XXII.

THE BABYLONIAN UNIVERSE NEWLY INTERPRETED.

By WILLIAM F. WARREN.

FEW studies in ancient cosmology can more entertain or instruct the investigator of to-day than a careful comparison of the seven diagrams published as correct pictures of the Babylonian universe in the works named below.¹ No two of the seven agree. Moreover, the first represents the Zodiac as at a vast distance above the sphere of the fixed stars, a proceeding which at the start disarranges all ordinary astronomic ideas. Equally unpicturable in my imagination is the seventh of the series, the world sketched by Radau. Again and again have I tried to construct it in thought, but every time have failed. Even Jensen in his great work gives us for "the place of the Convocation of the Gods" (*Du-azag*), only a pitch-dark cavern in the thin crust of his sea-filled hemispherical earth, and has no place for Hades but another cavern located in the same thin crust and oddly

¹ The reader is earnestly requested to turn to these diagrams and to note their striking divergencies.

(1) Isaac Myer, *Qabalah*, Phil., 1888, p. 448.

(2) Hommel, *Babylonischer Ursprung der Aegyptischen Cultur*, 1892, p. 8.

(3) Hommel, *Aufsätze und Abhandlungen*, 1901, Th. iii, 347.

(4) Jensen, *Kosmologie der Babylonier*, 1890, appendix.

(5) Maspero, *Dawn of Civilization*, 1892, p. 543.

(6) Whitehouse, art. "Cosmogony," *Hastings' Dict. of the Bible*.

(7) Hugo Radau, *The Creation-Story of Genesis*, 1902, p. 56.

Professor Hommel's second is a marked improvement on his first. In connection with it he prints a generous reference to the present writer.

enough far *above* the cave of the gods.¹ Surely there is a call for new attempts to think the thoughts of these ancient Semites after them.

For the reconstruction of the Babylonian universe we have no less than twelve most valuable data derived from the study of ancient Babylonian texts. These will now be enumerated, and that the enumeration may command the greater confidence I shall connect with each of them one or more references to equivalent statements by experts of high authority in this field. Here follow the data :—

(1) In the Babylonian conception of the universe the earth occupied the central place. Winckler expressly calls the earth “the accepted centre” of the planetary system of this people.²

(2) The northern half of the earth was viewed as the upper, the southern as the under. The former was associated with light and life, the latter with darkness and death. Winckler remarks :—“The South and the Underworld are identical.”³

(3) The upper or northern half of the earth was regarded as consisting of seven stages (*tupukati*), ranged one above another in the form of a staged pyramid. Speaking of the staged temple of Nippur, Sayce observes :—“It was a model of the earth, which those who built it believed to be similarly shaped, and to have the form of a mountain whose peak penetrated the clouds.”⁴

¹ Jensen's diagram, anglicised in terminology and much enlarged, may be seen in Worcester's *Genesis in the Light of Modern Knowledge*, opposite p. 109.

² *Himmels und Weltenbild der Babylonier als Grundlage der Weltanschauung und Mythologie aller Völker*. Von Dr. Hugo Winckler, Leipzig, 1901, p. 34.

³ “Identisch ist also Süden und Unterwelt auch hier wie bei unserer kosmischen Ausrichtung der Erdachse” (p. 24).

⁴ *Gifford Lectures*, 1903, p. 374. See also Boscawen, in the *Oriental and Biblical Journal*, Chicago, 1884, p. 118. For interesting parallels see Letherby, *Architecture, Mysticism, and Myth*, London, 1892. The existence in Egypt of a type of pyramid with sloping stages, and the

(4) In like manner the antarctic or under half of the earth was supposed to consist of seven stages corresponding to those of the upper half. As Jensen expresses it:—"The seven *tupukati* of the underworld are a facsimile of the seven *tupukati* of the overworld."¹

(5) Like the quadrilateral temples modelled after it, the earth of the Babylonians was four - cornered. In this particular it agreed with the conception ascribed to the ancient Egyptians, Hebrews, Chinese, and to the Indo-Aryans of the Rig-veda period.²

