

# Petroglyphs And Abandoned Sites In Mustang A Unique Source For Research In Cultural History And Historical Geography<sup>1</sup>

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In the last few decades interest in the research and documentation of rock art has increased on a global scale. On the one hand, this has been due, in part, to recent technological developments and advances in scientific methods of dating, such as accelerator mass spectrometry (AMS) radiocarbon dating. On the other hand, the growing interest in rock art has also been the result of the realization that petroglyphs (engravings) and pictographs (paintings) are not, as had long been presumed, simply graffiti which were created in early historic or prehistoric times by tribal peoples just to pass the time of day. Rather, they are cultural and historical documents which are a potential source of significant scientific information.

Only a few rock art sites are known to exist in the Himalayas. They are found in northern India, in Ladakh and Zaskar (see FRANCFORT et al., 1990). Considering the scarcity of known rock art

in the Himalayas, the discovery of the rock engravings of Kak Nyingba in Mustang (Nepal) was an important one, especially in view of the fact that no rock art had been documented in Nepal up until then. The petroglyphs were found during fieldwork on the history and geography of settlements in the southern Mustang district in 1993. Two further sites of rock engravings (Samar, Te) were found during field trips in 1995 to northern Mustang (see Fig. 1).

The studies carried out on the petroglyphs of Kak Nyingba occurred within the interdisciplinary German Research Council (DFG) focus programme "Settlement Processes and the Formation of States in the High Himalayas Characterized by Tibetan Culture and Tradition" (see HAFFNER & POHLE, 1993). One primary task of the geographical project was to prepare a representative documentation of the remains (abandoned sites) in the cultural landscape of present-day Mustang district. Both abandoned sites (e.g.

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1. I want to thank Philip Pierce for the translation of this paper into English.

settlement ruins) and rock art are relics of past epochs and important evidence of earlier populations, their ways of life and manifestation of beliefs. The study of both in each case had historical reconstruction as its goal. Methodologically, the work thus comes under, on the one hand, the historical settlement geography (and in particular, the geographical study of abandoned sites), and on the other, the interdisciplinary rock art research. One main goal of the historical-geographical investigations was the documentation, analysis and interpretation of the various rock art motifs, styles and techniques evidenced in Kak Nyingba. Another main objective was to integrate the rock art discoveries into the local history of the cultural landscape of Mustang and the supra-regional cultural and geographical context (see POHLE, 2000).

### **The petroglyphs of Kak Nyingba**

The petroglyphs of Kak Nyingba are located north of the main range of the Himalayas in the middle course of the Kali Gandaki river at a height of 2,770 m (see Fig. 1). The surrounding landscape is that of an arid high mountain area with oasislike farming settlements - an area populated by Tibetan peoples and dominated by Tibetan culture and traditions. The petroglyphs were carved into flat sandstone banks abutting the Kali Gandaki river. The deserted settlement of Kak Nyingba, after which the rock art site was named, lies in the vicinity.

The petroglyphs of Kak Nyingba were hammered or chiselled into the rock with simple stone tools, and partially ground and polished. In all, 1,189 petroglyphs have been identified up until now (single cup-marks were not counted). For the most part, the petroglyphs are distributed over two large areas of rock within a radius of about 200 m. An overview of the various engraved motifs and their typology is given in Fig. 2. The approximate number

of petroglyphs according to single motifs, motif categories and groups is shown in Fig. 3. The petroglyphs of Kak Nyingba are small in size and dominated by symbolic representations. Cup-marks are very common - a form typical of rock art all over the world. In addition, several human and animal figures are represented. Less common are decorative elements or patterns, and inscriptions and characters as well. The latter are, for the most part, recent Tibetan Buddhist inscriptions.

### **Rock art in the context of historical and geographical settlement research in the Tibetan Himalayas**

The rocks of Kak Nyingba must have been used as a "writing surface" over a long period of time. This is indicated not only by the different degrees of weathering and repatination of the engraved rock surfaces, but also by the high variability in the rock art motifs, styles, and techniques represented. Indeed, further features suggest that the Kak Nyingba petroglyphs go back to prehistoric times - for example, the use of stone tools in making the pictures and the large number of superimpositions of rock art figures, signs and symbols (see POHLE, 2000).

Thus the discovery of the petroglyphs supports the thesis that the settlement and cultural history of the northern Nepal Himalayas is several thousands of years old, despite the unfavourable ecological conditions specific to this high mountainous area (see HAFFNER & POHLE, 1993). Archaeological investigations of cave systems and terrace settlements in southern Mustang provide evidence of at least three thousand years of history (see SIMONS & SCHÖN, 1998). During this time extensive migration and cultural assimilation, along with warfare and other forms of conflict, took place, as indicated by relics from previous settlements and their high concentration in Mustang (see POHLE, 2000). If one takes a look at the map (Fig. 1), the large concentration

of abandoned sites in the Mustang district is immediately apparent. Along the Kali Gandaki river and its side valleys, on a distance of about 70 km north to south, not less than 200 abandoned sites (including caves, abandoned settlements and fields, ruins of fortresses, palaces and monasteries) were documented.

