

year. A similar second monument from Sev mount contains the number of days in two solar months, while the third one which is a magnificent prehistoric monument of calculation and a calendar, is merely a combined calculation table with the help of which an estimate of the lunar and solar year can be made (Table 65, Fig. 3). The pictures are divided into four groups. One of them contains a symbol of the constellation "Ram" that corresponds to the month of March; it initiates the farming year in Armenia, the New Year.

The second group of images of mythological content depicts "The Twins", the last constellation in the apical cycle of the sun. The other two groups are made up of pictures of a definite number of heavenly bodies; they are calendrical in nature. The "celestial bodies" in the main group of pictures representing the solar system are arranged in numbers 7, 13 and 14. If we multiply 13 by 7 we shall get the average number of days in a year's quarter (91), i. e. the period from Ram to the Twins. If we multiply 13 by 14 we shall derive half the number of days in a year (182), and if we double this number we shall get nearly the total of 13 lunar months or a solar year (364). There are two tables in this large group of

images of the solar system. One of them is the one metre long solar disc, made up of four circles and 94 stocky-rays. It represents a quarter of the sun's revolution in a year that takes place between, say, the vernal equinox (March 21) and the summer solstice (June 22). If we divide that number 94 by three we shall get 31,3 days, which is completely in harmony with the number of days in the spring and the summer months. According to this table the number 188 for half a year is almost unmissable and exceeds the modern calendar by two days. But the number of the days of the year is considerably larger. That is why another table is engraved under the above large disc. It enables us to regulate the difference between the lunar and solar years.

The thesis advanced in respect to the prehistoric calendar is still in need of additional corroboration; however, all the material at hand supports the fact that our remote ancestors were in practice quite well aware of some fundamental laws of motion of the heavenly bodies and knew their reflection on the changes of purely earthly natural phenomena. The recognition and use of those regularities was a sinequa-non of progress, especially in advancing farming, animal husbandry and hunting.

CHAPTER SIX

RELIGIOUS—IDEOLOGICAL CONCEPTS, RELICS OF PREHISTORIC MYTHS

A substantial number of rock carvings from the Gegham mountain range display, in various relations, gods of the neolithic and Early Iron Age. Broadly speaking, though they are anthropomorphic, their large dimensions with exaggerated iconographic details and functions differ sharply from the pictures of ordinary men or hunters. Another differentiating feature is their appearance in association with celestial symbols, which indicate the extraordinary heavenly origin of those supernatural creatures. As we have seen above, the rock carvings dealt overwhelmingly with animal and hunting scenes. Accordingly the figures of gods of prey and hunt predominate (Tables 67—73). It is not an easy task to distinguish those two

gods by their morphological characteristics. They can be recognized only by their different functions. These gods appear very clearly during the 5th and 4th millennia, and they survive up to the beginning of the 1st millennium B.C., undergoing certain morphological changes. They dominate in the compositions. The gods of prey appear in "peaceful" conditions, in free herds of grazing, drinking or copulating animals. They are often seen driving away with spears or magical movements the wild beasts attacking the herds. More conspicuous are the gods of hunt that are portrayed invariably with hunters. The gods of hunt themselves are seldom involved in hunting. Their posture is usually static, the arms raised upward at the

elbows, or stretched out, again with the arms directed upward. Even in cases when those gods appear with bows and arrows, the weapon is not levelled at the animals while at the same time the hunters are successful. It is noteworthy that in some large compositions the gods in static squatting, or lying positions, are surrounded by numerous different animals and an equally large number of hunters, each one chasing or catching with bare hands or with ropes an animal. Here an ordinary unarmed hunter fights alone against a powerful animal as a bull, which implies that he is patronized by a god of hunt.

In common hunting scenes the bulls are charged only in groups. The hunting ritual dances and rites, exquisitely depicted in several magnificent rock carvings, are unmistakably associated with hunting scenes and the cult of gods of prey and hunt (Table 73). Of no lesser interest are the farming rituals (Tables 74—76).

The gods considered above are of purely animal husbandry and hunting nature. However, if the rock carvings had portrayed only these gods in the midst of a large number of hunting scenes, one could infer that the art of rock carving was a reflection of the simplest primitive culture of hunting-stock breeding tribes. Fortunately, the images of other gods are likewise represented in the monuments of the Gegham mountain range; those gods are pre-eminently or completely connected with the farming cult or ideology. This group includes first of all quite generalized and stylized female figures, which in the Gegham and Vartenis mountains are depicted in the form of big and small rectangles presenting the body and the head, while those of Mount Aragats have other attributes: waists, naves, sex indicators, etc. (Tables 66 and 71). These features suggest that the figures are goddesses. The female figures are characteristic of Armenia; they are met in pre-historic shrines in the form of clay statuettes erected on the altars in the 3rd millennium in Pulus and in the 2nd and 1st millennia in Metsamor. In the shrines burnt the holy fire, sacrifices were offered, wine and holy water were poured and ceremonies associated with the cult of farming were conducted. Exactly the same female figures (this time made of stone) were recovered in the temple of the Sumerian town of Eridu which, from recorded

evidence, are ascribed to the great mother goddess Nammu. She used to live before the creation in the heavenly ocean where she gave birth to the gods of the Earth, the sky, the lightning, the sun and others; and the organic world took its origin. The present work analyses the Sumerian and Hurrian myths related to the Mother goddess in the light of comparative data of Armenian mythology and epos. Such analysis shows that the same ancient oriental concepts were current in pre-historic Urartean and early Armenian spheres. These concepts were undoubtedly also related to the female figures of rock carvings.

