

## CHAPTER X

### PTOLEMY AND PLACIDUS

IT is generally conceded that the system of directing which has so far occupied our attention first originated as a measure of time in the mind of Claudius Ptolemy, the famous geographer, mathematician and astronomer of Alexandria, who flourished in the second century of our era, and wrote a standard work on the subject of astrology called in the Greek *Tetrabiblos*, and in the Latin *Quadripartite*, being four books on the Influence of the Stars. He also wrote the *Syntaxis* and the *Almagest*, which, together with his work on astrology, have been translated into every language in Europe and into many Oriental languages also.

From the writings of Sir Isaac Newton we have evidence that there were many sources of information open to Ptolemy in the pursuit of astrological knowledge, and there is no reason to suppose that he did not avail himself of them fully, for none has ever suggested that astrology as a science was first promulgated by him. But it may certainly be affirmed that Ptolemy gave to the Western world the first scientific exposition of the subject. There are two Latin editions of the work and one in Greek. The best translation that we have is the paraphrase of Proclus from the Greek text rendered into English with extensive commentary by J. M. Ashmand, and recently published as a supplement to *Coming Events*. Ashmand has followed the Elzevir text, dated 1635.

The name of Claudius Ptolemy will be revered wherever astronomy and astrology are studied. It is enough for the purpose of this sketch to note that he was born at Pelusium in Egypt, and became a brilliant disciple of the Alexandrian School. It appears that he was born about the year 80 A.D., flourished during the reigns of Adrian and Antoninus Pius,

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and died in the seventy-eighth year of his age.

Of Placidus de Titus, who first rendered a studied version of Ptolemy's work on astrology, we have very little information. It appears that he was known as Didacus Placidus, and was a native of Bologna, became a monk, and was appointed mathematician to the Archduke Leopold William of Austria. He wrote in the early part of the seventeenth century a work entitled the *Primum Mobile*, in which he gives a thorough digest of the teaching of Ptolemy. The best English translation is by Cooper. Placidus showed that Ptolemy recognised two sets of directions arising out of two sets of planetary positions, one in the zodiac and the other in the world, i.e. in the prime vertical. To Placidus remains the credit of having elaborated that part of directional astrology which has regard to directions in mundo.

Ptolemy makes it clear in his chapter on the "Number of the Modes of Prorogation" (bk. iii., ch. xiv.) that "when the vital prerogative is vested in the Ascendant, the anareta or killing planet may be brought to it by oblique ascension; and if it be vested in the Midheaven or a body there situate, then direction is to be made by right ascension. If on the occidental horizon, the degrees of oblique descension are to be reckoned. But if not in either of these three places, but in some intermediate station, it should be observed that other times will bring the succeeding place to the preceding one, and not the times of ascension or descension nor of meridian transit as already declared.

"For, if it be desired to calculate agreeably to nature, every process of calculation that can be adopted must be directed to the attainment of one object—that is to say, to ascertain in how many equatorial times the place of the succeeding body or degree will arrive at the position preoccupied at the birth by the preceding body or degree, and, as equatorial times transit equally both the horizon and the meridian, the places in question must be considered in regard to *their proportionate distances from both these, each equatorial degree being taken to signify one year.*"

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Here Ptolemy makes it clear that he directs a body in the heavens to one that precedes it, or a body to a degree that precedes it, which direction is formed by the diurnal rotation of the Earth on its axis from west to east. He also makes it clear that he uses the proportionate distances of bodies from both the horizon and meridian as the basis of the calculation, and the arc of direction is the intervening degrees (equatorial) between them, at the rate of one equatorial degree for a year of life.

It is evident, therefore, that he takes a proportion of the semiarcs, or, as he calls them, "the horary times," of the planets involved. These arcs he describes as parallel to one another and to the Equator, but cutting the circle of the horizon at various degrees of obliquity.

Obviously, therefore, we have to take proportion of their semiarcs and meridian distances, exactly as we have been instructed in the foregoing exposition ; and as these semiarcs are regulated by the latitude of the place of birth and the corresponding ascensional differences of the planets, the positions of the bodies will have respect to the prime vertical and will be their apparent places in the plane of that circle. But it is important to note that Ptolemy says nothing concerning converse directions, whether in mundo or in the zodiac.

That he recognises the mundane position of a body as distinguished from the apparent place of its "degree" of longitude is obvious from his mentioning both in the same sentence ; and we distinguish ourselves between the mundane and zodiacal conjunctions only by reference to the body of the planet in the first instance and its longitude in the other case.

