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New approaches to Saharan rock art of the Bovidian Period

The Sahara is one of the world's great parietal art areas, and may be much more complex than the rock art of Southern Africa, Australia and Europe. The ethnographic commentary available for the southern hemisphere paintings has produced some marvellous insights into aboriginal cosmology and symbolism (Lewis-Williams 1981a; 1981b; 1983; Vinnicombe 1976). What is most striking is that the art has such deep meaning for the artists and the communities they served.

The complexity of Saharan rock art is compounded by the probability that it was not a single rock art genre by one society. The range of styles and content suggests very strongly that there were a number of societies who lived at different times and in different parts of the Sahara and who produced their own art forms. Thus trying to interpret what was being said in Saharan rock art is made difficult both by a lack of chronology of the paintings, and identity of the gross cultural groups who were the artists. We are fortunate in having the Cologne Museum catalogue for their Saharan exhibit (Kuper 1978), hereafter referred to as 'K', where many of the fine reproductions of Columbel from the Mission Lhote to the Tassili n'Ajjer are included. Also with this important collection are photographs by Laioux, many of which had already been published (Lajoux 1963; 1977) and which will hereafter be referred to as 'La' (Mori 1965). Other published sources include Lhote's (1959) and his update (Lhote 1976).

We are faced with a restricted number of published reproductions that can be used, and while we must recognize that these constitute only a minute fraction of the paintings which exist in the Sahara, we can accept nonetheless that these are ones which are the most spectacular. The sample chosen here is that of the naturalistic rock paintings of Lhote's "bovidien" period from the Central Sahara (Tassili n'Ajjer, Acacus). A survey of the published rock art of this 'bovidian period' shows that there are at least two major painting styles, each with different content, although the viewer is left in no doubt that we are seeing pastoral societies, for the common subject is domestic cattle.

Style 1 can be called the "white-face" style. Here the people are drawn with pale skins, long hair, beards on the men and long dresses on the women: K: 234, 418 - 21, 424 - 31 (Fig. 1). Face paint can be seen on some of the individuals, and some of the men are either tatooed or have body paint. These paintings are also the scenes with the circular huts shown from the outside. It is also in this style

Fig. 1. Tassili n'Ajjer. The "white face" style.

that small stock play a prominent role. All the animals are somewhat stylized, and coat markings, while varied, are generalized (K: 420 - 1, 424 - 5). Some of the cattle have a curious wavy-line coat colour. This pattern is repeated in a scene in which some important ceremony or event is recorded (K: 426 - 7 – Fig. 2) the symbolism of which is obscure, but may represent fire-workshippers' (Monès 1988: 229). The ceramics being used appear to be double pots, *i.e.* large ones with saw-tooth and impressed decoration whose rim is enclosed by a smaller, undecorated pot upside down and acting as a lid. Leather bags are shown (K: 418 - 20) with looped decoration.

Even the humans of this "white-face" style can be subdivided, possibly, into three separate but similar social groups on the basis of hair style and clothing. Also the artistic form shows the artists to be aesthetically concerned with a degree of symmetry which can be seen in the repeated motif of cattle horns (K: 417) and animals lined up together (K: 418 - 19, 425 - 5). Even wild animals

in one panel show an intermingling of giraffe necks which underline the graceful movement of these animals (K: 418 - 9). Another aspect of this genre is the tendency to allow the animals to focus an human activities (K: 424 - 5, 430 - 1), thus ordering the spatial layout of the scenes.

The recognizable activities in this style are: a lion hunt (K: 430 - 1), movement of camps (K: 418 - 9, 428) and re-erection of huts (K: 418 - 9, 431), possible

Fig. 2. Uan Derbauen, Tassili n'Ajjer. The "white face" style.

tribute to leaders or holy men (K: 424 - 5, 430) and ritual ceremonies (K: 430), as well as a broad range of pastoral activities, *e.g.* tying up the animals (K: 428 - 29) and watering of stock (K: 418).

