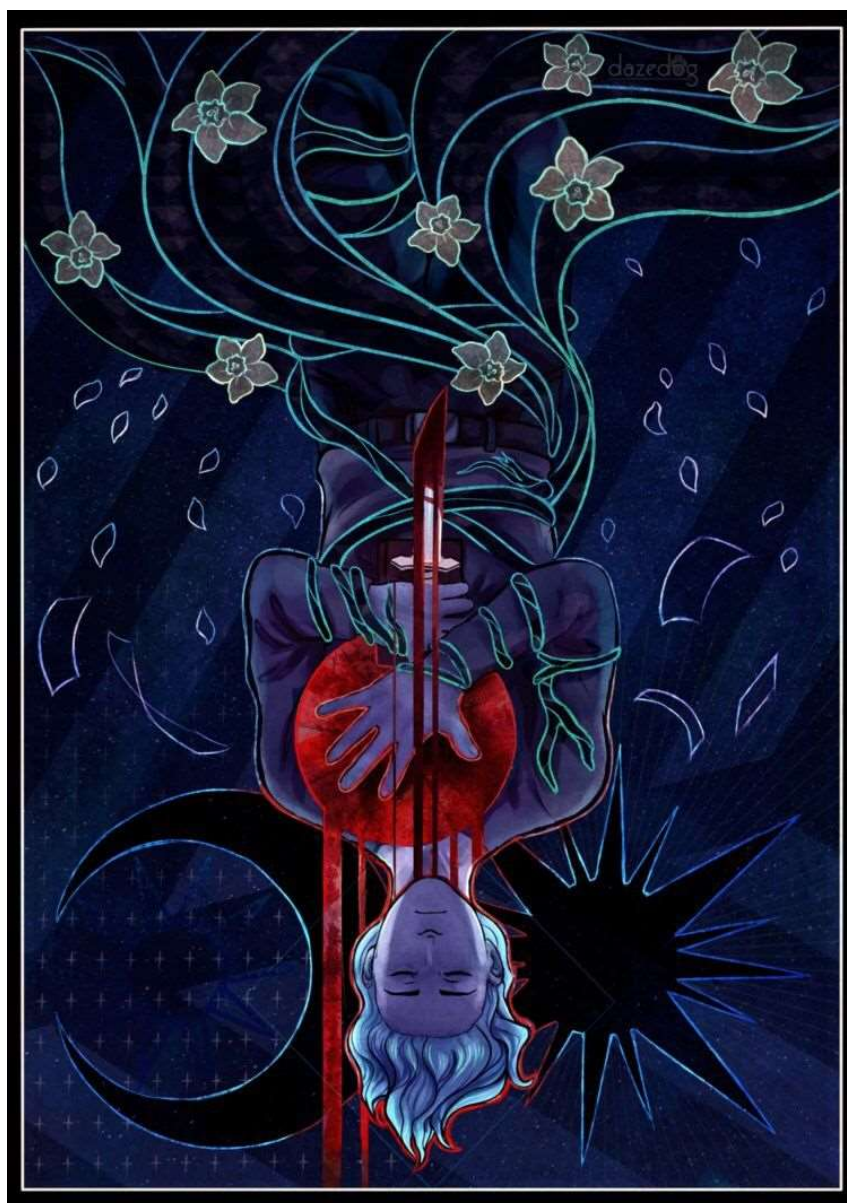


Q-ASTROLOGY

QUAINT, QUANTITATIVE, QUOTIENT, QUESTING, AND QUESTIONING

*THE ASTROLOGICAL DIARY OF
CHRISTOPHER BENTON*





This work is licensed under a Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License.

Dedicated to the following giants whose shoulders I have stood upon:

Marc Edmund Jones, Dane Rudhyar, Grant Lewi, Jim Lewis, David Cochrane, and Michael Erlewine