To Claudius Ptolemy, therefore, may rightly be accorded the honour of having set astrologers upon the right track with regard to the correct measure of time by reference to the equatorial degrees separating one body from another, or one body from the longitude or aspect of another, as seen from the place of birth.

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There is little doubt, from the illustrations of his method that Ptolemy gives, that he uses the “ ascensional ” times in all cases due to the latitude of the place of birth ; and this method serves very well not only for directions to the Ascendant and Descendant, but also for intermediate positions when the planets are in the same or different quarters and on the same side of the meridian, for then their arcs may be measured with great facility and approximate accuracy from the Tables of Houses alone.

### *Illustration*

1. Bring the Sun to the place of Mars in the horoscope of Ruskin.

The sidereal time on the Midheaven	h. m.
when Mars' place rises is	15 49
That when the Sun rises is	<u>16 44</u>
Difference in R.A. on the Midheaven in S.T.	0 55

Divided by 4, this gives  $13^{\circ} 45'$  as the arc of direction.

The same arc of direction when exactly calculated by the semiarc method is  $13^{\circ} 49'$ .

2. Bring the Sun to the conjunction with Venus in zodiac.

	h. m.
The S.T. at sunrise (as above) is	16 44
That when Venus' place rises is	<u>14 35</u>
- Difference	2 9

This gives an arc of  $32^{\circ} 15'$ .

3. Bring Saturn to the place of Sun in zodiac. The declination of Saturn is  $6^{\circ} 54'$  S., and this answers to the longitude of Pisces,  $12^{\circ} 37'$ .

	h. m.
S.T. on Midheaven when this point rises	17 30
S.T. on Midheaven when Sun rises	<u>16 44</u>
Difference	0 46

This gives an arc of  $11^{\circ} 30'$ .

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4. Bring the Moon to the opposition of Venue in zodiac.

The declination of the Moon is  $25^{\circ} 39'$ , which exceeds that of any degree of the zodiac owing to the Moon's extreme latitude north added to the declination of its longitude. But reference to the Tables of Ascensional Difference and Right Ascension will show that its oblique descension answers to the twelfth degree of the sign Leo, which is the same as the oblique ascension of Aquarius  $12^{\circ}$ . Then the arc between the place and Venus in zodiac and Aquarius  $12^{\circ}$  will be the arc of direction. Thus :

S.T. on Midheaven when Venus long. rises	h. m. 14 35
S.T. on Midheaven when the 12th of Aquarius rises	<u>16 30</u>
Difference	1 55

This gives an arc of  $28^{\circ} 45'$ .

5. Bring the Sun to the opposition of Uranus in zodiac.

Take the opposite degree of the zodiac to that held by Uranus, and bring the Sun to it by oblique arc.

S.T. when Gemini $23^{\circ} 25'$ rises	h. m. 21 21
S.T. when Sun rises	<u>16 44</u>
Difference	4 37

This gives an arc of  $69^{\circ} 15'$ .

6. Bring Sun to par. Uranus in zodiac direct.

The declination of Uranus is  $23^{\circ} 24'$ , which answers to that of Cancer  $4^{\circ}$ . Find the arc between this and the Sun.

S.T. on Midheaven when Cancer $4^{\circ}$ rises	h. m. 22 06
S.T. on Midheaven when Sun rises in Aquarius $18^{\circ} 45'$	<u>16 44</u>
Difference	5 22

This gives an arc of  $80^{\circ} 30'$ .

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These examples will serve to show that without recourse to the elaborations of a speculum or the use of proportional logarithms in the computation of proportional arcs, Ptolemy could, by the mere use of a table of ascensions under any latitude, find the time of an indicated event within an arc of 30' and even less, which, having regard to the approximations which are frequently adduced as " arcs for the event " when both are accurately known, show that they would serve for all practical purposes. I most frequently calculate arcs of direction in this manner, bringing out the results to the nearest quarter of a degree, which measures to three months of time. Ptolemy had constructed such tables, as appears from his *Almagest*, and this is obviously the method he used. In other words, he recognised no other directions than those that could be calculated by the difference of the oblique ascensions of the planets and of their longitudes, taking the oblique ascension of their opposite degrees when the arc was formed by descension of a body.

A table of oblique ascensions such as that published by Worsdale enables the calculation to be made with even closer exactness. It has only to be remembered that when we are directing the body of a planet to the body or longitude of another, the longitude corresponding to its declination must be dealt with, and not the longitude of the body itself, as the above examples will sufficiently indicate.