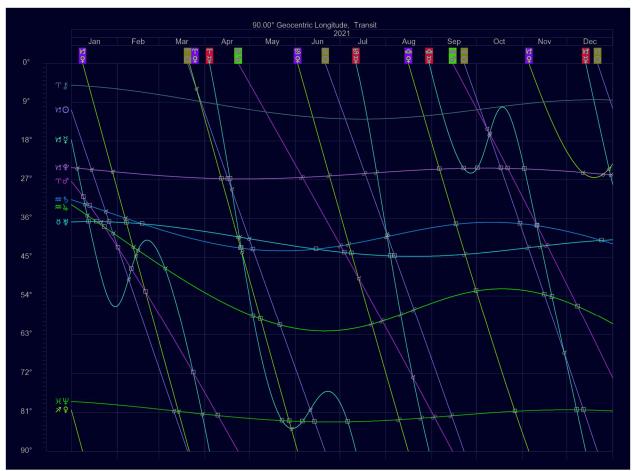
## QUOTIENT STRUCTURES AND GRAPHIC EPHERMERIDES

An example of quotient structures that many astrologers are familiar with is the graphic ephemeris. This is basically just a graph of each planets motion over a period of time, and such graphs have become common thanks to computers and technology. Below is a graphic ephemeris showing the movement of each planet as positions change throughout a range from  $0^{\circ}$  to  $360^{\circ}$ , and the software that I prefer for this (Sirius 4.0) is nice not only because it is easy to read, but also because it shows the aspects that the various planets make with one another.



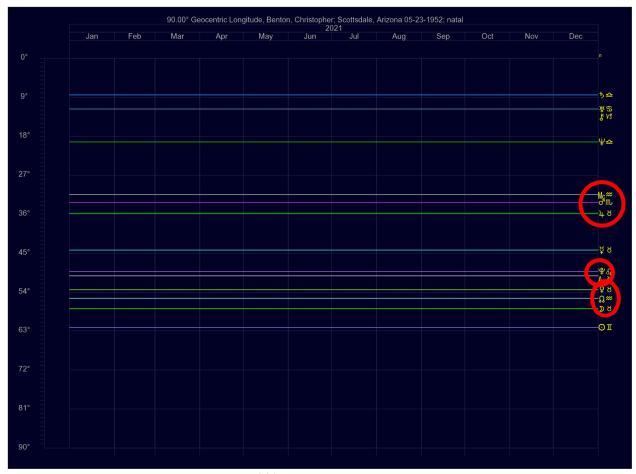
360° Graphic Ephemeris

However, one might like to narrow in specifically on  $4^{th}$  harmonic aspects between the planets, or in other words, we want to readily identify planets that are either  $0^{\circ}$ ,  $90^{\circ}$ ,  $180^{\circ}$ , or  $270^{\circ}$  from one another. We can do this quite easily by instructing our program to create a  $90^{\circ}$  ephemeris for the time period in question. In this type of ephemeris, planets that are separated by a  $4^{th}$  harmonic angle will appear conjunct as seen in the image below. Also, this is a quotient structure precisely because we are dividing out the differences between the various harmonics that are based on multiples of  $90^{\circ}$ .