CONTENTS

| | |
|--|-----|
| Introduction | 1 |
| Quaint Astrology | 2 |
| The Art and Practice of Astrology | 3 |
| The Cycle of Becoming | 16 |
| The Art of Interpretation | 24 |
| Back to the Future..... | 30 |
| Harmonic Astrology and Midpoints | 41 |
| Synastry – The Art of Chart Comparison..... | 64 |
| Relocation Charts and Astrocantography..... | 67 |
| Mundane Astrology | 71 |
| Quantitative Astrology | 88 |
| Does Astrology Really Work? | 89 |
| The Celestials | 97 |
| Astrology and Fractals..... | 115 |
| The Joys and Sorrows of Statistics | 127 |
| How to Do Statistical Analysis with Astrodatabank..... | 132 |
| Astrology and Complex Numbers | 146 |
| Mathematical Models for Aspects | 158 |
| Quotient Astrology..... | 164 |
| Quotient Structures | 165 |
| Quotient Structures and Harmonic Astrology | 168 |
| Quotient Structures and Arc Transform Charts | 178 |
| Quotient Structures and Graphic Ephemerides..... | 184 |
| Quotient Structures and Midpoints | 193 |
| Quotient Structures and Composite Charts..... | 194 |
| Quotient Structures and the Sabian Symbols..... | 195 |
| Quotient Structures and Enlightenment | 196 |
| Questing Astrology..... | 201 |
| Questing Astrology..... | 202 |
| Questioning Astrology | 251 |
| Questioning Astrology | 252 |
| Epilogue..... | 254 |

INTRODUCTION

This is a book about astrology that is different from most other books that one might come across on astrology. It is written from the perspective of neither a true believer nor a true denier. It is written from the point of view of one who both believes and questions at the same time. I call this approach to astrology “Q Astrology” where Q stands for quaint, quantitative, quotient, questing, and questioning. Above all, however, Q does not stand for QAnon (very delusional and very bad!) nor the Q continuum of Star Trek (cool, but also not my Q). Additionally, many sections in this book can be read independently of the others, so feel free to go through this material in whatever order works best for you. And now let me now give a brief explanation of what each branch of Q Astrology means to me. Enjoy!

Quaint – By quaint I don’t mean old fashioned. I simply mean traditional, and in the first few chapters of this book I’ll give a summary of the traditional astrology that most Western astrologers use every day. Also, the chapter on *The Cycle of Becoming* is the most important to everything that follows.

Quantitative – The next section of this work will review some of the scientific evidence for astrology, both from astrophysics and statistics, and then I’ll make some recommendations regarding standards for statistical research as we move further into the 21st century.

Quotient – The heart of this book is the concept of a *quotient structure* that pervades all of advanced modern mathematics. This is not a difficult concept, but it will be a new concept to most people, and I’ll try to explain why I think it is so important to the future of astrology. I’ll also discuss harmonic and arc transform charts as examples of quotient structures within astrological practice.

Questing – Typically when people go to an astrologer, they want to know about love, health, and finances. However, I would argue that that’s not what most people came into incarnation for. Instead, each person’s life is a quest, a hero’s journey, and the most important thing is to understand the journey that the person is on. All the rest is just incidental.
























Questioning – On the one side are perhaps a majority of scientists who automatically think that astrology is nonsense, and on the other side are many astrologers who, perhaps, are too eager to adopt new techniques and interpretations before they have been properly vetted by the astrological community. Both sides have unwittingly accepted their biases and have forgotten to question, and if we don’t use the tools available to us to constantly question and strive to improve, then only decay will follow. That is what I want to avoid. I want to return constructive questioning to astrology, science, and other disciplines as well. As I like to say, you can’t successfully complete your QUEST if you don’t QUESTion along the way!

