambypé. Was it part of it? We have more than one good reason to think not. Firstly, the road leading to it did not go any further, where there was only — and still is today — virgin forest. Secondly, we found no traces of buildings on the hill and its surroundings — although it is true that we did not explore the entire plateau —: the houses must have been made of wood, as we have already said, without stone foundations. The only exception is the dolmen, located at the foot of the southern flank of the massif. But we cannot say for certain that it was built by human hands. Finally, the rock shelters at the foot of the hill could only have served as guard posts, as confirmed by some of their inscriptions that speak of war and victory. Two of them even prove that the inhabitants of Cerro Guazú were on the defensive: "War has returned from Kiok... Father, stay above"; "Sunold and Ekath, watch the path on the left slope". They certainly made numerous sorties — "5 plus 8 and still 7 expeditions to Fafóiol" — but their situation was clearly precarious: the enemy threatened the approaches to their village. Such a state of affairs would have been inconceivable during the era of the Tiahuanacu empire. The Itaguambypé then had a firm control over the region, and well-protected convoys frequently travelled the road, which otherwise would have had no reason to exist. Things were no longer the same after the Araucanians of Chief Kari took the Viking capital in 1290. Suddenly, the garrisons of Paraguay lost all contact with the Altiplano. Duly informed, if only by the arrival of refugees, of the defeat of the Island of the Sun (1), the Guaraní auxiliaries gradually regained their independence. The hostile Indians in the area, who had until then been kept at bay, became increasingly aggressive. Without troops, the Itaguambypé was no longer defensible and, moreover, no longer had any reason to exist. The white men who, until then, had commanded the indigenous units had only one solution: to retreat to a more solid position. Cerro Guazú, from this point of view, was unrivalled: a plateau with a lagoon, whose few access points were easy to defend. However, the refuge of the Sun God became his tomb. Forced to live in the indigenous way, since they no longer had any helpers, the Vikings slowly degenerated to the level of the present-day Guayakies. Perhaps it is no mere coincidence that a band of "white Indians" still frequents the surroundings of Cerro Guazú, just as other bands still roam near the Posta de Yvytyruzú, in Peaviru del Sur. 5. **A breeding ground** The road that, coming from Tiahuanacu, crossed the Paraguay River at Cerro San Fernando and headed towards the Gulf of Santos via what is now Pedro Juan Caballero was considerably shorter than the one that skirted the Pilcomayo River and, via Paragua'y (Asunción) and Puerto Adela, reached the Atlantic at the same point. This was its fundamental use. But perhaps there was another that was hardly less important. We saw in Chapter V that, contrary to legend, there were horses and cattle in pre-Columbian South America. Ullman's Vikings had brought with them war horses that they had re-embarked when they left Mexico in 989. These animals explain why their owners embarked on the overland journey from Venezuela to Colombia, a distance of about 1,200 km as the crow flies: the men were not forced to carry themselves the heavy equipment needed for several hundred people. We have already said, moreover, that they help us to better understand the existence of the Peaviru, who, over a distance of about 3,000 km as the crow flies, linked Lake Titicaca with the Atlantic coast: the chasquis probably used them for running, according to the postal system that the Peru of the Incas has made known to us, but the Vikings certainly used them for riding. If the Spanish did not find horses in the Altiplano during the Conquest, it was because the survivors of the massacre of 1290 had taken those that had escaped from their attackers with them when they fled. We have proof of this, since the Amazons, the Viking women who had taken refuge in the jungle, where they had created very special living conditions, still had some at the beginning of the 16th century (:1). On the contrary, Juan de Garay, in 1580, had verified, not without surprise, north of Buenos Aires, the "existence of large numbers of herds of chucaro horses". Where had these come from? It is known, from the example of Spanish colonisation, that horses do not acclimatise well in the Andes and that the species degenerates there. Furthermore, Peru has no grasslands, either in the mountains or along the coast, that meet the requirements of European livestock. The Vikings therefore had grazing lands elsewhere where their horses could reproduce without any problems. This was not the Argentine pampas, since the Men of Tiahuanacu had not colonised it: the livestock, returned to the wild after the destruction of the empire, only

