Astronomical Foundations of the Astrological Houses by Christopher A. Weidner

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In order to understand the origins of the different house systems and the problems connected with them, it is helpful to discuss a few terms of celestial mechanics which are important from an astrological perspective for the construction of the respective systems.

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The horizon system

The horizon is the most important reference level in astrology when it comes to the houses because it forms the platform on which we experience ourselves as observers of all phenomena. The horizon divides the celestial sphere - at the centre of which the observer is located - into a visible hemisphere above and an invisible hemisphere below.

From an astronomical point of view, the matter is not that simple: astronomers differentiate between the

- · true horizon and the
- apparent horizon

The apparent horizon exactly corresponds to the horizon which we perceive when we talk about the 'horizon'. We could also say: the plane of the apparent horizon is on the same level as the eyes of the observer.

The plane of the true horizon, however, is on the level of the geocentre. Again, we could say: When we consider the true horizon, we act as if the observer was standing at the geocentre. For calculation purposes, astrology uses the true horizon.

The difference between these two planes in reference to very distant celestial bodies is extremely small and therefore basically negligible.

The horizon is the plane the observer perceives when looking at celestial phenomena. We distinguish six reference points which give us orientation on this plane:

- East, South, West and North give us orientation on the horizontal plane, and
- Zenith and Nadir give us orientation on the vertical line.

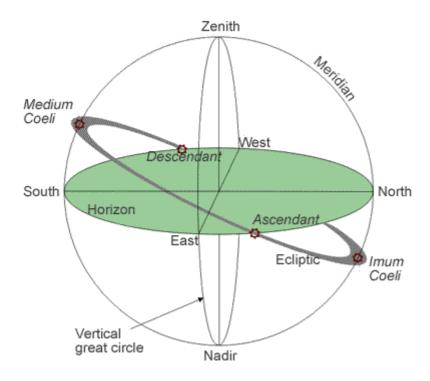


Illustration 1: The horizon system with its three great circles.

The great circles in the horizon system

These points can be connected to form the so-called "great circles". They are circles in the celestial sphere whose centres align with the centre of the celestial sphere itself. Three of these great circles are especially important in astrology, because they make up the framework of the celestial sphere from the viewpoint of the observer (cf. illustration 1).

- The horizon itself is one of the great circles: it connects the East, South, West and North points, and thus defines the horizontal axis (Ascendant and Descendant) of the horoscope.
- The meridian is the great circle which is drawn around the celestial sphere from the North point via Zenith, South point and Nadir. It divides the celestial sphere into an Eastern and a Western hemisphere, and forms the foundation of the meridian axis in the horoscope, i.e. Medium Coeli and Imum Coeli.
- The vertical great circle results from the connection of East point, Zenith, West point and Nadir. It
 is not usually represented in the horoscope, but is used to calculate some house systems.
 Sometimes the East point is shown in the horoscope as "Anti-Vertex" and the West point as
 "Vertex".

This framework of three great circles completely describes the position of the observer in relation to all directions. But astrology does not show the positions of the planets in direct reference to the great circles but as projections onto the ecliptic, the apparent orbit of the Sun around the Earth, better known as Zodiac with its twelve Zodiac sections or signs.

The ecliptic is another great circle in the celestial sphere, which - depending on the position of the observer on the Earth - has a different "obliquity" in relation to the horizontal plane, and which intersects the three great circles of the horizon system. These intersections are especially important in astrology because they consitute the cardinal points of the house system:

- The intersections of the ecliptic and the horizon constitute the Ascendant and Descendant.
- The intersections of the ecliptic and the meridian make up the Medium Coeli und Imum Coeli.

The intersections of the ecliptic and the vertical great circle constitute two other points which are sometimes seen in the horoscope: Vertex, the West point, and Anti-Vertex, the East point. Especially the Vertex is often considered a sensitive point which is supposed to be related to relationships and partner

The horizon in the horoscope

In the horoscope the horizon is represented by the Ascendant/Descendant axis. The horizontal line divides the celestial sphere, in the centre of which we experience ourselves, into a visible and an invisible area. We can observe this fact in the horoscope: all celestial bodies below the Ascendant/Descendant axis (1st and 2nd quadrant) were not visible at the time of birth, and all bodies above this axis (3rd and 4th quadrant) were visible (cf. illustration 2).