One basic reason why Mustang for centuries was repeatedly the scene of military conflict is its geographical location. Being a region that stretches from north to south along the Kali Gandaki valley, it joins in a virtually ideal manner the Tibetan plateau with the foothills of the Nepalese Himalayas, and thus with India. Already in early times, therefore, the Kali Gandaki valley was a favoured trading route, on which, typically, grain from the south was transported in large caravans to Tibet, and salt from the north to Nepal (see FÜRER-HAIMENDORF, 1975). Control over such a trading route from early on signified political power, on the one hand, and economic gain on the other. If settlement remains of the most diverse type and age are massed in the region of this landscape of passes and defiles, and if all rock art sites hitherto discovered are situated there, then this is only one more indication of the special historical dynamics at work in the Himalayan transverse valley of the Kali Gandaki.

### Problems of dating rock engravings

Despite all efforts, the petroglyphs of Kak Nyingba have not yet been dated absolutely. Indirect and relative dating methods, however, have yielded some results. According to the degree of weathering, for example, it is obvious that the Tibetan inscriptions containing religious mantras are the youngest, not yet repatinated engravings. A darker patina is displayed by various Buddhist symbols (e.g. svastikas, stupas, vases). From the weathering of their edges, however, it is clear that they are not the oldest

petroglyphs. The engravings of axes and the motifs connected with them, such as snakes, are even older (see Figs. 4.1 & 4.2). They can be interpreted as proof of the presence of pre-Buddhist religious ideas. For petroglyphs belonging to earlier periods, a more exact differentiation based on the degree of weathering becomes unreliable. Under these circumstances, bench marks for the antiquity of the rock art can only be derived - hesitantly - by an analysis and comparison of rock art styles, or by drawing on dated motifs at other locations.

One example of how age can be estimated by comparing styles is the engraving of the **blue sheep next to a labyrinth** (see Figs. 5.1 & 5.2). Prominent features, such as the long beaklike snout, the representation of the animal in a "warped" perspective, and the co-occurrence of a labyrinth points to the so-called "animal style" from the time of the Scythians. This specific artistic style from the middle of the first millennium BC is also known as the "Eurasian animal style", for it occurred all over Eurasia (see NOWGORODOWA, 1980). Rock art of this particular style is widely spread over Central Asia (see also JETTMAR, 1980, 1984).

One of the oldest motifs in Kak Nyingba alongside "solar discs", at least typologically, is the **hoofprint** (see Figs. 6.1 & 6.2), which figures 241 times. This motif is again common in the rock art of Central Asia (e.g. Mongolia, Inner Mongolia and Siberia), there being no parallels in Indian rock paintings or engravings. In eastern Mongolia, one rock art site (Arsaan chad) containing numerous petroglyphs of hoofprints has been described by NOWGORODOWA (1980:51). A very fortunate state of affairs for the dating of these petroglyphs came about with the discovery of one rock with hundreds of engraved pictures (including numerous hoofprints) whose lower parts were covered by a cultural layer from a Neolithic workshop. Therefore,

the petroglyphs must be older than the Neolithic settlement. The hoofprints are very similar to the petroglyphs of Kak Nyingba, not only in terms of their typology, engraving style and the technique used, but also in size and the high number of engravings, and in their combination with other motifs (e.g. squares, semicircles) as well.

For the dating of the petroglyphs of Kak Nyingba, the chronologies obtained with the aid of typological comparisons can be taken only as indications of a maximum age; that is, they may provide an idea of the span of time in which, for example, the hoof motif enjoyed its special status in the Central Asian realm. An exact date for the creation of the petroglyphs of Kak Nyingba cannot be determined on the basis of comparison (see POHLE, 2000).

### Origins

The rock engravings themselves provide no direct clues as to the ethnic origin of those who created them. The variety in the groups of rock art may have been produced owing both to the differing ethnic or cultural groups responsible for them, and to cultural change occurring within a single ethnic group over time. By referring to the historical context, and with the aid of comparative regional and cultural analysis, one may, however, arrive at indications of definite source cultures.