The second style can be called "black-face" style which is somewhat different in form and content from the previous one. Here the cattle are still the dominant element, but the humans all have dark skin (K: 422 - 3, 427; La: 116 - 132). A range of hair style can be identified (K: 232), and white body paint is occasionally found. The scenes with huts, as noted above, are of plan form and a distinct type is repeated in a number of cases: an oval shape with a door which closes on the inside (La: 120 - 1, 123, 130 - 1; K: 299) and occasionally pots and other domestic accoutrements can be seen (K: 229; La: 123). In this style the cattle are often portrayed very realistically, with great attention paid to coat colours (La: 107, 119 - 21; K: 228). The detail of human faces, always in profile, show strong black African facial characteristics (La: 116, 126, 147 - 8, 170), but even here there are variations, not only in facial structure (*e.g.* La: 119) but in hair design or head covering (K: 232, La: 119, 125 - 7, 140, 142, 144 - 5, 149 - 50, etc.). In this "black-face" style we see even greater variability in the cultural details, suggesting many more social groups than in the "white-face" style.

Social activities which can be recognized are: riding scenes (La: 160 - 1), domestic camp scenes (La: 120 - 1, 130 - 1; K: 427), scenes of general pastoral activity (La: 119; K: 229, 422 - 3; Hampaté Ba and Dieterlen 1966: Plate VIII: D). Other activities are more obscure and are probably of a ritualistic nature, to be discussed below (*e.g.* K: 422-3; Hampaté Ba and Dieterlen 1961: Plates A and B; Lhote 1966: Plates I and IV).

The geographical overlap between these two major styles of 'bovidian' art indicate a broad usage of the Central Sahara by various herding groups during the period between 6,500 and 4,000 B.P. (Smith 1980). The early dating of this art in the Acacus Mountains is confirmed by Mori (1965) who managed to refit a piece of broken panel found in the deposit below the painting at Uan Muhuggiag. He obtained terminus *post quem* date of 4,730 ± 310 B.P.

Who were the pastoralists of the Central Sahara?

The paintings of the 'bovidian' period indicate two quite distinct cultural groups, that might be equated with different physical types. We can make some general comments about the human populations of the Sahara *ca.* 8,500 - 4,000 B.P., the period with two successive lacustrine events in the Central Sahara which ameliorated conditions and permitted human occupation. It would seem that an older, robust African population existed at the earlier part of the period in the lake regions of Hassi-el-Abiod, Tamaya Mellet and Lake Chad. The stone tool industry from the area north of Timbuctou is called "Néolithique ancien" (Raimbault 1983: 339) and dated to 8,450 ± 60 and 6,970 ± 130 B.P. (Dutour and Petit-Maire 1983: 278 - 9). From the typology of the microlithic stone tools I would associate this occupation with the pre-pastoral phases of Adrar Bous (Smith 1976) and Tagalagal (Roset 1982), all sites producing pottery. In the later pastoral period we have two quite distinct populations: (1) 'negroid' typified by the Asselar skeleton and (2) a 'proto-mediterranean' seen in the Ine-Sakane, Tagnout-Chaggeret, Karkarichinkat, *etc.* skeletons. Since the Tilemsi Valley had both 'negroid' and 'proto-mediterranean' populations we might suggest different social groups occupied the Central Sahara with their livestock during the period 6,000 - 4,500 B.P., and that the Tilemsi was the southern waterway from the Sahara, important for all the pastoral people of the Sahara moving southward when desiccation increased *ca.* 4,000 B.P. (Smith 1979).

Saharan rock painting and ethnographic commentary

Hodder has suggested that material culture can be 'read' in the assumption that "there are some very simple rules underlying all languages... underlying the ways in which *Homo sapiens* at all times and in all places gives meaning to

things" (Hodder 1986: 123). This has been more explicitly stated for rock art by Davis (1984). Thus if the rules are understood the visual image can be a narrative which can be read by those who recognize the symbols. So compressed is the image that it can be a metaphor for a wide range of layered meanings, and these symbols can, in turn, play a part in the structuring of society. Interpretation of cultural material can only be achieved by identifying the meaning content through abstraction of the symbolic functions (Hodder 1986: 121).

Hampaté Ba and Dieterlen (1966: 143) suggest there are two primary objectives for initiation: (1) as an archive for myths and their conservation for initiation, (2) for ritual ends in themselves, as part of ceremonies or sacrifices. A third objective we can postulate is that the paintings are a metaphor for a religious or mystical experience, and while they also achieve objective (1), and may be involved in (2), are directly related to the painter's experience. At its most basic level of abstraction material culture can be simply the list of objects excavated from an archaeological site. In the case of the prehistoric Saharan pastoralists this included stone tools, ceramics and some items of pastoral adornment, such as beads and bracelets. At a higher level of abstraction we can refer to the seminal work of Lewis-Williams (1981a) where reading of the ethnographic record has offered new insights into the meaning of southern African rock art.

