

The Progress of Hittite Studies—II.¹

By Prof. J. GARSTANG.

THE new documents bearing on home affairs, though numerous, are not easy of interpretation. It is known from a cursory examination of more than 2000 fragments that the subject matter includes kings' speeches, chronicles and decrees, wills, deeds of gifts and patents of nobility, treaties, legal agreements, inventories (both civil and military), registers of landed property, codes of law as well as detailed military regulations. A large proportion deals with religious matters, including descriptions of festivals and ritual; prayers and legends; questions for the oracles, soothsayers' texts, incantations, and so forth. There is evidently material for reconstructing the social institutions and organisation of Asia Minor under the Hattic kings that will in due time become intelligible. Already, notwithstanding the difficulties of language, the nature of the kingship and government, and the military organisation of the confederated states may be discerned in outline with a measure of certainty.

The Hattic kingship was essentially military, and it was established on a feudal basis. All lands and offices were received from the king on terms of service, whether military or civil. All officers and functionaries were sworn in to personal loyalty, from the viceroy to the royal shoemaker. In the wider aspect of the Great-King as head of the vassal or allied Hittite states, the same principle prevailed. Each king or chieftain owed military service to the central throne, whether by way of levies to the standing army or terms of special service. When princes were enthroned or re-enthroned after revolt, the terms of service were defined by treaty. This applied to conquered territories of non-Hittite or not purely Hittite peoples. Thus the kingdom of Arzawa on the southern coast, which appears frequently opposed to Hattic rule, was dismembered by Muršil III. after one such revolution, and each state was separately bound by agreement to fealty and military obligations. In the time of imperial domination over the states of northern Syria (the fourteenth and thirteenth centuries B.C.) the duties of each vassal in regard to the Great-King's wars were defined and their relations towards one another were dictated to them. The powerful Amorite rulers of the Lebanon area were treated with a certain measure of respect, but even they were bound to join their forces to the Hittite armies in the greater enterprises, and among these the possibility of a conflict with Egypt was foreseen.

While the king's position as head of the army was absolute, and his dominion over the vast agglomeration of Hittite states and conquered territories was maintained by a ready sword, yet in the conduct and organisation of military affairs there was an accepted procedure and code of regulations. The position, rights, and duties of the army, its units and its leaders, were carefully and

strictly defined. Army orders covered all such questions as the requisitioning of private property, reservation of quarters, lodging of prisoners, guard duty, the construction of camps—even to the detail of the dimensions of ramparts and ditches and the length of palisades when encamped in enemy country. It is also noteworthy that proper personal credit is given to the generals and officers. A sense of social equity pervades the records, in which the historical sense was equally impartial, no difference being seen in the narrative of events whether to the glory of the king or of his generals, or even when revealing the weakness of either.

This sense of equity finds its official expression in the constitution of a general assembly to advise the king on questions of law and constitutional procedure. The princes of allied and vassal states had their places at this meeting and many of them held high office or high titles at the court itself. The system permeated the administrative organisation of the land: each principality had its local assembly and each township its council of elders. The constitutional history of the later empire suggests, in fact, the presence of the same tendencies, and much the same processes at work, as later in early England.

By the side of the military absolutism, modified by gradual infiltration of democratic principles, there is always visible a theocratic element of power around the throne. The king was hereditary High Priest of all the gods. His duties and functions at the chief rites were formulated and are preserved. Before and after his campaigns the young warrior Muršil III. never failed to invoke the blessing of the sun-goddess of Arinna, the maker and dethroner of kings, mistress of oaths, and goddess of war—and to render to her all the glory of his successes. This duty was not self-imposed. A deep religious sense permeates numerous documents and was evidently a national heritage, and an offence against the gods might involve national disasters. Some of the latest documents reveal this element most strongly, and in several parts of Asia Minor, as is well known, the theocratic system survived the military kingship. Until earlier documents give their evidence it is not possible to say whether this tendency was a new and growing one, or whether, as would seem more likely, the military rule of the Hattic kings was originally imposed upon a theocratic society, of which, as in religious worship, it assimilated the strongest elements. It is significant that while the duties of the priests were laid down in detail, they were restrained from holding property of any kind except by royal gift and favour.

In regard to the organisation of the land, with its numerous principalities and fiefs, there are many important documents of which the full interpretation is not yet possible because the geographical names are unfamiliar. The outline of the picture is clear but the detail is confused.

¹ Continued from p. 820.

The interpretation of documents relating to foreign affairs has been greatly facilitated, not only by the Semitic language of the texts but also by the fact that names of places in the Semitic world are in some cases permanent or at least transparent. An immediate example of survival is the name of Aleppo, namely, Ḥalab, or Ḥalpa, which is essentially the same to-day, and was so in Egyptian. In other cases tentative identification based on similarity of sound or general indications of position can be checked by comparison with parallel documents from Egyptian or other sources. Thus the name Yaruwaddaš (written also Yaruwandaš) scarcely disguises the name of Arvad, Egyptian Aruad, the island city near modern Tripolis on the coast of Syria. The equation is confirmed by reference to the Amarna letters, in which the same persons and situations are mentioned as in Hittite documents. Working on these lines, certain points may be fixed (*e.g.* Kinza = Kodshe = Kadesh), so that narratives of campaigns may be followed on the map, and in so doing other identifications can be tentatively formulated with due regard to the physical and political geography of the areas involved.