Quaint

Astrology

THE ART AND PRACTICE OF ASTROLOGY

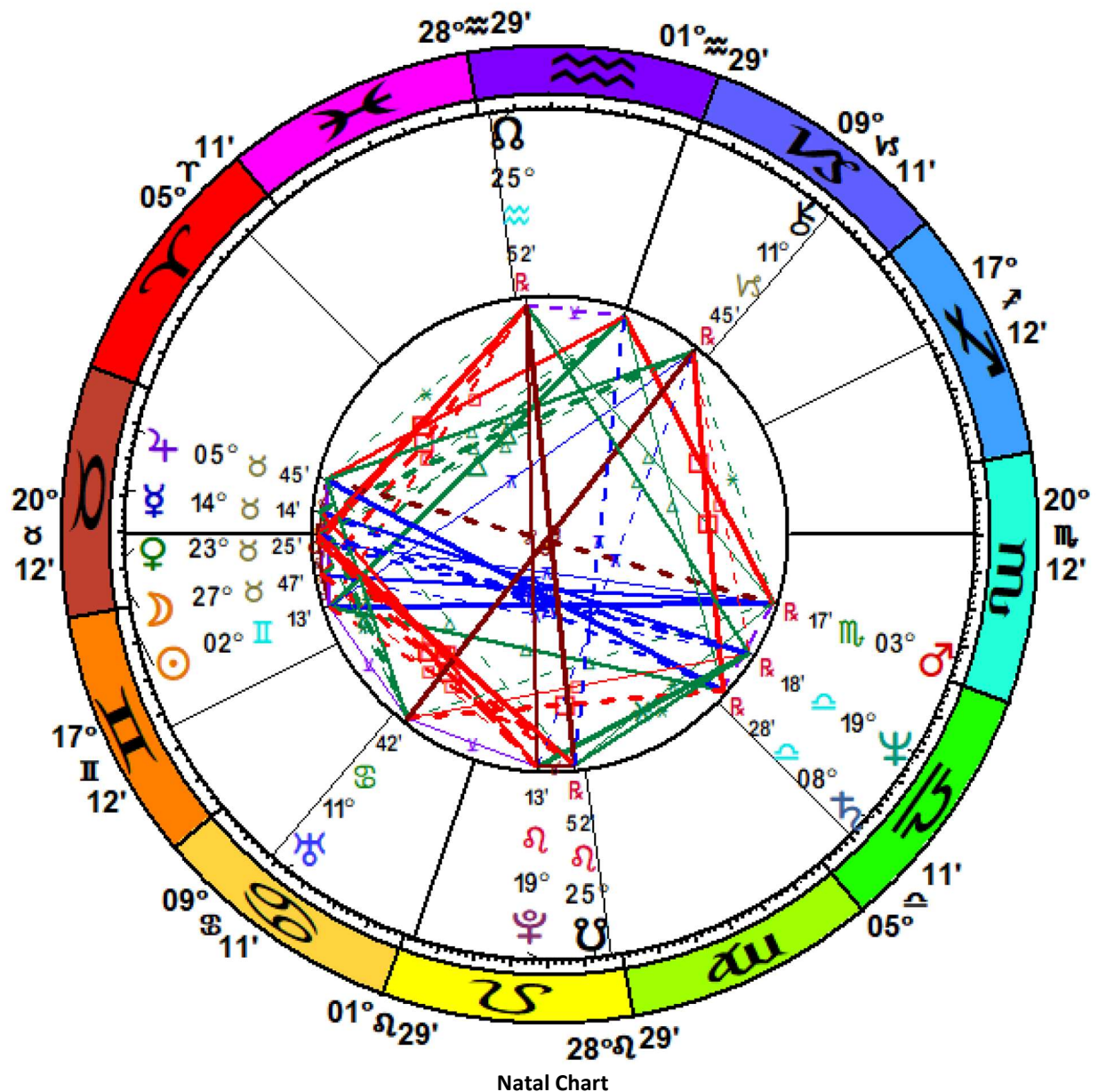
Below is a chart that shows many of the symbols that make up the language of astrology. Refer to this chart often until it becomes second nature. A horoscope is made up of planets, signs, aspects (the angles between planets), and houses, and we'll discuss all of these things below.

| | | | | | |
|---|------------|---|-------------|---|--------------|
|  | SUN |  | ARIES |  | CONJUNCTION |
|  | MOON |  | TAURUS |  | OPPOSITION |
|  | MERCURY |  | GEMINI |  | SQUARE |
|  | VENUS |  | CANCER |  | TRINE |
|  | MARS |  | LEO |  | SEXTILE |
|  | JUPITER |  | VIRGO |  | SEMISQUARE |
|  | SATURN |  | LIBRA |  | SESQUISQUARE |
|  | URANUS |  | SCORPIO |  | INCONJUNCT |
|  | NEPTUNE |  | SAGITTARIUS |  | SEMISEXTILE |
|  | PLUTO |  | CAPRICORN |  | QUINTILE |
|  | SOUTH NODE |  | AQUARIUS |  | BIQUINTILE |
| | |  | PISCES |  | CHIRON |

Our first task will be to explain the basic meanings of the planets that are used in astrology. Let us begin!

Planets

Below is a typical horoscope circle. We'll explain the different parts beginning with the planets, and we'll also show this image for reference at the beginning of each section.



The Sun is the most important planet in any horoscope, and it represents the self and those things that we most identify with. In the chart above the Sun is at 2 degrees, 13 minutes, Gemini. We'll discuss later what that means.