Metaphor and the trance hypothesis

Among the San of the Kalahari there is a belief in the successful intervention by people against disease and social ills. Individuals are capable of "pulling sickness" by being trained to control *Kia*, or trance, which generates *num*, or spiritual energy (Katz 1982). While in trance the healer enters a state of altered consciousness where he or she is capable of "out-of-body travel", sometimes changing into an animal form. Lewis-Williams (1981b) has been able to show that many of the images in Southern African rock art are metaphors for the trance state, and the symbols represent depiction of healers in the state of altered consciousness. The images are not all naturalistic and some become transformed into fantastic creatures.

Work on changes in consciousness has focussed on the universal experience of hallucinations. Some of these may be drug-induced, others attained by ritual dancing and music, meditation or sensory deprivation for periods of time. Regardless of how this is achieved, during the early stage of hallucination there appears to be a common response in the human mind where the individual sees a limited number of forms. These "form constants", or "entoptics" (Siegel and Jarvik 1975), comprise moving geometric shapes, curves, lattices, tunnels, spirals, *etc.* of intense colours. With prolonged hallucination resulting from increase drug dosage or intensified dancing, the person will enter a second stage of imagery of a much more complex nature. This can include naturalistic or recognizable images, such as faces, people, landscapes, animals, *etc.* (Siegel and Jarvik 1975; Tauber and Green 1959; Ludwig 1968).

Turning to the Saharan paintings to see if any of the universal forms that humans experience have been depicted, we find tectiforms, similar to those from Zimbabwe (Summers 1959), have been recorded from the Central Sahara (Lhote 1959: Fig. 46; 1966: Plate IV: 11, 12; Striedter 1984: Fig. 130 - 3). In the trance experience figures become disembodied and without legs, as well as become repeated in long lines. This was described by one informant during a controlled experiment on hallucinogenics who saw "a progression of squirrels with sacks over their shoulders... marching across a snowfield" (Tauber and Green 1959: 101).

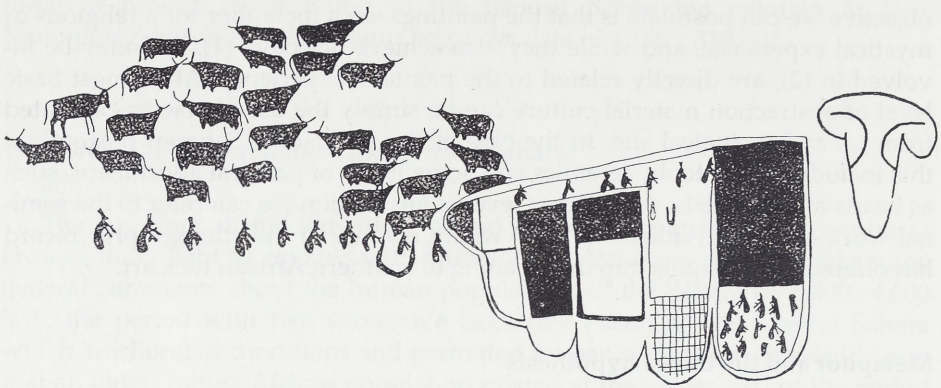

Fig. 3. Ti-n-Tazarift, Tassili n'Ajjer. An example of tectiforms.

Other form constants are the zigzag lines described by Maggs and Sealy (1983) from South Africa. Published examples from the Sahara can be found in Lajoux (1977: 152) from Tahilahi (Fig. 4); although these cannot be directly associated with any particular period, other paintings in the area are of the "white face" style (K: 266, 312). The elongated human figures common in trance imagery in Southern Africa are also to be found in the Sahara (Lhote 1959: Plate 25). Although these are just mentioned here to strengthen the idea of the possibility of trance possession playing a role in the creation of Saharan rock art, we find in the ethnographic record that spirit possession exists among the nomadic Fulani of the Sahel, induced by a string instrument and drums. Among devotees possession becomes hysterical frenzy and the spirit is said to 'escape' by sneeezing (St. Croix 1945: 56 - 57).