As an analysis of the rock art and an historical-geographical interpretation of the images and their sites in Mustang have shown (see POHLE, 2000), complexes of motifs (e.g. cup-marks and bowls, connected to each other by grooves) in Kak Nyingba, Samar and Te point to a formerly unified base culture in these areas. Alongside linguistic and ethnological considerations (see RAMBLE, 1998), therefore, the studies carried out on the rock art thus offer a further piece of evidence that Kak Nyingba and Samar, nowadays Tibetan-speaking areas, were once

inhabited by a non-Tibetan population that spoke a Tibeto-Burman language (Seke), and whose religion was highly animistic. Whereas even today a Seke-speaking population is still living in the town of Te, the regions around Kak Nyingba and Samar have been Tibetanized in both language and culture, and so Buddhicized - a process that can clearly be traced in the rock art of Kak Nyingba.

At present no definite pronouncements can be made concerning the originators of other striking rock art motifs in Kak Nyingba - for example, the representations of hoofs or the axe engravings. To be sure, the groups of motifs can be assigned to certain cultural spheres, but it remains unclear whether it was concepts and ideas that were merely disseminating, or whether different population groups each manifested its own belief-based notions.

One thing may be said, however, with a great degree of probability: the producers of the petroglyphs of Kak Nyingba were less likely to have been transients such as those along the Karakorum Highway (see JETTMAR, 1980) than local inhabitants. Several features favour this assumption, such as:

- the repertoire of motifs (e.g. the hunting scenes with local prey),
- the sacred nature of the rock art site, as well as
- the great effort in terms of time and experience which was needed in order to engrave complex scenes into a sandstone whose very hard weathered surface was difficult to work on.

### The petroglyph site and the deserted settlement

Although investigations into the relationship between the rock engravings and the nearby deserted settlement of Kak Nyingba have not been completed yet, we can assume that the petroglyph site was formerly used by the inhabitants of the village. A mortar hole testifies to this, along with several engraved stone game boards of *rama rildok*, a Tibetan pastime commonly played by herdsmen. In contrast

to this profane use in the more recent historical period, the original purpose of the site was of a sacred nature, and is likely to go back to prehistory. It is not possible to conclude at present, though, whether the site was being used by the local population as a ceremonial location already in pre-Buddhist times, particularly since the period of the settlement's origin is still unclear. Initial results for the cultural layers of the deserted houses, using radiocarbon dating of charcoal and thermoluminescence dating of fritted soil, indicate habitation between the 11th to 15th centuries AD (see POHLE, 2000). The local oral tradition also confirms this (see RAMBLE, 1983).

### **The function of the place**

A great deal of evidence indicates that the rock art site was of religious significance, that it was used as a ceremonial setting, and in particular as a possible site for cult and offering activities. Some evidence of this is as follows:

- the large number of symbolic representations (see Fig. 3);
- the placement of a large number of the same motifs together (e.g. hoofprints [see Figs. 6.1 & 6.2], footprints, "solar discs", snakes), which can often be interpreted as an expression of cult or ritual activities;
- the engraving of the "sacrifice scene" (see Figs. 4.1 & 4.2) and close to it the discovery of a rock niche, covered with soot, in which fire sacrifices were presumably offered;
- the large number of cup-marks and bowls connected to each other by grooves, and which may have been used for libations, and finally
- the more recent engravings of Tibetan Buddhist symbols and inscriptions.

*It is remarkable that the religious character of the site can be inferred during all periods of the rock art, and that the site had, and indeed still has, the status of a "sacred place" both in pre-Buddhist and*

*Buddhist times. It thus reflects a certain cultural continuity expressive of a sense of allegiance to previously consecrated sacred places.*

### **Features relating to landscape ecology**

Inferences concerning environmental conditions may often be drawn from the representation of historical fauna in rock art. In Kak Nyingba, the significance of the rock engravings of deer (see POHLE, 2000) has been heightened by archaeological discoveries in the Muktinath valley: bones of primarily forest animals - including the deer - which no longer exist in Mustang (v. d. DRIESCH, 1995). Deer are dependent on extended forest areas for their habitats. The present-day landscape of Mustang, however, may be characterized as basically high mountain semi desert. In this context, the engravings of deer could be a further indication that the area of southern Mustang used to have a more dense forest cover than it does today. This, however, should be treated with caution: since the deer is an important mythological animal in the whole of Central Asia, drawing conclusions as to its natural distribution from rock engravings may be misleading.

### **Economic activities**

Statements about the economic activities of those who produced the petroglyphs can be made on the basis of interpretations of the rock art motifs and their groupings into scenes. The rock engravings of Kak Nyingba also contain clues regarding the economic activities of their creators, such as specific hunting practices, including the different weapons used and animals ridden, as well as the various animals hunted. In one hunting scene, for example, a dog, a blue sheep and a rider on horseback can be identified. Hunting blue sheep obviously took place as a battue with dogs. In this way, the animals were driven downhill into traps, as is confirmed by local informants. Hunting blue sheep has a long tradition

in Nepal, in the area north of Dhaulagiri and Annapurna Himal. This is confirmed in the oral tradition (see KRETSCHMAR, 1985).

