

Bruno's History of Astrology

Bruno Huber

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Three articles by Bruno Huber bring to life the history and origins of astrology.

Originally published in 'Astrolog', the German-language magazine of API Switzerland.

Translated by Heather Ross.

Translation funded through a generous bequest from Agnes Shellens.

Astrology – History and Development

Bruno Huber

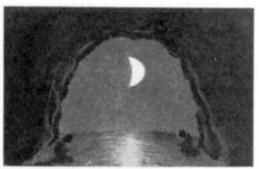
First published in 'Astrolog' Issue 60 in February 1991, and subsequently included in Bruno's Astro-Glossarium. Translated by Heather Ross

The age of astrology cannot be established or even dated, for its original roots lay back in the grey area of pre-cultural history. It is also not possible to exactly establish when mankind's interest in the sky and its heavenly bodies could start to be called astrology or astronomy.

The development of astrology has essentially passed through four phases, which largely reflect mankind's spiritual history. However, these phases occurred at different times in different cultures. The following short historical outline is mainly oriented to the axis of astrological development, which occurred from Sumer / Bablyon via Greece, Rome and Arabia to Europe (these years are rounded up to centuries). People also observed the precession dates, which show when a new constellation entered the vernal equinox (V Eq).

Pre-Cultural Phase

In this early development, the nomads and cave dwellers (inter- and post- ice age periods up to 8000 BC), astrology as such did not really exist. The human spiritual state was animistic and therefore irrationally focussed on the intrinsic experience of the direct environment. Cave paintings from this period in Europe and North America, which often show representations of the crescent moon, nevertheless indicate that out of all the firmament, at least the moon must have made an impression on the human consciousness. Terms like "moon face", "the man in the moon" and others that we know today, show the animistic way of experiencing: "the moon is a being like myself".



-7900 VEq in Cancer

1. Magic-Mantic Phase

Sun-Moon Cult

From about 8000 BC, man became settled and sedentary cultures prevailed (lake dwellings, stockaded villages) – man began to manage nature with the domestication of animals and the cultivation of various plants (animal husbandry and agriculture). A precondition for this is the development of the rational intellect, which can observe and compare natural processes and states and draw conclusions from them. Man therefore also became objectively aware of the Moon and the Sun as beyond his control and superior to the powers of nature.



6500 V Eq in Gemini

This period brings the discovery of the North-South migration of the ascendant on the eastern horizon by observing the rising of the Sun and the Moon compared to the seasonal changes in nature, as well as the recognition of the Vernal Equinox (0° Aries) as the start of the yearly cycle. (Burial sites with optical line-of-sight, stone alignments, first attempts at lunar calendars).

"Seers", who understand the language of the heavenly bodies, appear and become the spiritual leaders of clans and tribes. Solar and lunar cults emerge as ways for communities to communicate with the heavenly powers.

4300 VEq in Taurus

From about 4000 BC, the first city states on the Indus, the Nile, in Mesopotamia and China – megalith cultures, also in Europe (Celts) and North America (Native Americans).

Erection of gigantic stone measuring systems (megalithic observatories), which were



also actually astral cult sites. Priests, druids or shamans form a spiritual leadership – the worldly agents of the god-kings (or tribal chiefs).

In this period, the observation of eclipses led to the discovery of node lines, which gave the priests a position of absolute power because they were able to predict eclipses. This period also saw the first demarcation and naming of quarters (four large, seasonal constellations which each cover a quarter of the sky).

In the Celtic and Germanic area, the development of astrology ends abruptly after Stonehenge (1900 BC). What does continue to develop, particularly in the Celtic areas, is the "Geomancy" of the Druids, who, using the existing megalithic observatories (astral force centres) as a starting point, create other magic "powerful places" (then often without reference to the stars), and a network of force lines based on triangles (ley lines) – which can still be sensed by perceptive people today.