(6) In Babylonian thought, Winckler says, "there were seven heavens and seven hells."³ This belief is one of untraceable antiquity. Writing on this subject, Hommel remarks—"The idea of the seven heavens seems to go back to the beginnings of Semitic culture."⁴

(7) Above the seventh heaven was another, the "highest heaven," that of the fixed stars; called by the Babylonians

clear traces in India of a conception of the earth as spheroidal in figure despite a series of rising zones or retreating mountain-terraces upon its surface, suggest that the stages of the Babylonian earth should not be mentally pictured as necessarily implying their possession of the sharply angular outline presented by a staged temple, or by the figure in our diagram. It is quite possible that in Babylonian thought the quadrangularity of the earth was largely a conscious and deliberate emphasizing of the cardinal points of the heavens and earth, and that its pyramidal form in architecture was as conscious and deliberate a deviation from supposed reality as are with us the parallel meridians and flat zones of a Mercator's Chart of the world. Moreover, as the celestial spheres are of a substance so crystalline as to be absolutely invisible to men, so the rising stages of the earth are to be viewed as less and less grossly material, until at length all appearance of materiality vanishes, leaving the highest as invisible (save in the case of a divinely sent trance, Genesis xxviii, 12), as are the heavens in which they are lost.

¹ *Die Kosmologie der Babylonier*, Strassburg, 1890, p. 175.

² Sayce, *loc. cit.*; also, *Encyclopædia Biblica*, ii, col. 1148; C. Puini, in *Rivista Geograf. Ital.*, 1895, p. 12; H. W. Wallis, *The Cosmology of the Rig-veda*, London, 1887, p. 112; F. L. Pullé, *Cartografia dell' India*, 1901, p. 18.

³ "Was die obere Welt hat, hat auch die untere. Es giebt demnach sieben Himmel und sieben Höllen oder Höllenstufen" (*op. cit.*, p. 34).

⁴ "Die Astronomie der alten Chaldäer," in *Ausland*, 1891, p. 381.

the "heaven of Anu," after the name of the oldest and highest of their gods.¹

(8) This eighth heaven was divided by the Zodiac into two corresponding portions, an upper, or Arctic, and an under, or Antarctic. At the pole of the former Anu had his palace and throne.²

(9) In Babylonian thought the north pole of the heavens was the true zenith of the cosmic system, and the axis of the system upright; consequently, as among the ancient Egyptians and Indo-Aryans, the diurnal movements of the sun and moon were regarded as occurring in a horizontal plane. Speaking of the Babylonians Maspero says—"The general resemblance of their theory of the universe to the Egyptian theory leads me to believe that they, no less than the Egyptians, for a long time believed that the sun and moon revolved round the earth in a horizontal plane."³

(10) Proceeding outward from the central earth, the order of the seven known planets was as follows: Moon, Sun, Mercury, Venus, Mars, Jupiter, Saturn.⁴ That their respective distances from the earth were not uniform was already known. Such at least seems to be the opinion of Winckler, and certainly is that of Hommel.⁵

(11) In order to pass from the upper half of the earth to its under half, that is, from the abode of living men to the abode of the dead, it was necessary to cross a body of water, which on every side separated the two abodes. This

¹ Winckler, p. 34; also Jeremias, *Das Alte Testament im Lichte des alten Orients*, Leipzig, 1904, p. 10.

² Winckler, p. 36; Jensen, p. 24; A. Jeremias, p. 27, "Der Sitz Anu's ist der nördlich vom Tierkreis gelegene Himmel mit dem Nordpol des Himmels als Mittelpunkt. Dort ist sein Thron."

³ *Dawn of Civilization*, p. 544; cf. Robert Spence Hardy, *Legends and Theories of the Buddhists*, London, 1866, pp. 85-89; L. A. Waddell, *The Buddhism of Tibet*, 1895, p. 78; W. F. Warren, *The Cradle of the Human Race*, Boston, 1885, pp. 191 ff.

⁴ Winckler, p. 35. Hommel calls it "die uralte feste Anordnung" (*Aufsätze und Abhandlungen*, iii, 375-383).

⁵ See Winckler, p. 34. "In immer grösserem Abstand von der Erde" is the language of Hommel in his *Insel der Seligen*, p. 38.