In contrast to blue sheep, the hunting of **wild yaks** obviously took place on horseback, with bows and arrows, or even spears (see Figs. 7.1 & 7.2). Despite this, it is reasonable to conclude that the hunting scene of wild yaks is not a realistic one; rather, the disproportionately large arrow suggests imitative magic, according to which the result of the hunt is magically anticipated or ensured by creating the picture itself. Finally, it is remarkable that there is no information about agriculture or animal husbandry in the rock engravings of Kak Nyingba, unless the numerous hoof engravings in them be interpreted as magical symbols and the expression of a fertility cult intent on securing and increasing the number of livestock (see NOWGORODOWA, 1980; CHEN ZHAO FU, 1989)

### **Rock art motifs and cultural regions**

The specific geographical location of the rock art in the border region between two cultural territories, the South Asian and the Central Asian, is reflected, among other things, in the art itself. Numerous motifs from the rock engravings of Kak Nyingba - examples are the hoofprints (see Figs. 6.1 & 6.2) and the blue sheep engraving next to a labyrinth (see Figs. 5.1 & 5.2) - appear to be related to Central Asian rock art, especially to what is located in Mongolia. Other common motifs in Kak Nyingba - for example, axes - have no equivalents in the rock art of Central Asia, but have been found in the rock engravings of the upper Indus valley (see JETTMAR & THEWALT, 1985), and in the rock art of central and southern India as well (see NEUMAYER, 1993). In the wider context, analogies to the axe engravings are also

found in the European rock art of the Alps and of Scandinavia.

### **The universality of rock art motifs**

Rock art motifs of the same kind which appear in different areas very far away from each, on the one hand, may reflect large-scale exchange of information, ideas and trading goods. On the other hand, they do not necessarily imply cultural contact, but may simply be representations of universal phenomena (i.e. rock art archetypes; see ANATI, 1991). Examples of widely found patterns are motifs such as "solar discs", spirals, hand- and footprints, and cup-marks and bowls, all of which occur in the rock engravings of Kak Nyingba. Is it now the theory of a large-scale exchange of ideas, information, trading goods and products of the material culture that might fit as an approach to understanding? Or are the motifs simply representations of universal phenomena and activities that have their roots in a common human system of association? Many aspects of rock art, including some exhibited by the petroglyphs of Kak Nyingba, will necessarily remain a mystery for some time to come.

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Fig. 1: Petroglyphs and abandoned sites in Mustang (Draft: P. Pohle)

Fig. 2: Repertoire and typology of rock art motifs in Kak Nyingba (Draft: P. Pohle)

Fig. 3: Approximate number of petroglyphs in Kak Nyingba according to motif category and group

Fig. 4.1: Photograph of the "sacrifice scene" (P. Pohle)

Fig. 4.2: Drawn copy of the "sacrifice scene" showing a human with an axe in his raised hand, an anthropomorphic figure in motion (dance?), one unspecified "sacrificial animal", one dog, two snakes and four axes beside linings and cup-marks (Draft: P. Pohle)

Fig. 5.1: Photograph of the blue sheep engraving next to a labyrinth (trap?) (P. Pohle)

Fig. 5.2: Drawn copy of the blue sheep looking back at a labyrinth (trap?). The motif has been artistically engraved into rough sandstone (Draft: P. Pohle)