The Moon represents our persona, the mask that we put on in order to help us communicate with others. For example, In the chart above, the Sun is in Gemini and Moon is at 27 degrees, 47 minutes, Taurus. This suggests a mind that is very quick inwardly, but that outwardly may seem to be plodding along at a much slower pace as is customary for Taurus. Additionally, since our physical body is literally our interface with the rest of the universe, the Moon also represents one's health, moods and emotions, and those habits that have become a part of our physical being.

Mercury is the fastest moving of the planets, and so it encounters the other planets more often than a slow moving planet like Pluto would. Thus, Mercury is aptly named the messenger of the Gods! In modern astrology, though, Mercury represents the left hemisphere of the brain. Hence, it is an important component of our thought process, and Mercury represents, in particular, language, mathematics, and the quality of our thinking.

Venus corresponds exactly to the pleasure principle as Freud described it, the drive to reduce tension. This gives it an affinity with things like love, romance, and the arts. Venus also represents our non-verbal, right-brain that experiences pain or pleasure without verbalizing. Wherever Venus is in a chart, that's where we'll get information about what we like and the things that we enjoy.

Mars is the drive to increase tension, and just as we need a pleasure principle to reduce tension, so do we need a complimentary drive to increase it. And if such a drive didn't exist, then we would never get out of bed in the morning!

Jupiter is the largest of the planets, and so it is natural that it should represent growth and expansion. It is our drive to grow and learn, and that should be a lifelong endeavor.

Saturn is the next planet to be found in our solar system, and it represents a drive toward control and regulation. When we don't work consciously with Saturn to self-regulate ourselves, then we are more likely experience the frustration and depression instead of the kind of controlled growth that works to keep us in balance and give us what we need.

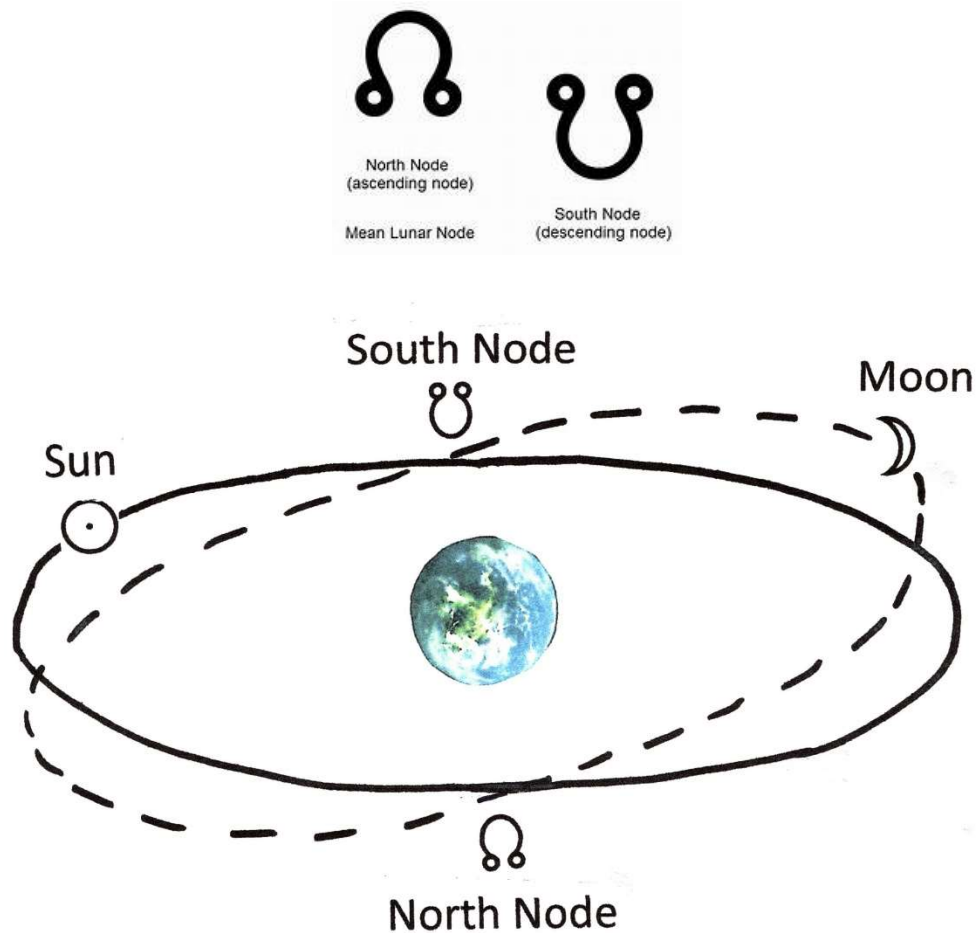
Chiron is a small planetoid that was discovered in 1977 by Charles Kowal, and it's located between Saturn and Uranus. Its meaning in modern astrology is related to its position between Saturn and the outer three planets. As such, it is seen as a bridge between the personal (Sun, Moon, Mercury, Venus, Mars, Jupiter, Saturn) and the outer, transpersonal planets (Uranus, Neptune, Pluto). Also, in mythology Chiron was a centaur who not only trained the ancient heroes, but who also received a wound that never fully healed. Thus, the motif of the wounded healer resonates with many who have an active Chiron in their chart. Not everyone is consciously aware of the presence of Chiron in their lives, but for those who are, many have found that this planet is intimately connected with their spiritual growth. It represents our drive to transcend the ordinary and the mundane.