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The upright central line is the polar axis of the heavens and earth. The two seven-staged pyramids represent the earth, the upper being the abode of living men, the under one the abode of the dead. The separating waters are the four seas. The seven inner homocentric globes are respectively the domains and special abodes of Sin, Shamash, Nabu, Ishtar, Nergal, Marduk, and Ninib, each being a 'world-ruler' in his own planetary sphere. The outermost of the spheres, that of Anu and Ea, is the heaven of the fixed stars. The axis from centre to zenith is 'the Way of Anu'; the axis from centre to nadir 'the Way of Ea.'

explains the language of Dr. A. Jeremias, where he says—
 “When one sails out upon the ocean, one finally comes down into the Underworld.”¹

(12) According to Diodorus Siculus (ii, 31), the Babylonians considered that twelve designated stars south of the Zodiac stood in the same relation to the dead as do the twelve corresponding stars north of the Zodiac to men still in the land of the living. This representation clearly makes the living and the dead the residents respectively of antipodal surfaces of one and the same heaven-inclosed earth. In like manner, in the Creation Tablets (V, line 8), Anu and Ea are antipodally located gods, the former having his palace and throne at the north pole of the heavens, the latter his palace and throne at the south pole.²

Such then, according to latest scholarship, are the fundamental features of the ancient Babylonian world-concept. The task of combining them is simple. One can but wonder that there should have been such mistakes and such delay in effecting the due adjustment. In the diagram accompanying this paper each requirement of the twelve enumerated propositions is fully met. The upright central line represents the polar axis of the heavens and earth in perpendicular position. The two central seven-staged pyramids represent respectively the upper and lower halves of E-KUR, the earth. The seven dotted half-circles above the earth represent the “seven heavens” of the planets; the corresponding hemispheres below the earth the “seven hells.” The outermost sphere, the upper half cut away, as were the seven heavens, to show the interior of the system, is of course the all-including starry

¹ Op. cit., p. 10; also, his “Hölle und Paradies bei den Babylonier” (*Der alte Orient*, Jahrg. i, Heft 3, S. 14 ff.); also F. Jeremias, in Chantepie de la Saussaye's *Lehrbuch der Religionsgeschichte*, 2nd ed., 1905, Bd. i, S. 275; Tiele, *Histoire Comparée des Anciennes Religions*, p. 177.

² Winckler, *Altorientalische Forschungen*, Leipzig, 1902, p. 201.

sphere girdled by the many-mansioned Zodiac,¹ and made scintillant by the appointed astral watchers who keep their patient vigils one half above the living, one half above the antipodal dead.

How wonderful a world-view was this! How perfect the symmetries of the system. Its duplex centre lived on in Pythagorean thought as "Earth and Counter-earth."² Doubtless it influenced Plato when in the *Timæus* he said, "To Earth, then, let us assign the form of a cube." It still lives on in the four-cornered earth of the New Testament, and in that of the Mohammedan teaching. Its heavens lived on in the "homocentric" "crystalline spheres" of the Greek astronomers, and through the influence of Ptolemy's *Almagest*, shaped the thinking of all savants, philosophers, and poets till the days of Copernicus. Dante's heavens are those of Ptolemy, and Ptolemy's are those of the ancient worshippers of Anu and Sin. Their music is still audible, their form still visible, in Milton's *Ode to the Nativity*.

But while the presence of this highly mathematical world-concept is thus traceable through millenniums, its origin was among a people antedating the Babylonians. A truer name, therefore, for the system would be, the Pre-Babylonian. The East-Semites received it from their predecessors in the possession of the Euphratean valley, the Akkado-Sumerians. At least such is the opinion and the teaching of our highest experts.³ Did the system originate among these non-Semitic predecessors in the valley? This has been assumed, but no man can pretend to know.

¹ The 'lunar mansions' of astrology are all within the Zodiac.

² The often misunderstood *χθών* and *ἀντιχθών*; O. F. Gruppe, *Die kosmische Systeme der Griechen*, Berlin, 1851, p. 82. Correctly understood by Cicero, *Tusc. Disp.*, i, 28, 68.

³ H. Zimmern, *Die Keilinschriften und das Alte Testament*, Aufl. iii, 1902, S. 349.