2. Mythological Phase

Star Religions (OMEN astrology)

From about 2500 BC, calendar astronomy: (Sumerians, Mesopotamians) discovery of the Solstices and the Sun's orbit (Ecliptic) and the distinguishing of at least eight zodiacal constellations (they are known as "heavenly houses") – catalogue of the brightest fixed stars – discovery of Venus.

In this period, man first gradually begins to think of the sky as a distinct space belonging to the gods (planets, fixed stars, constellations). This is the decisive intellectual step towards real astrology, which for example that of the Indian and Celtic cultures, and also those of Egypt and China, have never consistently fulfilled.

1900 V Eq in Aries

First documented use of horary and query astrology (elections) with the ascendant as the

point of reference (ora skopeo – Horoskopoi = hour watcher). The positions near the eastern horizon of the Sun, Moon, Venus and the fixed stars were interpreted as the gods' answers to questions about the public good (omen interpretation). Their findings are only used for collective events, i.e. in the context of what we would now call Mundane astrology.

In Egypt, the sidereal year is established at 365 days (Sothis year) following observation of the heliacal rising of Sirius; the flooding of the Nile, which is essential for the irrigation of their fields, appears regularly with the annual "emerging of Sirius from the rays of the Sun" around the 20th of July. Strangely enough, this discovery leads not to the development of a solar calendar – they continued to use the decanate calculation and the lunar calendar. The development of astrology stops here in Egypt, until the Greeks refine and import theirs again (zodiac of Dendera) in the second century BC.



From 1700 BC, the Babylonians, who inherit the legacy of the Sumerians, discover the remaining planets one by one and carefully note their positions and movements. This leads to simple, as yet not completely accurate attempts to calculate planetary positions based on the addition of integers. Eleven zodiac constellations are now known: modern-day Libra is still seen as "Scorpio's pincers".



Around 1000 BC, and even earlier, people begin to carry out careful astronomical scanning of the sky in China. A supernova and various comets are discovered, and the planet Uranus is observed and recorded several times, without being recognised as such. Only the moon is used for the purposes of omen astrology. Astrology proper has not yet been developed. Instead, a complicated counting mechanism derived from the I Ching System, is used, until it is combined with Western astrology imported by the Jesuits in around 1400 AD.

Around 700 BC, Babylonian priests compile an enormous astrological "rule compilation" (Mul.Apin – about 30,000 cuneiform clay tablets), which go right back to the Sumerians (about 2200 BC). Around 500 BC, they calculate the first accurate Venus Ephemerides for a 20-year period. Astrology also first began to be used for individuals – but still only for state leaders and high priests for selection purposes.



Fragment of first Venus Ephemeris

The calculation of the Ephemerides is also connected to the discovery of the Precession (the shifting of the constellations with respect to the annual return of the Sun). It leads to the conception of a Solar Zodiac.

Around 600 BC, independent development of Indian astrology begins. It initially inherits the legacy of the Babylonians, but then continues independently from the West (Mesopotamia, Greece) after a separate, third phase of its development, and finally remains (from about 800 AD) divided between constellation astrology and zodiac astrology. At this time, it also becomes a religiously integrated fixture of daily life in the Indian cultural circle, but this vulgarisation gives it strongly prognostic-deterministic characteristics (formal, accurate prognoses, up to exact predictions of the date of death!).

3. Individual Phase

Personal Destiny (Horoscope astrology)

Around 400 BC, the Solar zodiac (seasonal zodiac, 360° divisions, twelve zodiac signs), has established itself at the expense of the constellation zodiac. The Babylonians prepare the first horoscopes for individuals about 450 BC: individual astrology (birth chart astrology) appears – and that is the beginning of character reading.

300 – 100 BC, the Greeks, successors of the Babylonians (Chaldeans), know that the earth is round and calculate the precessions (Hipparch). Appearance of the first horoscopes with houses included. The originator is not known. It is an equal house system: all houses are counted back from the ascendant in divisions of 30°. Only in the second century AD do Ptolemy's calculations in the Almagest show that the horizon and meridians are not always perpendicular to each other, which in the following century leads to the first unequal house system (Porphyry, about 270 AD).