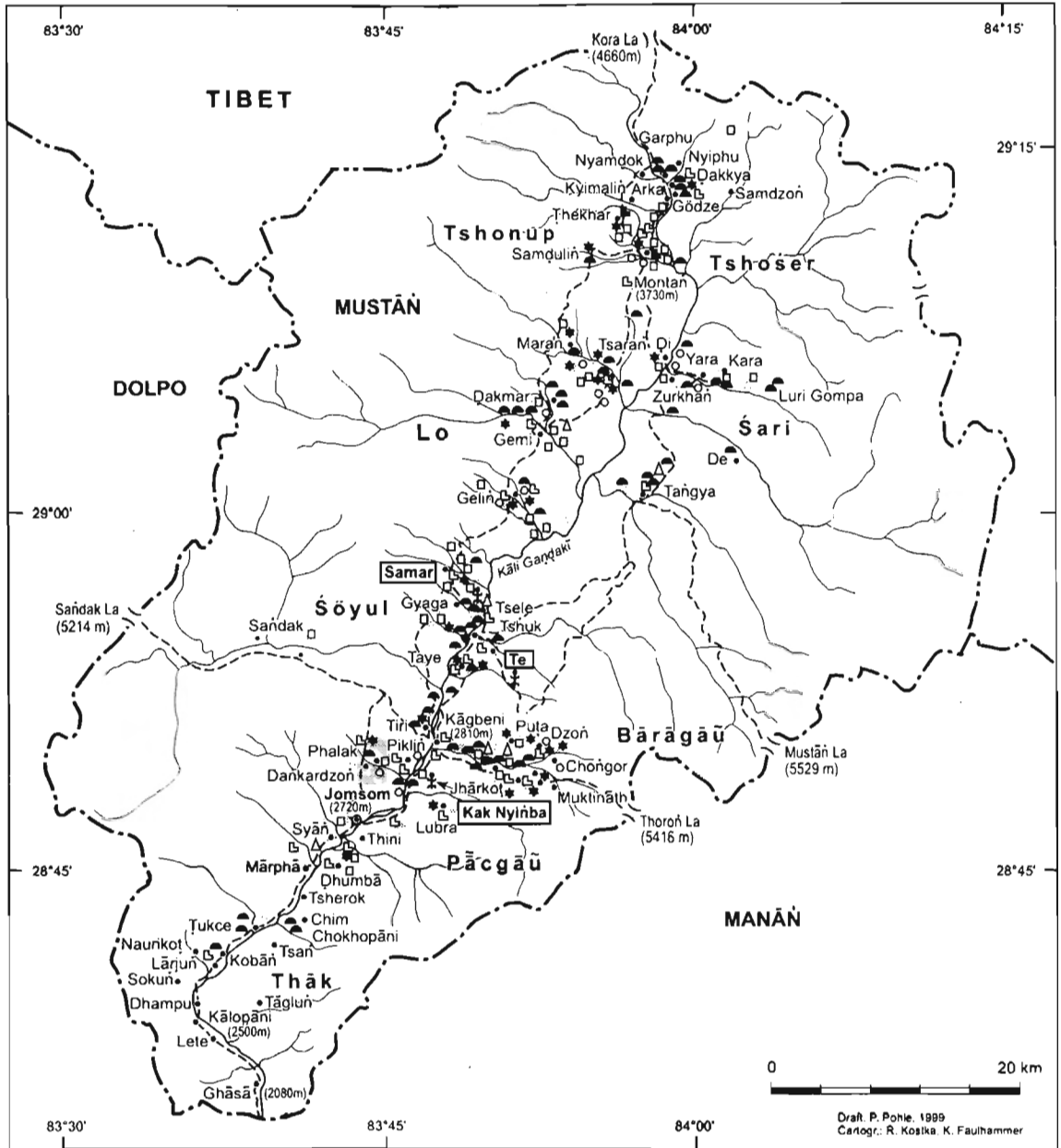
Fig. 6.1: Photograph of hoofprints together with "solar discs", lines and geometric signs (P. Pohle)

Fig. 6.2: Drawn copy of hoofprints together with "solar discs", lines and geometric signs (Draft: P. Pohle)

Fig. 7.1: Photograph of the hunting scene (P. Pohle)

Fig. 7.2: Drawn copy of the hunting scene showing five men on horseback with bows and arrows or spears hunting wild yaks (three figures). At a later point in time, an axe was engraved in superimposition to the hunting scene. In the lower part of the scene, a blue sheep can be identified. (Draft: P. Pohle)





Draft: P. Pohle, 1989  
Cartogr.: R. Kosika, K. Faulhammer



Mustān District		Classification of deserted places	
▲	Caves, anthropogenic	✳	Monastery, ruin
□	Settlement, abandoned	○	Building, ruin
■	Fort / castle / fortified settlement, ruin	⚡	Petroglyphs
△	Watch-tower, ruin	▨	Fields, abandoned