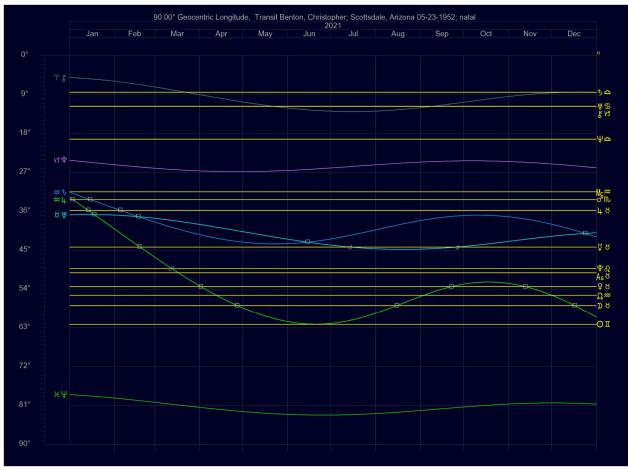
90° Graphic Ephemeris

We can also apply this technique to just the birth chart where, in our graph, each planetary position will be represented by a horizontal line. And if we use a  $90^{\circ}$  graphic ephemeris, then the closer planets are to making a  $4^{th}$  harmonic angle with each other, the closer their positions will be in the  $90^{\circ}$  graphic ephemeris. Hence, from the closeness of various lines representing planetary positions in my own chart, we can conclude that I have Jupiter/Mars/Midheaven, Uranus/Chiron/Saturn, Venus/Nodes/Moon, and Pluto/Ascendant all in  $4^{th}$  harmonic relationships with one another.

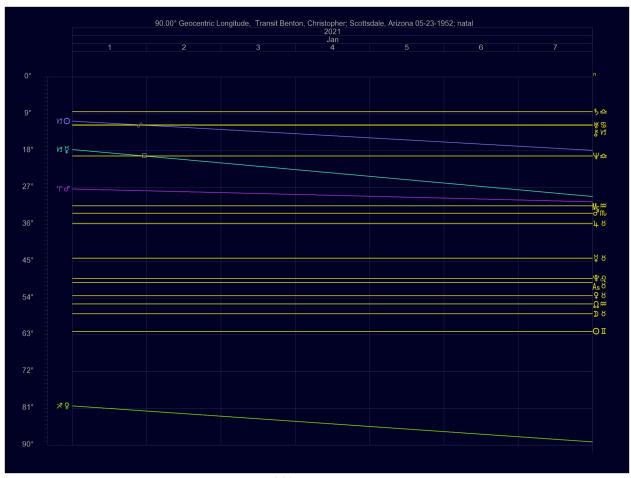


 $90^{\circ}$  Graphic Ephemeris

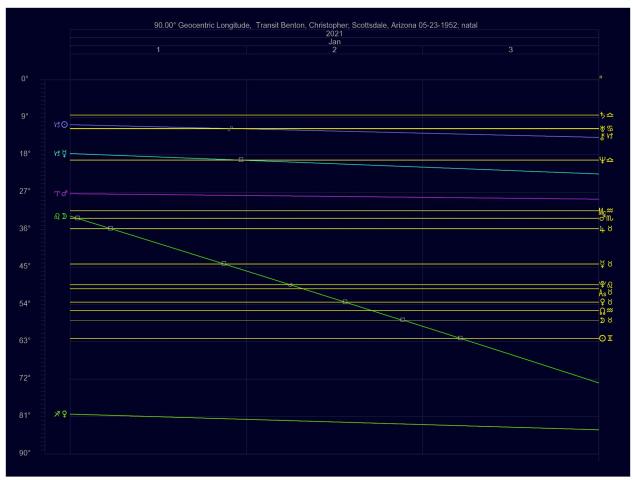
Additionally, we can also add the current movement of the planets to this graph in order to inspect the astrological transits. Typically, however, if one is doing this for a long span of time, then one might consider only the slower moving planets from Jupiter on out. Likewise, if it is a shorter period of time, such as a week, then one will likely want to view the faster moving planets (minus the Moon) over this span of time. But if one is looking only at transits for 1 to 3 days, then it is easy to include the Moon as well. Below are graphs for each of the scenarios I just described.