The whole structure of astrology and all the basic elements of the horoscope are now in place. This body of mathematical and astronomical knowledge and interpretation rules (see the works of Manilius and particularly Ptolemy) can be termed classical astrology – its substance will not change again. What occurs until the start of the 19th century is actually a lot in terms of quantity, but in essence only a process of specification, refining and specialising that can best be summarised as traditional astrology.

Until 300 BC, personal astrology becomes increasingly popular, first in the broad circle of Greece (first astrology school "Berossos" on the island of Kos) and then in the Roman



Empire; where it both very quickly influences Caesar's politics (who used the services of the "Chaldeans") and is also used by the people for the first time (vulgar astrology). Here it also first experiences persecution in late Roman times. It then petered out in Europe (Middle Ages).

Until the 12th Century, astrology survives only in the courts of the Sultans and Caliphs of the Arab world. Arabian astrologers are strongly astronomically and mathematically oriented, which enables them to develop more accurate calculating methods for the planets and they are the first capable of calculating realistic house systems (unequal systems of Alcabitius, Ibn Ezra, et al). However, they are also originators of all kinds of artistic interpretation elements, like for example the sensitive points (luck point, death point, etc.), which have nothing to do with the reality of how the sky works. Their way of thinking is strongly influenced by Islamic beliefs, extremely deterministic, even fatalistic (Kismet), hence their emphasis on prognosis methods, at which they undoubtedly became very skilled.

From the 12th Century, astrology slowly becomes popular in Europe as a result of the Moorish invasions of Spain. In the centuries that follow, it experiences several pushes and pronounced waves of success, but unfortunately mainly involving the prognosis form favoured by the Arabs (Nostradamus) and after the discovery of the printing press, mainly the vulgar form of fortune-telling for consumption by the general public (astrological calendar and pamphlets)

In the 17th century (time of Morinus and Lilly), this development finally leads to a new wave of persecution and prosecution of astrology and astrologers, similar to those in the final phase of the Roman Empire. Then it was the combined strength of the Caesars (politics) and the recently formed Christendom (faith), which finally killed off astrology. This time it is scholastic theology (Church) and the still young modern science (Enlightenment), which admittedly have very different agendas but share one common objective: the eradication of superstition and fortunetelling. It is increasingly forbidden to print vulgar astrological publications; in many countries no commercial astrological activity is permitted at all. The seriousness and philosophical depth of famous minds like Kepler, Newton, Goethe, et al also do nothing to help this. Astrology goes underground.

4 Humanistic Phase

Anthropology and Psychology

It first emerges again in England at the end of the 19th Century, like the phoenix from the ashes. Those who promote it are rather different from its earlier advocates, as they are initially esotericists. For example, Alan Leo and other exponents are members of the Theosophical Society, which with its liberal, individualistic and evolutionary esotericism has advocated since 1875 the humanitarian point of view that man is responsible for his own destiny. Then, influenced by the strong development of depth psychology in the time between the two World Wars, the first exponents psychological astrology come to the fore (Schmitz, Fankhauser), who very quickly detach themselves from the deterministic approach of event astrology (symbolic astrology).

In parallel to this, a second line of new astrological thinking develops, which can be called a scientific approach. It tries to find scientific proof, partly using the methods of natural science, i.e. astronomical, physical and biological experiments and arguments (Maag, Tomaschek, Landscheidt), which are intended to prove that the heavenly bodies influence earthly circumstances, processes and beings (influence theory). The first signs of this seem to exist in modern science, but we cannot yet talk about a closed chain of evidence.

A second group (exponents like Krafft and Choisnard) turn to statistics, and try to demonstrate behavioural and psychological profiles in astrological interpretation. The French couple, the Gauquelin's, do outstanding work in this field after the Second World War. Unfortunately, discussion of their significant findings is mainly limited to a few academics. There is surely much to be done here...