Islamicisation of the Fulani varies considerably from area to area and among the pastoral Fulani still exists a core of spirit beliefs which pre-date the spread of Islam. Spirits, for instance, live in baobab and tamarind trees (St. Croix 1945: 54). The baobab has a divinatory character and the tamarind, a symbol of life and resurrection, is used in medical practise (Hampaté Ba and Dieterlen 1961: 34). This close attachment to the world of spirits can be seen in the words of Fulani poet who says: "mes vaches... leur parc est maison de Djinns" (Sow 1966: 311). Traditional initiation of Fulani men into the world of spirit is a long and detailed

Fig. 4. Tahilahi, Tassili n'Ajjer. Scene with painted zigzag lines.

process of 33 successive levels. The initiate has to prepare himself for this by fulfilling certain obligations between the ages of 14 to 21, so patience and perseverance are qualities which are closely monitored. An important part of this training is learning the therapeutic properties of plants of benefit for humans and the herds. Divination plays a significant role in the lives of the Fulani, and even acceptance of a novice for initiation is dependent upon how a selected herd displaces itself around the *kraal* once it is returned by the postulant. The different levels of initiation raise the consciousness of the initiate and his ability to intervene in the spirit world. "Le postulant doit pénétrer successivement dans douze 'clairières' qui symbolisent, sur un premier plan, l'année et ses douze mois, sur un autre plan, son déplacement sur un terrain ou il rencontre, en passant d'une clairière à l'autre, les personnalités mythiques qui doivent l'enseigner" (Hampaté Ba and Dieterlen 1961: 29). The initiate also comes into contact with wild animals which are symbols of the forces they must deal with, as well as the main vegetation types important to a pastoralist. The initiate thus passes from the disorganized world of men (the camp of his family), to the ordered world of God – the world of the herdsman (Hampaté Ba and Dieterlen 1961: 30).

Ritual behavior similar to that of the modern Fulani has been suggested from paintings recorded in the Tassili. One specific painting of cattle being passed through a brush 'gate' (Lhote 1966: Plate 1: 2 – Fig. 5) is interpreted by Hampaté Ba and Dieterlen (1961: 1966) as a part of the *lotori* ceremony of the Fulani. Many of the motifs are reminiscent of San imagery, particularly the lines

Fig. 5. Uan Derbaouen, Tassili n'Ajjer. Ritual scene showing cattle being passed through a brush "gate".

Fig. 6. Tekadedoumatin, Tassili n'Ajjer. Camp of pastoralists.

connecting various participants in the ceremony, which in South African paintings are suggested by Lewis-Williams (1981b: 12) as trance symbols depicting "trancers... joined to animal metaphors by the red lines" transcending the world of "ordinary people" to be able to heal. The *lotori* ceremony is a purification rite, and from the symbolism depicted, and in the past may have involved trance situations or possession states resulting in the imagery seen on Saharan rocks. Many other paintings evoke trance imagery, *e.g.* the two-headed snakes (Lhote 1966: 20), cattle (Lhote 1966: Plate 1: 5; 3: 9; Hampaté Ba and Dieterlen 1961: Plate 9: F) and giraffes (Hampaté Ba and Dieterlen 1961: Plate 4: 10).

In spite of the tenuous connection which may exist between the depictions on the rocks of the Sahara and the pastoralists of West Africa today, there are still a number of other parallels which, while not at the 'deep level' of magico-religious beliefs, indicate a possible relationship. One of these is the camp layout which Lhote (1976: Plate 41) reproduced from Station Tissourar (Fig. 6). In this splendid painting one sees the camp separated by the calf-rope, with the huts on one side and the herds on the other. The calf-rope is an important symbol in separating male and female elements in Fulani society, as laid out in the sketches of Stenning (1959: 106) and Dupire (1962: 158). "It is a rope, and therefore is made by men; it is connected with cattle and is therefore provided by the cattle-owning group of which the husband is a member. Of all the many kinds of rope used by Pastoral Fulani it is the only one made of cowhide" (Stenning 1959: 123).