1-year 90° Graphic Ephermeris

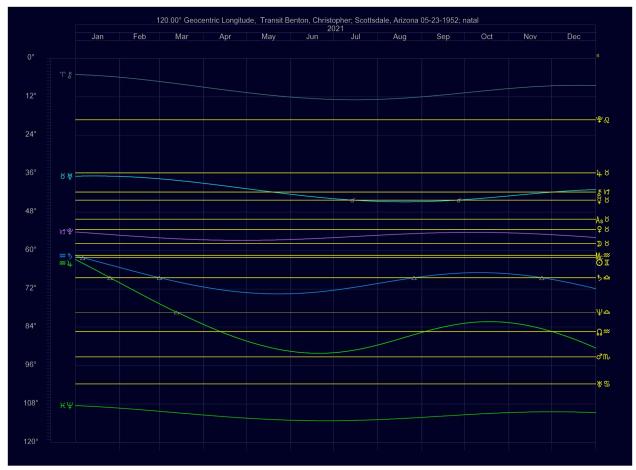


1-week  $90^{\circ}$  Graphic Ephermeris



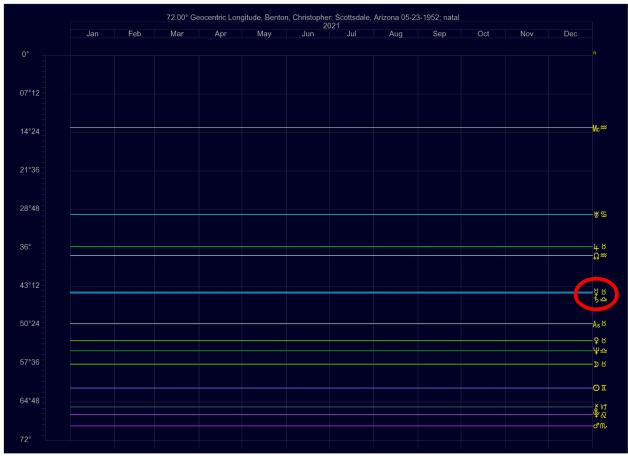
3-day 90° Graphic Ephermeris

Similarly, one might be interested in simply identifying what trines from outer planets one might experience by transit in the coming year. To easily see this, one can construct a  $120^{\circ}$  graphical ephemeris in order to easily identify all outer planets that make a  $3^{rd}$  harmonic angle by transit in the coming year.



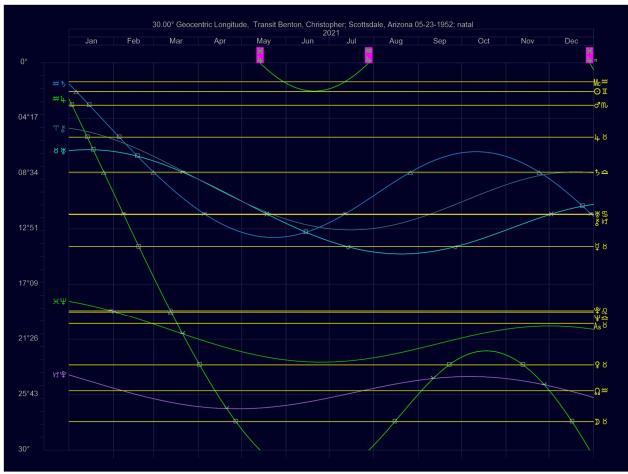
1-year  $120^{\circ}$  Graphic Ephermeris

One can also use a graphical ephemeris to help one identify aspects that are generally not so easy to se such as the  $5^{th}$  harmonic aspects or quintiles (0°,72°,144°,216°,and 288°). In the  $5^{th}$  harmonic ephemeris below, the lines for Mercury and Saturn overlap because these two planets are in a strong biquintile (144°) with one another.



72° Graphic Ephemeris

And finally, the graphic ephemeris that I use most often is a  $30^\circ$  graphical ephemeris. The reason I prefer this one is because the aspects that I use most often are the  $12^{th}$  harmonic angles that are based on multiples of  $30^\circ = \frac{360^\circ}{12}$ . Hence, this ephemeris helps me identify aspects of  $0^\circ, 30^\circ, 60^\circ, 90^\circ, 120^\circ, 150^\circ, 180^\circ, 210^\circ, 240^\circ, 270^\circ, 300^\circ, and <math>330^\circ$ .



1-year 30° Graphic Ephemeris