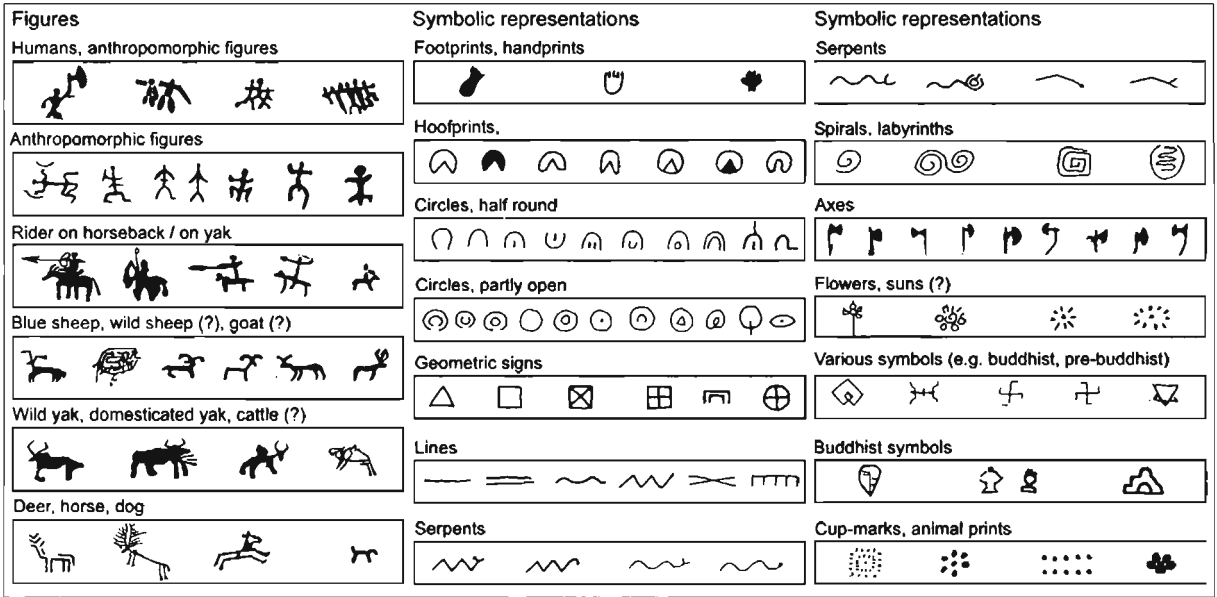


Fig.2: Repertoire and typology of rock art motifs in Kak Nyingba (Draft: P. Pohle)

Fig. 2

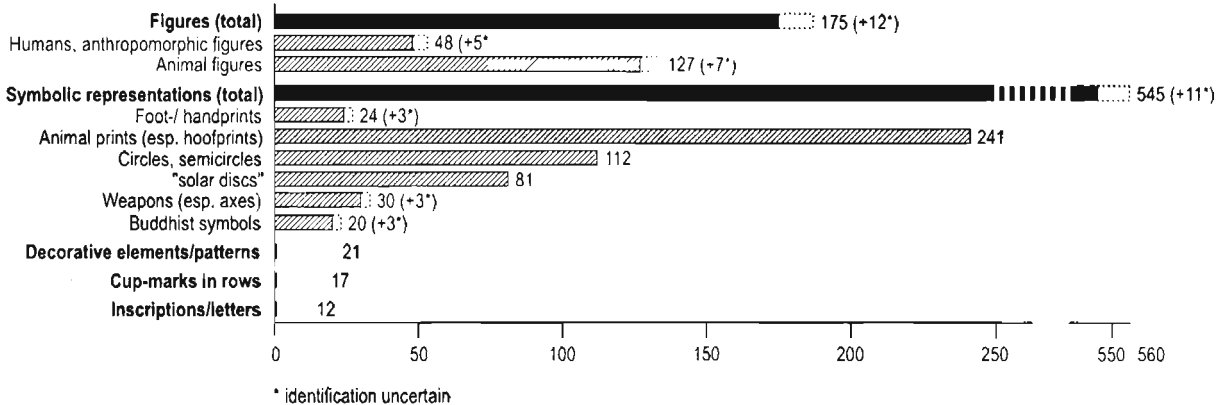


Fig. 3: Approximate number of petroglyphs of Kak Nyingba according to motif categories and groups