However, the trend towards a humanistic and psychologically-based astrology gathers pace after the Second World War (Ring, Rudhyar), and undoubtedly has the potential to become the universally-recognised astrology for the "New Age".

The History of Astrology – Timetable

Bruno Huber

First published in 'Astrolog' Issue 79 in April 1994, and subsequently included in Bruno's Astro-Glossarium. Translated by Heather Ross

Babylon	(-: B.C.)	Greece	Egypt etc.
Immigration of the Sumerians (not Semitic) from the East or North into the Semitic homeland. Settlement in UR and URUK in the estuary of the Tigris and Euphrates. Subjugation of the resident Semitic peoples such as Akkadians, Assyrians, Babylonians, Chaldeans, etc.	-4-3000		
Establishing of the Equinoxes and Solstices in the "pillars of the heavens": Aldebaran, Antares, Regulus and Amphore	-3200		1 st dynasty of the Egyptian Kingdom
Discovery of Cuneiform and Rollsiegel (exact date unknown)	- up to -2800		Egypt: sarcophagus covers with lunar calendars (decanates)
Sumarian civilisation, origin of the Epic of Gilgamesh, 3 paths of Ea, Anu, Enlil	-2600		Egypt: 1st pyramids England: Stonehenge, 1st phase of the construction of the cult site and the Solar and lunar observatory
Original version of the mul.Apin, first known star catalogue with 66 constellations and individual stars; Knowledge of the ecliptic and the precession of the equinoxes from Aldebaran to the Pleiades; The twelfth zodiac constellation (ZI:BA:AN:NA/Zibanitum/Libra) is formed from Scorpio's pincers (Chelae)	-2350		Egypt: discovery of the Sothis period of 365 days (heliacal rising of Sirius) — despite adhering to the lunar calendar
Destruction of Ur and Uruk by the Babylonians and takeover of the Sumerian culture	-2340		Stonehenge 2nd phase
Start of the construction of the Tower of Babel	-1950		Stonehenge 3rd phase completed
1st Babylonian civilisation (Hammurabi makes Marduk the highest God, as the God of the Babylonion state) Marduk temple, Ishtar Gate Active astronomical observation of the movements of the planets by the priests in the temples.	around -1800		China, the foundations of the Ming Shu emerged: 12 yearly cycle of Jupiter + daily and hourly cycles + position of the Moon. Stonehenge is abandoned and falls into ruin.

Babylon	(-: B.C.)	Greece	Egypt etc.
Oldest known Venus table in the Ammizaduga Library. Oldest circular depiction of the zodiac	-1646		
Assyria (Babylon) 1st use of zodiac symbols on boundary stones	around –1400		1st signs of astrology in Persia and eastern Turkey
	Ca. - 1340		Egypt: Amenophis IV = Akhenaton establishes a solar religion lasting 19 years
	Ca. –800	Homer writes the Iliad in Greece (mythological epic, not astrology)	
Library of the Assubanipal: Enuma Anu Enlil, about 30,000 clay tablets collection of omens and copy of Sumerian mul.Apin,	Around -687		
Rediscovery of the precession of the equinoxes by the Chaldeans in Babylon	-624 -586	Thales of Miletus (Geometry + astronomy) Pythagoras (Harmony of the spheres) Empedocles (theory of the 4 elements) all in ancient Greece – still no astrology	
Definitive formulation of the tropical zodiac with division into degrees and twelve signs of the same size.	Up to -400		
"Invention" of the personal birth horoscope (oldest preserved horoscope, in cuneiform)	-410		
	After. -400	Plato (born ca. –428) formulates a cosmology still influenced by Pythagoras, which facilitates the subsequent integration of astrology into the Greek worldview.	
	around -390	Hippocrates was the first doctor to take into account the position of planets at birth of the patients he treated.	
	around. -350	Aristotle, a student of Plato, develops the concept of the influence of the stars on earthly events	
Alexander the Great conquers the Babylonians cultural exchange begins	Ca. from – 331	Immigrant Chaldean astrologers start to infiltrate Greek philosophy.	