The documents concerning Asia Minor, however, contain hundreds of place names which have not survived the various changes of race and language, and except for the capital itself (the name of which has also disappeared), there is scarcely a fixed starting-point upon which students are agreed. The few maps published by German scholars accordingly show profound and disappointing differences. Nevertheless, possible clues may be found in the grouping of the names, having regard to the physical features of the country, and the possibility of some surviving sound-elements in classical or Turkish names. Thus a town Wi.ya.na.wa.an.da, grouped with a river Aštarpa, which is a boundary of a district Kuwalia, with which in turn there is associated a boundary River Šiyanti and a tract called Mira, suggest respectively the Lycian Oeneanda (the digamma disappearing), the River Isparta (an assimilation by metathesis to a local and relatively recent place name), the district of Kabalia (the digamma this time becoming β , a tendency noted by Ramsay, *H.G.* p. 22), together with the Eshenide River or Eshen (classical Xanthos) and the district of Milyas (Lycian Mira). This grouping in Lycia accords precisely with the indications of physical and classical geography; but Dr. Forrer, whose line of attack is different, places the same group in the east of Cilicia, where also was a classical name Oeneanda. In the latter district, moreover, some English scholars would locate an entirely different state called Kizzuwadna.

Another group of Hittite names, from a list of hiera, which is several times repeated with variations, associates:

Dunna . . . Ḥubišna . . . Tuwanuwa . . . Laanda and Maššuhanda.

With these may be compared the Cappadocian group from Ptolemy (Cataonia, etc.):

Tynna . . . Kabassos (? Kybistra) . . . Tyana . . . Leandis and Mazaka.

The identity of Tyana is generally admitted; and

the suggested identity of Maššuhanda with Mazaka recalls the tradition that its founder was Mošoḥ (*cf.* Meshekh), which may account for the composition of the Hittite name. In this way, group by group, a working theory of the identity of the Hittite places, and so of the disposition and military organisation of the Hittite states, can be constructed. In it a number of names appear to survive plausibly; *e.g.* Alše as the Assyrian Alze (Arzen); Damašhunaš as Damascene; Ḥumiššenaš as Komisene; Kuššar, of which the variants are Kuššara and Kuššaraš, and the latest form apparently Gaz-zi-u-ra-aš, as Gaziura (Strabo xii. iii. 15); Kuwanna as Kuwania (Konia); Teburzia as Trapezus (Trebizond); Urušša as Eriza; Zimurria as Zimara, etc. The result shows the main political divisions which are based upon physical features to have been permanent. Thus the central Ḥatti state is represented generally by Cappadocia; the allies of Arzawa and Kizzuwadna reappear as Cilicia and Pontus respectively, Gasga as Lesser Armenia; while the rival state of Ḥarri was the forerunner of Armenia, east of the Euphrates.²

In general it may be argued that the power which resisted for centuries the old monarchies of Egypt and Babylonia and occasionally challenged them in Syria was presumably master of all Asia Minor. In particular the control by Ḥatti of the passes of anti-Taurus towards the Euphrates and Syria may be assumed; and the general resemblance of the Hittite monuments, borne out by comparison of details, may be adduced in support of the view that nearly all the monuments characterised as Hittite by special hieroglyphs or symbolism throughout south-east Cappadocia and anti-Taurus (including the palace sculptures of Marash and Malatia) are Hattic in inception. The result indicates a strategic organisation of the south-east frontier which is accordant with its physical features and the course of history.

Turning to the rest of Asia Minor, the names in the north-west are more baffling than elsewhere, possibly owing to the Phrygian and other historical immigrations. But the line of monuments along the main highway from the capital to the coast near Ephesus, is evidence of an extension of Hattic dominion to the Ægean, at a time more or less contemporary with the religious sculptures of the capital.

The menace and gradual penetration of the Achæans on the western and southern coasts provides further evidence that the later Hattic kings regarded these tracts as within their dominion. The attempts of the newcomers to settle on the Carian coast in the thirteenth century have been indicated by Dr. Forrer. In amplification of his thesis, we may point to a group of names mentioned in connexion with the expedition by sea with 100 ships of Attarišiyaš (who is identified tentatively with Atreus by Forrer, and with Perseus by Sayce). Among these names (Wallarimma, Ialanti, Bitāšša, Maraša, and Millawanda) there appears the unusual form Khuršunašša, which seems to equate perfectly

² For a fuller discussion and map, *cf.* "Index of Hittite Names" (Sp. Publ. of the British School of Archaeology in Jerusalem).

with Khersonesos, and so to give a clue to the identity of the whole. Accordingly the following possible identifications may be suggested, following the same order: Hillarima, Alinda, Pedasa, Mylasa, and Miletos respectively. The last is based on the analogy and variant forms of Yaruwaddaš. If these equations stand test it would appear that the coast at any rate preserved its Hittite names remarkably, unless indeed the texts are quoting names which, as in Syria, were new or foreign to the Hittite scribes.