Fig. 3



Fig. 4.1

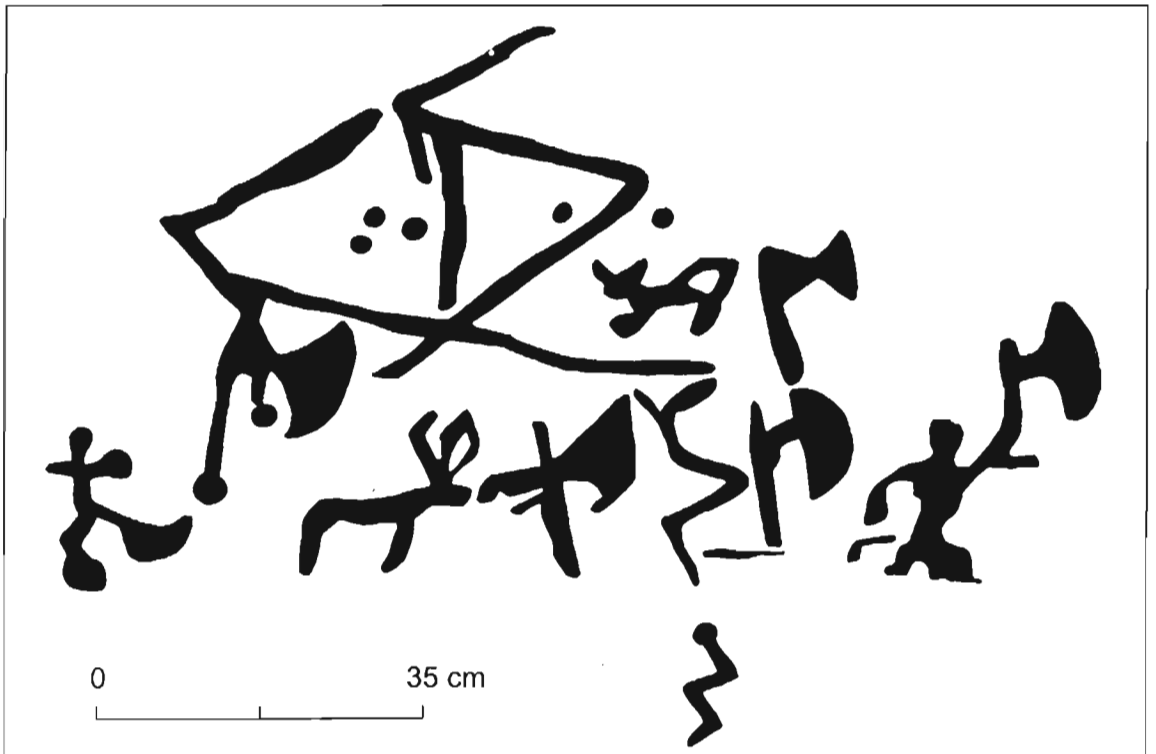




Fig. 5.1

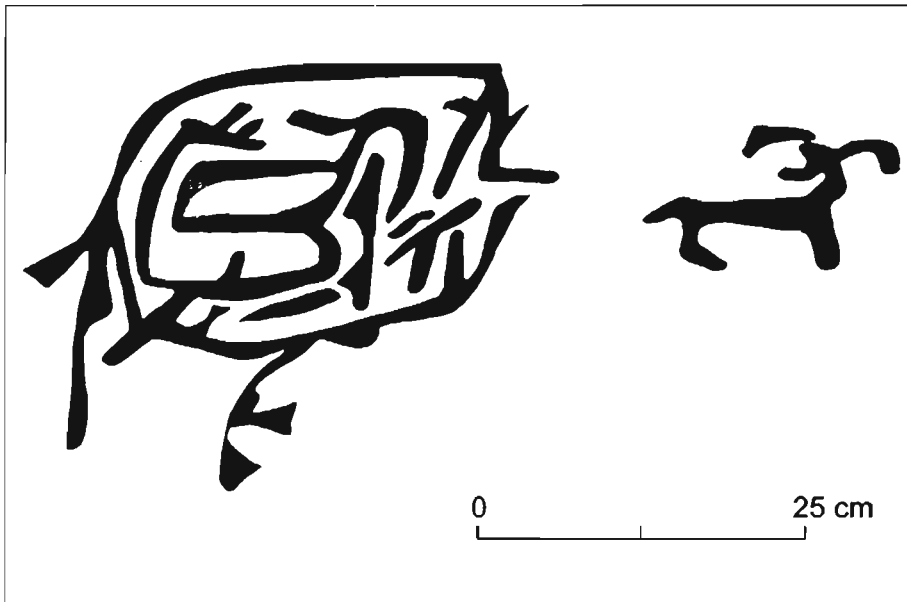


Fig. 5.2