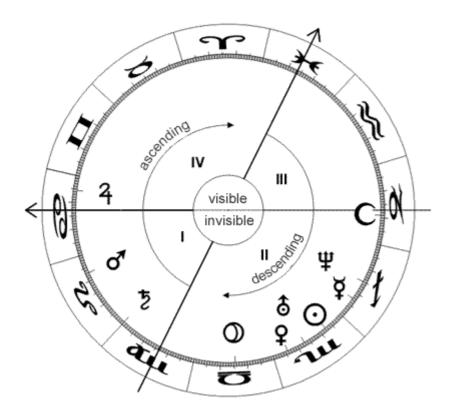


Illustration 2: The quadrants of the horoscope between the four cardinal points of the house system

The meridian in the horoscope

The meridian is represented in the horoscope by the axis of Imum Coeli and Medium Coeli (Midheaven) and divides the horoscope wheel into an Eastern (1st and 4th quadrant) and a Western hemisphere (2nd and 3rd quadrant). All celestial bodies in the Eastern hemisphere are ascending, and all celestial bodies in the Western hemisphere are descending (cf. illustration 2). The culmination is marked by the Medium Coeli - the Midheaven: this is where, for example, the Sun is at midday. This point is also called upper or midday culmination because it is above the horizon. The opposite point is symbolised by the Imum Coeli - the Nadir, the lowest point in the horoscope: this is where the Sun is at midnight. Since this point is below the horizon, it is also called lower or midnight culmination. _

The four cardinal points in the house system

As mentioned before, the Ascendant and Descendant, Medium Coeli and Imum Coeli constitute the four cardinal points of all house systems in the horoscope. These are generally undisputed when calculating the houses. There are merely systems which do not use one of the axes, for example, the ecliptical system which starts from the Ascendant and neglects the meridian axis.

However, generally we can say that these four points are defined in the same way in each house system, whether they are used or not: they are intersection points between the great circles of the horizon and the meridian with the ecliptic._

The definition of the intermediate houses

The task is now to divide the space between the four intersection points into three parts. This is best done in a way that makes sense astrologically.

We could simply divide the distance between the cardinal points in the horoscope, e.g. between Ascendant and Midheaven, into three equal parts. This was suggested by Porphyrius. But this method does not bear any relation to the visible sky, it is simply a mathematical operation. Consequently, we need to find an organising level which is manifest in the sky.

The ecliptical systems, for example, use the ecliptic as an organising level for the house division, others use the vertical great circle. But in order to define the intermediate houses, astrologers have also used other reference levels. The two most important ones, beside the great circles discussed above, are:

- · the celestial equator and
- the diurnal arcs of the celestial bodies.

The celestial equator

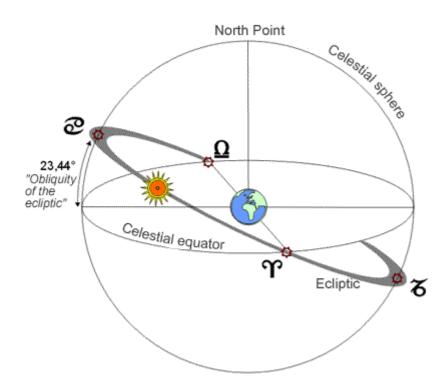


Illustration 3: Celestial equator and ecliptic.

This is another important great circle in the celestial sphere and corresponds to the projection of the Earth's equator onto the sky. The intersections between the celestial equator and the ecliptic mark two particularly important astrological points: 0° Aries and 0° Libra. They mark the beginning of the respective zodiac sign and at the same time signify the beginning of spring and autumn. The Aries point has a special meaning: it marks the beginning of the astrological zodiac and therefore of the astrological year. The Sun reaches this point at the time of the vernal equinox (around 21st March): day and night have exactly the same duration, and from now on, the days are getting longer than the nights - the victory of light over darkness (Translator's note: in the Northern hemisphere! - In the Southern hemisphere, the days are now getting shorter). Directly opposite the Aries point, we reach the autumnal equinox - the Sun enters the sign of Libra around 23rd September (cf. illustration 3).