The thunder-lightning and sun gods are conceived as descendants of the mother deity in oriental and Urartean-Armenian materials. They figure also in our rock carvings. They are discriminated with difficulty like the god Vahagn or the semi-god heroes of the epos. They display nearly the same external features: radial extremities, earth symbols, fire-flame elements (Table 77—80). The gods of thunderstorm are often accompanied by large images of goats, which are their companion animals and in Armenian folklore, in epos and general ethnography they are connected with the phenomenon of lightning, rain and the cult of farming. The pictures of lightning-sun gods are portrayed singly or in groups—"families" (Table 78—79). They are usually trigods. Accordingly, the relation of the sun deities to the earth and husbandry is more direct and influential. They simply descend to the ground or the plant and the tree and with their supernatural phallos fecundate the soil (Table 81, 2). We have observed this phenomenon in the epic narratives and in general ethnography in such genuine forms that our rock carvings seem like pictorial illustration of these pompous ceremonial rites. The sun god had yet another important function. He ever struggled with the evil snake, vishap-dragon, was captured by it and liberated bringing light, warmth, rain, prosperity and abundance to the world. In the battle the sun god often figures as a bird while the vishap-dragon personifying the black cloud—as a huge snake. We come across numerous images depicting this antagonism in the Gegham mountain range, in Syunik and Aragats which outline particular episodes of the cosmic legend which completely crystallized in the 3rd

millennium B. C. (Figs. 21—26). Originating in the aeneolithic-early Bronze Age, this legend persists throughout the entire pre-historic epoch, survives in Urartu and finally enters the Armenian tradition of the early and mediaeval periods.

The research highlights all the ancient oriental Urartean and Armenian written records pertaining to the legend that have survived and shows for the first time that the pre-historic myths and legends, lost long ago, can be fully reconstructed relying on the rock carvings.

CHAPTER SEVEN

THE ROCK CARVED SIGNS OF PREHISTORIC ARMENIA. (TABLE XI)

As we saw above, the rock carvings are sources of positive information and in some sense can be treated as written monuments. One of the most important features of the rock carvings, however, is that they lay at the origin of all subsequent writing and scripture, which are based on the pictures of objects, luminaries, animals, birds, men, etc. A study of the rock carvings of the Gegham range and those of other areas proves that pictographic, hieroglyphic and ideographic characters originate in early Bronze Age Armenia in the 3rd millennium B. C. and in the later stages of development enter into the Urartean culture. Here pictographs presumably change into syllabic script which involves many ideograms borrowed from neighbouring countries. But hieroglyphic writing here does not achieve perfection. This form of writing is inherited by the Armenian priesthood—"a heathen script"; cult-religious, astronomical-astrological writing—it is then preserved in late mediaeval manuscripts. Those lists of manuscripts and a companion of Urartean hieroglyphs and pre-historic characters make clear that the symbols duplicate each other with the same semantic content. A special volume is dedicated to the investigation of rock carved characters. In the present work we print only the joint table XI of the pre-historic signs and their Urartean-Armenian parallels. Selecting two ideograms from this table, we translate their semantics by means of a complex study of the material. First of these is the character "Ram", which results from the gradual dissolution of the elements in the figure of the ram and is used as a symbol of the constellation Ram. This is a circle open from below with an axis descending from above. This celestial ram figures as a complete representation in a composition of religious, cultic nature in the sequence—bird, sun, moon, bull, snake and ram

(Table XII, Fig. 1). The iconographic details of the carved animals together with the images of the sun-the moon and the bird, indicate that those animals are truly celestial, i. e. extraordinary creatures of worship.

The morphology and logical succession of figures of these conspicuous rock carvings of the 3rd millennium B. C. is of mythological nature and resembles that part of the Babylonian creation myth in which Marduk overpowering the sea monster Tiamat, fills the sky with luminaries and constellations. Next he appoints the Twins-Taurus and the Ram, guards of the celestial gate: exactly in the sequence of our rock carving. At the same time he defined the successive revolutions of the sun, the moon, created vegetation, birds and animals. The sign of the Ram on a number of rock carvings of the Gegham mountain range (Table XII, Figs. 12,13) seems to continue or illustrate the Babylonian myth, amidst birds, celestial bodies, animals, trees; particularly in such pictures in which the sun gods descending to earth fertilize the soil, while the animals are cross-breeding. All these demonstrate that the Ram was associated with the cult of spring fertility. The sign of the Ram is central to and appears in the same compositional and semantic contexts on decorations of the 3rd millennium B. C. earthenware. But, more interestingly, in some parts of the Shengavit settlement (3rd millennium B. C.) supports styled as powerful rams which were made for performing rites connected with the cult of the Ram were recovered. The latter cult was long lived in the area. In the recent finds from the shrines in the pre-Urartean level of Dvin huge clay boards decorated with stylized ram heads and other celestial symbols were set leaning