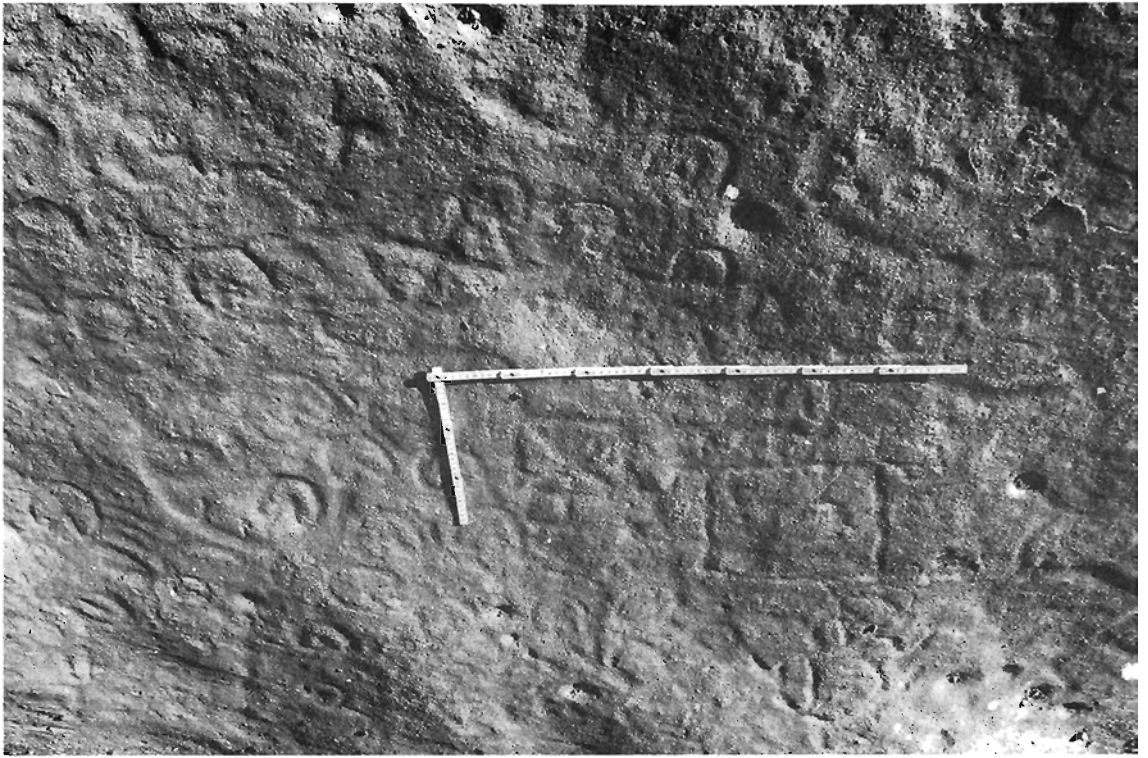


Fig.



Fig. 6.2



Fig. 7.1

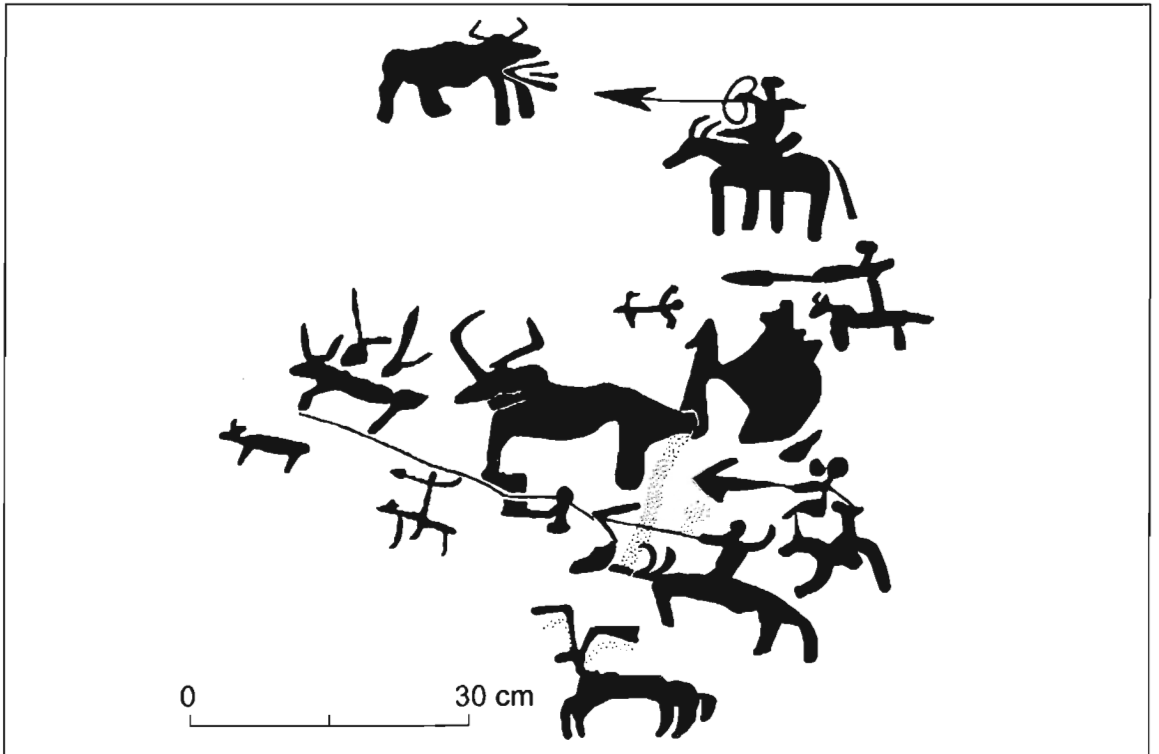


Fig. 7.2