Babylon	(-: B.C.)	Greece	Egypt etc.
	around –310	Birth of Aristarch of Samos, who was the first to formulate the heliocentric worldview	
	Ca. from – 300		Egypt: start of the transformation of Egyptian mythology by immigrant Chaldean astrologers.
	Ca. – 300		India: appearance of the heroic epic Maharabhata: earliest mention of lunar house astrology (27 Nakshatras)

Greece	(-: B.C.)	Rome	others
Berosa the Chaldean founded the first (secular) astrology school on the island of Kos	Ca285		
Aratus ("Phaenomena"): armillary sphere for determining the position of celestial bodies	-270		
Erastotenes: describes the twelve signs of the zodiac (nation according to zodiac sign)			
	-263		Babylon: the oldest known birth horoscope with degrees of the zodiac
Hypsicles: table of ascendants	around -200	Astrology reaches Rome	India: influence of "yavanas" (Ionians) and "Romakas" (Romans) enables astrology to be used by the Brahmins for spiritual exercises (elimination of karma)
Greek rediscovery of the <i>precession</i> of the equinoxes by Hipparch of Rhodes	Around -150		India: "Garga Samhita", the oldest astrological text book by the wise seer Garga
Posidonius, stoic astrologer: the influence of his philosophy makes astrology increasingly fatalistic.	Ca. from -110	The astrological wave coming from Rome has a stoic-fatalistic character from the start	Egypt: zodiac of Dendera
	-68		The latest horoscope in Chaldean cuneiform
(7 th July) Lion of Commagene , the most ancient Greek horoscope – stone relief on Nimrud Dag (Turkey) for the coronation of King Antioch I.	-61		
	-9		1 st Egyptian horoscope

Change of Era

Greece	(-: B.C.)	Rome	others
			India: independently develops its own horoscope technique with religious influence (tropical and sidereal zodiac in parallel)
	14	Manilius writes his "Astronomicon"	
	Around 120	Ptolemy writes "Tetrabiblos"	
	Ca. 200	Solar cult (Mithras) becomes Roman state religion	
	232	Porphyry: house system	
	313	Christianity becomes Roman state religion	
	Ca. 350	Firmicus Maternus: "Mathesis"	
	476	Fall of the Roman Empire in western Europe: provisional end of astrology in Europe	
	529	Byzantine emperor Justinian bans pagan cults and schools (also astrology)	

Arabia		Europe	Others
Oldest known Arabian horoscope	531		
Mohammed begins the Arabian conquest	625		
Islam conquers Alexandria: the ancient library is destroyed by fire	641		
Arabs adopt the hermetic and astrological knowledge of the ancients from Alexandria and expand it with Indian teachings (<i>Kanaka</i> : Indian astrological textbooks from the caliphate)	VII century	Christianisation of the rest of Europe, especially by Irish monks (no astrology)	India: astrology stagnates and degenerates into fortune-telling
Abu Mashar: foundation of mundane astrology	787-886		
	800	Coronation of Charlemagne "Holy Roman Empire"	
Alcabitius: house system and textbook	900? - 967		<i>China</i> : 12 year cycle with animals
Islam conquers a large part of India	Around -1000		Intensive mix of Arab and Indian astrology (Al Biruni, et. al.)