The arrival of ships returning from the Old World meant that, at least during the winter, they could sail up the river to Iquitos, Peru, and beyond. From there, the drakkars could follow a triangular route, which travellers were not obliged to take, however. It was feasible for them to take either one of the Peaviru rivers or the Amazon to go from Tiahuanacu to the Atlantic or vice versa, at least when the summer floods did not make navigation too dangerous due to the submerged logs they carried. We have evidence of only one voyage by South American Vikings to Europe: thanks to which, around 1250, information, including precise maps of the subcontinent, reached Dieppe, subsequently enabling its shipowners to import heartwood from the Amazon and, on the return journey, the sculptural models of Amiens Cathedral brought by Father Gnupa to Tiahuanacu. However, there is no reason to believe that there were not others. On the contrary, it is very likely that the Normans' maritime traffic encouraged their cousins, who had been responsible for initiating contact, to follow their example. In any case, the extent of their land, river and sea communication routes meant that the Vikings of South America had geographical knowledge several centuries ahead of that of Europe. Or, more precisely, of that which was in the public domain in Europe. **Epilogue** The existence of America was certainly not unknown in the Old World before 1250 (••). As early as the 1st century AD, Marino of Tyre placed the city of Cattigara on his map, on the eastern coast of the Sinus Magnus, the Great Gulf that stretched beyond Asia and was none other than the Pacific Ocean. The European Middle Ages, nourished by Ptolemy, the Alexandrian who, in the 2nd century, had taken up, without distorting them, the works of Marino de Tiro, knew very well that there was a land east of Indochina whose western coasts were frequented by ships from India and, above all, from China, and even from Rome. The Arabs, who sailed the Indian Ocean, were probably the first, as early as the 9th century, to give the Land of Cattigara the shape of a peninsula extending east Asia southwards. Therefore, one or more of their ships had crossed the Pacific and recognised Cape Horn, or at least gathered accurate information from Chinese or Indian sailors who had done so. But their knowledge did not go beyond that. On their maps, the contours of South America are vague and inaccurate, and the subcontinent remains blank. The discovery by the East was not to yield any further results. Suddenly, in 1489, Henricus Martellus (Heinrich Hammer) offers us an image of the peninsula in question that is very close to the reality of South America, in which even Tierra del Fuego is not missing. Furthermore, his London planisphere, and it is Professor Paúl Gallez (n) to whom we owe this extraordinary revelation, includes the layout of the subcontinent's main rivers and its great mountain ranges. Then, in 1507, Martín Waídseemüller's "impossible map" appeared, in which, apart from the Land of Cattigara, which did not disappear, we find an America separated from the Asian continent, the southern part of which is implausibly accurate. Clearly, new data had been at the origin of this cartographic revolution. New, at least, for geographers. The source of this data leaves no room for doubt. To establish it, in fact, it was not enough to have a few adventures, even repeated ones, of sailors blown off course by storms. On the contrary, it required a complete survey of the South American coastline by navigators with extensive scientific knowledge and, on the other hand, a detailed exploration of an enormous territory. Now then: we know that the Vikings, accomplished sailors of high cultural level, controlled politically and militarily an immense empire that covered the Mountain —Berg, according to their inscriptions—, that is to say, the Andes, and the Plain —Matt—, that is to say, the jungle that stretched from the mountain range to the Atlantic: an empire criss-crossed by land and river communication routes. They were therefore in a position to draw a map of South America. And they were the only ones who could do so. This map, as we established in a previous work, was evidently taken with them on their 1250 voyage to Europe, and the Dieppians obtained it. In the Middle Ages, sovereigns and shipowners' guilds kept the deepest secrets regarding sea routes and the lands they allowed them to reach. Inevitably, some leaks occurred in the long run, no matter how many precautions were taken. This is how, in the case that interests us, Pizigano, in 1367, was able to include on his map, in three different places, an island called Bragir —"a name given by the Normans", the cartographer specifies— which represents, on the basis of contradictory data, several points on the "new" continent. This is how Henricus Martellus, in 1489, was able to give the Land of Cattigara the approximate contours of a South America whose rivers and mountains are perfectly identifiable. This is how, above all, Waídseemüller, in 1507, was able to represent an autonomous America whose northern part was limited to Vinland, colonised from the year 1000 onwards by Norwegian Vikings, plus Florida, and whose central part was limited to the islands and mainland reached by Columbus, but whose southern part was complete, except for the strait and Tierra del Fuego, and better designed than the Old World. This is how, finally, Johannes Schoner, in 1515, five years before Magellan's voyage, was able to copy the previous map, adding what was missing. It is not surprising, under these conditions, that the Portuguese were able to obtain, in Dieppe, the map of South America that Columbus, first, and Magellan, later, were going to steal from the King's Treasury. America had been officially discovered and then conquered, but the Vikings were no longer there. The descendants of those who had taken refuge in the jungle in 1290 had long resisted the living conditions imposed on them by a hostile environment, but degeneration had taken its toll, even though some still wrote in runes in the mid-15th century. The descendants—this is the meaning of the word Inca in Norse—of those who had founded the New Empire had managed to preserve some of their traditions and even their language, but the mestizo Atahuallpa, before Pizarro's arrival, had ordered most of them to be beheaded. The Spanish completed the picture by marrying the girls of the white aristocracy and enslaving their brothers. The civilising epic of the Men of the North had lasted five hundred years.