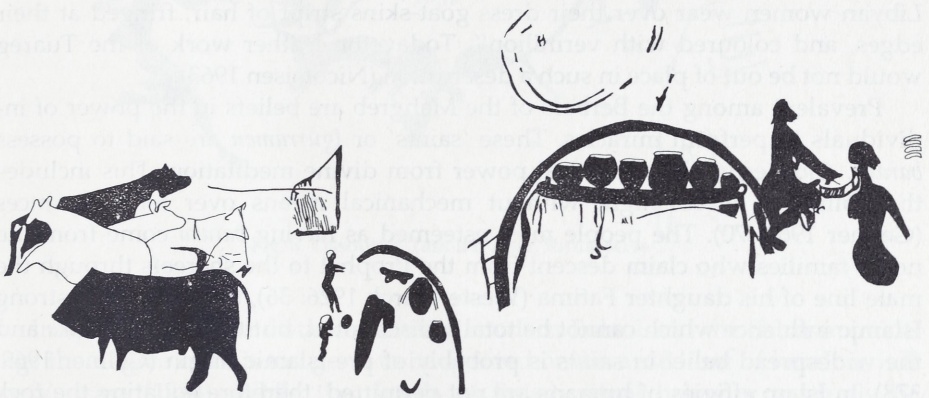

Fig. 7. Tissoukai, Tassili n'Ajjer. Camp scene with females and cattle.

Another symbol, this time of female activities and the marriage, is that of the *kaakul* or the calabashes a woman is given at marriage, which are displayed on a raised bench when setting up camp, or in the back of the shelter once the camp has been set up (Dupire 1962: 158). A similar display is to be seen in the painting from Tissoukai in the Tassili (Kuper 1978: 426 - 7 – Fig. 7), where the cattle once again are on one side and the female figurines on the other.

Pastoralists in North Africa

If the 'black-face' people can be equated with black African herdsmen, like the Fulani, who were the 'white-face' people in the rock paintings? The skeletal data above suggest these may have been 'proto-mediterraneans' and one must look to the history and ethnography of North Africa to find analogues. Some of these paintings indicate that not only was the skin fair, but also, apparently, the hair (*e.g.* Kuper 1978: 440 - 2). In his study of the people of the Rif, Coon (1931: 22) refers to stories of the Mashausha as a tribe of westerners and 'blonds' (see also Bates 1914: 39 - 40). References to "long-haired-people" come from Herodotus (Book IV). These "Libyan" people varied culturally, although all had domestic stock; some groups migrated seasonally from the coastal strip to the hinterland with their animals. They could be distinguished from each other, among other things, by the way they cut or fixed their hair. Libyan men wore a cloak of leather, often highly decorated. Tatooing of the skin was also practised by men (Bates 1914: frontispiece and Plate III), as seen in the Saharan paintings (K: 426, 430). There is a suggestion that this was only to be found among the noble castes or people with power. Not all the humans in the Saharan paintings have body markings and those which do seem to be playing a central role in the activities depicted (*e.g.* K: 426, 430). The dress of the Libyan women would be similar to that seen in the Tassili paintings from Iheren (K: 418 - 9, 424 - 5, 429, 430 - 1), Uan Derbaouen (K: 427) and Uan Amil in the Acacus (K: 234 - 5) described by Herodotus (IV: 189) as being of leather with leather thongs: "The Libyan women wear over their dress goat-skins stript of hair, fringed at their edges, and coloured with vermilion". Today the leather work of the Tuareg would not be out of place in such a description (Nicolaisen 1963).

Prevalent among the Berbers of the Mahgreb are beliefs in the power of individuals to perform miracles. These 'saints' or *Igurramen* are said to possess *baraka*, and derive their mystical power from divine meditation. This includes the ability of direct flight without mechanical means over long distances (Gellner 1969: 70). The people most esteemed as having *baraka* come from the noble families who claim descent from the Prophet to the shereefs through the male line of his daughter Fatima (Westermarck 1926: 36), thus there is a strong Islamic influence which cannot be totally discounted, but the idea of *baraka* and the widespread belief in saints is probably of pre-Islamic origin (Gellner 1969: 378). In Islam effigies of humans are not permitted, therefore equating the rock art of the Sahara with pre-Islamic Berber beliefs can have no modern analogues. The idea of shrines of holy men is almost certainly an Islamic manifestation. Jinn (djinn) or evil spirits can possess a person; this results in disease or convulsions (Gellner 1969: 271, 276). The difference between this spirit possession and that found in black Africa is that the person does not act out the part of the Jinn. In other words, among the Berbers there is assumed to be a casual relationship between sickness and evil spirits, but not the spirit "taking over" the individual. In this case we would not expect to find the universal form constants of hallucinogenatory nature among the Berbers.