Europe America and others

	Łurope	America and otners
1093-1167	Ibn Ezra: astrologer. Universal genius, teaches in Spain and Italy / <i>Paranatellonta</i>	
11 th - 13 th	Cathedral construction schools: use secret	
Centuries	astrological knowledge (symbolism in decoration)	
13 th century	Astrology is taught at universities	
1207	Florence: San Miniato in Monte	
Ca. 1210	Parma: Baptistery: Sculptures of the zodiac signs	
1233-96	Campanus: house system	
1250-1318	Pietro D'Abano , doctor "astrolabium planum" (Ibn Ezra). Images of the ascendant become popular	
1309	Padua, Palazzo della Ragione: frescoes of the astrolabium Planum (by Giotto?)	
around 1400	Start of the astrological "boom" (Ascendant images, fortune-telling, prognosis of world events) Princes and popes have their own astrologers	China: first contact with western astrology (Jesuit missionaries)
Around 1420	Venice, Doge's Palace: planet columns	
1467	Regiomontanus : "rational house system", ephemeredes, direction tables	
1471	Ferrara: Palazzo Schifanoia: zodiac frescoes	
1488	Angelus: Copy of the "astrolabium planum" with German version	
1501-1576	Cardanus: 233 aphorisms	
1503-66	Nostradamus: seer and astrologer: prophesies (quatrains)	
1568	Campanella: "the City of the Sun" – theocracy, led by wise men and astrologers	
1523-80	Junctinus: complete astrological textbook	
1543	Copernicus: "De Revolutionibus." heliocentric world view (posthumous)	
1546-1601	Brahe: astronomer: (sextant), meticulous Mars measurements; advocates serious astrology, not prognosis, cannot agree with Copernicus	
1571-1630	Kepler, "Harmonices Mundi", the three laws of planetary motion proves that the heliocentric view is correct	
1583-1656	Morinus: 26 volumes "astrologia gallica"	
1603-68	Placidus de Tito: house system – fights against the heliocentric world view	
1687	Bonatti: "universa Astrosophia" (secondary directions, birth time corrections)	
1602-81	Lilly: English "father of astrology": "Christian astrology"	
19 th Century	Raphael, Zadkiel, Sepharial, et.al. popularisation by almanacs, etc.	
around 1900	Alan Leo: "Astrology for All", he brings astrology "to the street", trials against "fortune-telling" are lost	

Europe

America and others

	Europe	1 minerieu una otnero
1921	Choisnard: statistical research. Collection of birth dates	
1920s and 30s	Second great astrology boom in Central Europe (Brandler-Pracht, Klöckler, Kühr, Sindbad-Weiss, Wassilko, and many more) Foundation of multiple astrological associations; different specialist magazines, (C.G. Jung also practises astrology)	Evangeline Adams Mass media, radio broadcasts (trial against "fortune-telling" won)
1928	Witte: midpoints, hypothetical planets, "Hamburg School"	
Around 1930	Ring, Fankhauser, et. al., symbolic/philosophical astrology, also:	Dane Rudhyar
1938		Foundation of the AFA (American Federation of Astrologers)
around 1950	Ebertin: Cosmobiology; foundation of the KAA (School of Cosmobiology), the Cosmobiosophic Society and the DAV (German Astrological Society)	
1958	AA – Astrological Association of Great Britain founded	
1964	Huber: Astrological Psychology	
1967	Gauquelin: Statistics, data collection, "The Cosmic Clocks" "Mars Effect"	
1968	API, first European astrology school – with fixed syllabus, year-round courses and professional training (with final diploma)	
1976	Addey: "Harmonics in Astrology"	
1981	1st World Astrology Conference in Zürich (1200 participants from around the world)	
1980s	World-wide astrology boom	

When and Where did Astrology really begin?

The latest findings about Sumerian Astrology

Bruno Huber

First published in 'Astrolog' Issue 101 in December 1997 Translated by Heather Ross

This story begins with the Babylonian clay tablets shown below, called mul.Apin.



Mul. Apin clay tablets; one of the two tiny tablets showing the entire Sumerian star, planet and constellation catalogue with precise definitions of time and place (original size 6 x 8.4cm)

However, before we go into this in more detail, we should first define exactly what astrology is. From a technical point of view, the "royal art", or as it is now known, "the oldest psychology in the world", uses the seven classical planets which move around a belt of constellations (called the zodiac). It also assumes that there is a relationship between these heavenly constellations and human life and destiny on Earth, which is perceived as an analogy or synchronicity of the processes in these two worlds.