However that may be, two further points respecting the Achæans' movements may be mentioned. Repulsed from Caria, they gained a footing in Cyprus about 1226 B.C. Almost immediately they are found in company with Trshu and Luku, as well as Shekelesh and Sherdenu, raiding the Egyptian coast in the time of Merenptah. Their base in Cyprus explains the association about which there has been much uncertainty, suggesting a local geographical group in which the Akwesh (Achæans from Cyprus) are combined in this adventure with peoples from Tarshish and from Lycia, as well as others possibly from Sagalassos and from Sardis.

Lastly, it is becoming apparent that these texts connected with the Achæan penetration are

gradually unfolding the background for the Trojan War. For in the time of Mutalliš (c. 1288) various new peoples with Trojan names, Derden, Luka, Pedes, Kelekesh, and others, are found newly leagued with the Hittite king against the Pharaoh. About the same time appears the name of Alakšanduš as an ally of the Hittite and settled by treaty at Uiluša (? Elausa). Greek legend also tells how Paris on his return from Egypt and Syria (according to one version of the story of Helen) was hospitably entertained by the 'Assyrian' king 'Motulos.' Whether this prove relevant or not, there is definite indication in these records that while the Achæans were menacing by sea the western and southern coasts of Asia Minor, the Dardanians were already being accepted as allies by the monarch and peoples of the mainland. The clash of arms around Troy (which by name Taroisia already appears in the texts) was but one crisis in the struggle which heralded the downfall of the Hattic empire. For long critical centuries European civilisation and society had been taking shape, protected by the Hittite organisation in Taurus and Anti-Taurus against the older ambitious monarchies of the Euphrates and the Nile. With the rise of the Iron Age, when Europe was able to fend for itself, the old Hittite barrier gave way.

Obituary.

PROF. EDOUARD BRÜCKNER.

THE death of Prof. Edouard Brückner at the age of sixty-four years, which took place at Vienna on May 21, removes a figure well known to both meteorologists and geologists. Brückner was born at Jena on July 29, 1862, his father being Alexander Brückner, the historian, which may account for the historical bias of his early meteorological work. He received the degree of Ph.D. at Munich in 1885, and from 1886 until 1888 he acted as assistant editor of the *Meteorologische Zeitschrift*. It was during this period that he discovered the weather cycle of 35 years which is universally known as the Brückner Cycle. During the next two or three years he collected a great deal of statistical evidence in support of this cycle, which he published in 1890 under the title: "Klimaschwankungen seit 1700," now one of the classics of meteorology.

Brückner's life-work was not mainly meteorological, however, for in 1891 he became professor of geography at Bern, and in 1906 professor of geography at Vienna, and although he continued to publish occasional meteorological papers so late as 1918, the main interest of the second half of his life was in the Quaternary history of the Alps, a subject in which he collaborated with Albrecht Penck. The fruit of this collaboration was a series of three large volumes, containing 1199 pages, published between 1901 and 1909—"Die Alpen im Eiszeitalter." To appreciate the service which this work did for glaciology, one must consider the position of the science in 1900. The battle between the supporters of one and of several glacial periods still raged hotly, the nomenclature was confused, and the wildest ideas of chronology prevailed. The

thoroughness and minute detail of "Die Alpen im Eiszeitalter" decided the battle in favour of the polyglacialists, laid the foundations of a sound chronology, and provided a standard of reference and nomenclature which, by the general acceptance it compelled, has rendered incalculable assistance to glaciology in all parts of the world.

DR. VIKTOR ROTHMUND, professor of physical chemistry in the German University at Prague, died on May 10, at the age of fifty-seven years. A native of Munich, Rothmund was appointed to a lectureship at the University of Munich in 1898, which he held until 1902, when he was appointed to the chair at Prague. His published papers deal with a variety of subjects, including solubility, ozone, hydrogen peroxide, perchlorates, permutit, and the passivity of metals.

WE regret to announce the following deaths:

Dr. Carl H. Eigenmann, professor of zoology and dean of the graduate school of the University of Indiana, known for work on the variation, distribution, and embryology of fishes, on April 24, aged sixty-four years.

Prof. W. Lochhead, emeritus professor of biology in Macdonald College, McGill University, known for work on insect and fungus pests of orchards, on Mar. 26, aged sixty-two years.

Mr. W. H. Shrubsole, who worked on modern and fossil diatoms and related forms and was awarded the Lyell Fund of the Geological Society in 1898, on May 19, aged eighty-nine years.

Prof. William Carleton Williams, professor of chemistry at the University of Sheffield from 1883 until 1904, on May 25.