Two other points are also marked by special positions of the Sun: the points of Cancer and Capricorn. The Cancer point marks the position in the zodiac, at which the Sun reaches its highest possible position above the horizon in the course of a year: The summer solistice (around 21st June). This is the longest day and the shortest night in the year (Translator's note: in the Northern hemisphere - the shortest day

and longest night in the Southern hemisphere). From now on, the Sun turns to move downward again, because the arc it describes in the sky between dawn and dusk every day becomes smaller and smaller, until it reaches its lowest point at 0° Capricorn, the winter solistice (around 22nd December). From there, it turns to move upwards again.

In relation to the celestial equator, this means that the Aries and Libra points constitute the intersection points of this great circle with the ecliptic, whereas the Cancer and Capricorn points are the points with the greatest distance between ecliptic and celestial equator. This distance is also called 'decliniation', which leads to the statement that at the time of the two solistices, the Sun has the greatest declination from the celestial equator. The maximum distance between ecliptic and celestial equator is fix at around 23.5° and is called "ecliptical obliquity".

We could also say that the celestial equator marks four stations on the ecliptic of the Sun's annual orbit around the Earth.

One example for practical use of the celestial equator for the construction of a house system is this:

Regiomontanus used this great circle by dividing it into twelve equal parts. First of all, he had to project the four fixed cardinal points onto the celestial equator, so that their representations on the great circle would result in four commensurate quadrants: the Ascendant was consequently represented by the East point which marks an intersection between horizon and celestial equator, and the Midheaven was represented by the intersection of the celestial equator and the upper meridian (i.e. that part of the meridian which is located above the horizon).

These divisions were then divided into three so that there were twelve equal divisions on the celestial equator. These had to be projected onto the ecliptic to make them astrologically visible.

For this purpose, Regiomontaus connected the division points of the twelve sections on the celestial equator with the celestial North and South points of the celestial horizon (which is a great circle parallel to the apparent local horizon). In this manner, he created twelve additional great circle arcs which all originate in the North and South points of the celestial horizon and intersect the celestial equator. (This is illustrated by the image of an orange with its slices).

Finally, each of these twelve arcs intersects the ecliptic at some point - and these twelve ecliptic points make up the house cusps of the horoscope according to Regiomontanus._

The Diurnal Arcs

The diurnal arcs are another important means for constructing house systems, mainly those which emphasise the time factor, like for example Placidus' system.

Diurnal arcs are those semi-circles which are described by a celestial body moving above the horizon from its ascending point in the East to its descending point in the West. Each point in the sky marks such a diurnal arc. The arc resulting from the movement of the descending point to the next ascending point is called nocturnal arc. Put together, diurnal and nocturnal arcs result in a full circle.

In astrology, only those points are important which are projected onto the ecliptic, usually the planets, Sun and Moon. Astrologically speaking, these are always located on some point of the ecliptic - and this ecliptical point also has a diurnal or nocturnal arc. This means that all points on the ecliptic ascend and descend at some stage.

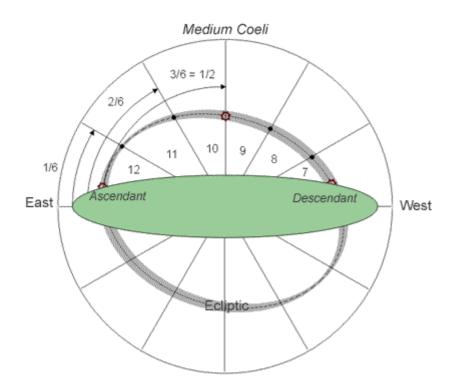


Illustration 4: The construction of houses according to Placidus based on diurnal arcs.

Placidus used these arcs to construct his house system by saying that a particular point on the ecliptic which has covered half the distance above the horizon has reached the midday (upper) culmination, which is, astrologically speaking, exactly at the point of the Midheaven. This means that this point on the ecliptic corresponds to the Midheaven as one of the four cardinal points. And the point on the ecliptic which begins its diurnal arc in the East, corresponds to the Ascendant. In order to define the intermediate houses, he concluded that the point which has covered one sixth of its daily path from East to West, corresponds to the cusp of the twelfth house, and the point on the ecliptic which has covered two sixths marks the cusp of the eleventh house, etc. (cf. illustration 4).

If this system is complemented by the nocturnal arcs, the house system according to Placidus is deduced from the daily movement of the ecliptic reflected by the diurnal arcs.