In every culture that mankind has created throughout its history, there have always been, even in their early stages, attempts to understand the Moon's behaviour. The first magical and mythical ideas and the rites and cults inspired by them based on the Moon as a nocturnal, constantly changing light certainly already existed in precultural times. The Moon was also a timer that was independent of the changing weather on earth. For the need arose very early on for the coming and going of the seasons to be regularly recorded and eventually accurately calculated. Having a reliable calendar was particularly important for the survival of an emerging settled advanced civilisation with its increasingly specialised social and commercial structures.

However, all these efforts by different cultures cannot be termed astrology, not even when some peoples were eventually able to record the movements of the Sun and thereby the seasonally determined true length of the year, like the early Indian Happa culture in the Indus Valley or the Druids at Stonehenge.



Sunrise at Stonehenge

Although this was certainly the necessary pre-stage from which astrology could develop, only one culture took the step of recording all the planets that could be seen with the naked eye and bringing them together into the overall picture of a "star religion". It was neither the Greeks nor the Egyptians, neither the Indians nor the Chinese. They all remained stuck in the pre-astrology stage, with their small, special applications, and only much later (around 500 – 300 BC or even later) adopted Chaldean astrology. It was also not the Chaldeans, not the Babylonians, not the Accadians, all Semitic nations originating from Mesopotamia. It was the Sumerians, a non-Semitic nation that immigrated, probably around 4000 BC, that in 3000 years BC took the crucial cognitive step that consisted of discovering the five planets Saturn, Jupiter, Mars, Venus and Mercury and measuring and describing their progress through the zodiac. This is what the latest scientific findings tell us.

The clay tablet illustrated on the previous page is one of two known as the mul. Apin series. They contain descriptions of the movements of the Moon, Sun and five planets and also accurate calculations and definitions for 33 constellations with 66 individual stars. It calls twelve zodiac constellations the "Path of the Moon" and the time of their morning rising appearance is accurately established with a lunar-solar calendar. This can still be recalculated today taking into account the precession of the equinoxes.

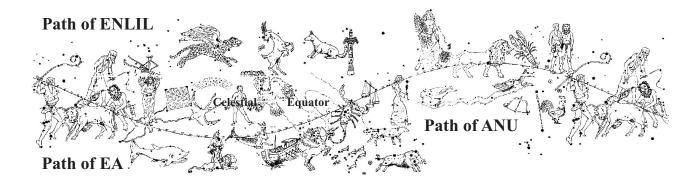
The two mul. Apin tablets were first discovered at Niniveh in the library of the Babylonian king Assurbanipal (Assyrian period, 669-627 BC). They were (erroneously) believed to be part of the *Enuma Anu Enlil*, which was long called the "oldest astrological text book in the world"*.

This Babylonian collection of clay tablets is the most comprehensive collection of astronomical and astrological observation data and omen rules of the early astrological period. According to Assurbanipal's own statement, they should have been its proudest possession. He rejoiced to read in it of "writings from before the Great Flood". This statement was given no credence until recently by the experts (Assyriologists and Sumerologists), for the main body of the writings of this collection definitely originates from the early Babylonian epoch (Hammurabi Dynasty) of King Ammizaduga (1581-1561 BC).

Now though, thanks to the newly possible decoding of the Sumerian language and writing that two of the small clay tablets – i.e. the mul. Apin – are copies of a much older Sumerian text, whose original has now been found. This dates from the year 2340 BC—the modern recalculations of the morning rising times of 66 constellations and individual stars by the specialist Werner Papke. He has painstakingly reconstructed the entire Sumerian star system. This discovery has finally given us a more accurate knowledge of the original Sumerian conception of astrology: what the sky looked like at the time, how it was divided up into constellations and interpreted in the star religion.

To represent the whole fascinating concept of the Sumerian intellectual world would exceed the scope of this article. Furthermore, only a small part of the clay tablets in the Sumerian language has been translated (around 20,000 untranslated clay tablets are still lying in the cellars of the British Museum in London). It would therefore be foolhardy and absurd to want to offer a conclusive overall representation. However, I would like to illuminate the picture we have so far with a few examples.