The Saharan rock art of the 'white-face' style is certainly much more narrative that that of the 'black-face' style, even when describing important mystical experience (K: 426 - 7). Other panels, while not explicit, suggest preparation for sacrifice, such as at naming ceremonies (K: 430), or tribute to important people (K: 424, 430).

Summary and conclusions

The complexity of even this one genre of paintings of the 'bovidian' period in the Saharan rock art must be obvious by now. This naturalistic art has been divided into two separate styles on the basis of perceived racial distinctions in the humans depicted.

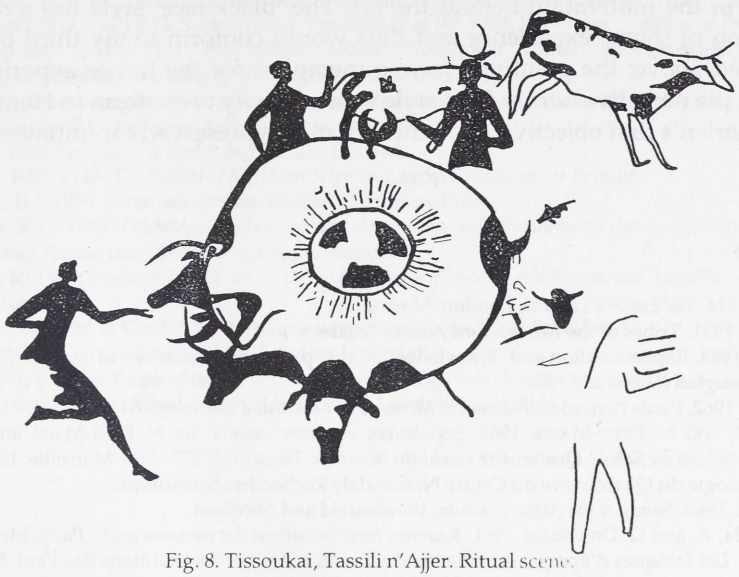

Fig. 8. Tissoukai, Tassili n'Ajjer. Ritual scene.

In spite of the time distance between modern Fulani and the Saharan paintings the degree of fit is too good to be ignored or discarded out of hand, as it is by Vansina (1984). While the details of Fulani ritual behavior can only be glimpsed in outline in the paintings, it is suggested here that spirit possession may have been an important underlying force behind the depictions, and the motive for the paintings, similar to that of the San in Southern Africa, was a metaphor for the trance experience, and a powerful expression of the trancer's contact with 'non-ordinary' reality. Among the Fulani only trained initiates can participate at the deepest level in ritual behavior. These are the people most likely to have been the artists capable of seeing the cattle as metaphorical intermediaries between man and spirit world, which is shown in the rather special painting in Lhote (1966: Plate IV: 10) and Hampaté Ba and Dieterlen (1961: Plate

B: 2 – Fig. 8). This depiction has been interpreted by Hampaté Ba and Dieterlen (1966: 148 - 9) as part of the initiation of Fulani herders who aspire to the grade of *Silatigi*. Their informant Sile Sadio had passed through 12 of the 'clairières' mentioned previously. The last 6 of these were the "demeures de 7 soleils".

The rich details in the 'white-face' style which was equated with the Berber people of North Africa, suggests a slightly different emphasis to the material depicted, but this still represents a metaphorical expression of ritual values and experience. In this case the social structure of Berber society, although economically similar to the Fulani, is quite different, being a highly structured hierarchical society with families of religious specialists who take care of spiritual needs. The role of women in this society is enhanced so that those with *baraka* or special mystical power can be both sexes.

To conclude, I would suggest the major difference underlying the two art styles is in the motivation behind the art. The 'black-face' style has a stronger suggestion of trance experience and thus would conform to my third objective mentioned above; the paintings were a metaphor for the trance experience. In contrast, the narrative 'white-face' style is more likely to conform to Hampaté Ba and Dieterlen's first objective: an archive of myths preserved for initiates.

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