The Sumerians divided their sky into three "paths", which ran parallel to the celestial equator and circumnavigated the heavens: the paths of **Ea**, **Anu** and **Enlil**. These paths were the spheres of influence of three abstract superior deities, who were never physically represented: the divine trinity. They were the spheres of the material world (Ea), the human world (Anu) and the divine world (Enlil). Through these three belts, meandered the "road of the Moon" (Charranu), which was also the path of the planets: the zodiac. Thus part of the zodiac lies in the path of Enlil (the summer signs), part in the path of Anu (the spring and autumn signs) and part in the Ea (the



winter signs). The star map shown here was made by Werner Papke according to the mul. Apin, and portrays this for the period around 2340 BC.

The Sumerians already knew then about the precession of the constellations. Earlier illustrations always feature only eleven zodiac constellations – Libra was still missing. However, the mul. Apin describes twelve constellations and mentions explicitly in the case of Zibanitum (Libra) that it was formed from the pincers of Scorpio in order for a sign to designate the beginning of the harvest. For previously, the zodiac was firmly centred on two stars: Aldebaran in Taurus marked the vernal equinox and *Antares* in Scorpio the autumnal equinox. This was only really correct for a period around 3200 BC. Probably only shortly before the mul. Apin was written it was discovered that the equinoxes had shifted westwards: from Aldebaran to the Pleiades and from Antares to the pincers of Scorpio.

The Sumerians apparently really lived their zodiac; they moved through the year in synchrony with the movements of the planetary gods and the circular dance of the heavenly houses (signs), which attributed the correct, appropriate activities and concerns to every moment. For example, the two star clusters Pleiades and Hyades in Taurus signify the "posts of the marital home". After their hibernal invisibility, they dip again in May as morning risers again before the sunrise on the Eastern horizon: time for marriage!

Or when, about a month earlier, the star Hamal emerged as a morning riser above the ascendant, it was time to plough and sow the fields. Hamal is the lodestar of Aries. The Sumerians called it LU.CHUN.GA, which meant something like worker in the field or herdsman. Incidentally, at the same time, the small constellation Apin (the plough) rose above the zodiac.

All planets already also had their home (home sign, domicile). At the same time, it is noticeable

that Venus (Ishtar) is the only one to have four houses. She was the highest planetary goddess and appeared in four forms: as *Schamchat* (the courtesan of the Gods) in GU.AN.NA (Taurus), as *Shala Shubultum* (Virgin with the ear of corn) in AB.SIN (Virgo), as *Ischchara* (Governess of all Lands) in GIR.TAB (Scorpio) and as *Anunitum* (Mother of LU.CHUN.GA) in ARURU (Pisces). This shows that the Sumerian culture was matriarchal, and in fact many priests were women. This female dominance was first broken by the Babylonian King Ammizaduga (1581-1561 BC) when he officially recognised Marduk (Jupiter) as the national god.

These examples should suffice. We could mention the Epic of Gilgamesh, of which a new translation from the original Sumerian texts is now available. Careful reading of this reveals that it is not just a brilliant epic-literary achievement, but is also a kind of textbook or interpretation guide for the mul. Apin. It really is the oldest astrological textbook. However, that would become a long story...

^{*}Along with the mentioned *mul.Apin*, the *Enuma Anu Enlil* collection contains many observations of the movements of the Sun (Shamash) and the Moon (Sin). In the section entitled (Venus) Ishtar, we find not only the now famous 20-year Venus Ephemerides, but also many observations about the other planets, their rising and setting and their conjunctions with fixed stars. All these data are attached to Omens (interpretation texts numbering about 7000). We find some verbatim quotations from these interpretation texts in the astrological literature right up to the present day – particularly in the collection of aphorisms of the 16th and 17th centuries and in mundane and horary astrology even in this century.