Uranus is called the planet of genius and eccentricity. It represents our drive to create anew by first breaking up the existing pattern. Thus, whenever and wherever Uranus is active in our lives, that is where we will experience creativity as well as a bit of chaos and disruption.

Neptune continues the process of transformation begun with Uranus by dissolving the boundaries of the broken shards that Uranus just created. In general, whereas Saturn makes things more concrete through a process of control and regulation, Neptune does just the opposite. It obscures all boundaries, and, thus, it is intimately connected to mystical states as well as confused states where it is not clear what is what.

Pluto is the planet of death and transformation, and it completes the process of change that Uranus began. Specially, Uranus breaks up the existing pattern, Neptune removes the boundaries that originally defined the object, and now Pluto creates a phoenix from its ashes. Pluto represents a very powerful energy because it can literally create life from death!

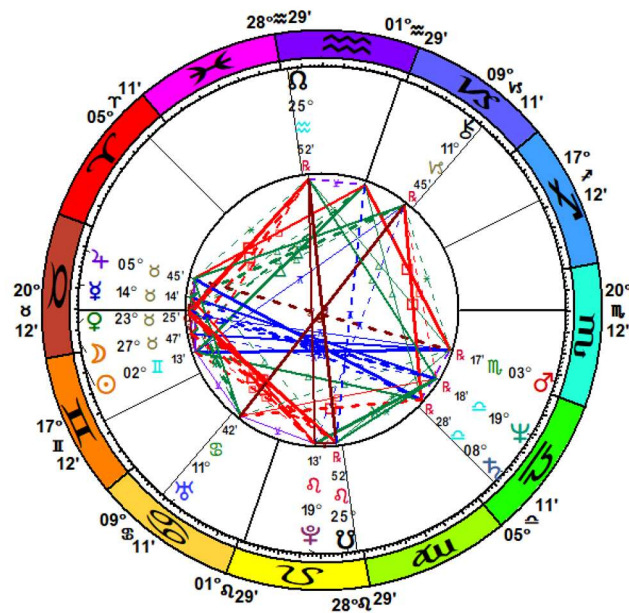
The Lunar Nodes (the North Node and the South Node) correspond to where the great circle corresponding to the Moon's path around the Earth crosses the apparent path of the Sun around the Earth. These Nodes have been used extensively in Vedic astrology (the astrology of India), but they also have a history in Western astrology. Current beliefs are that the South Node represents old karma that we have come into this life with while the North Node corresponds to unfinished business. However, what is certain is that the Nodes tend to magnify the power and influence of any planets they come into conjunction with. Thus, we tend to look to the Nodes to see if they are in conjunction with anything, and we tend to interpret the South Node in terms of skills or karmic debts acquired and the North Node in terms of things we want to develop and finish in our current life, things we often have a great hunger for. In Vedic astrology, the Nodes are referred to as shadow planets, and below are images showing the glyphs used for the Nodes and how they are defined by lunar and solar orbits. Also, in a horoscope the North and South Nodes of the Moon are always 180 degrees opposite one another.



Aspects

Next, we'll look at aspects, the angular distance between planets or other parts of a horoscope. But first, we'll display once again our chart of standard astrological symbols and our example horoscope.

| | | | | | |
|---|------------|---|-------------|----|--------------|
| ☉ | SUN | ♈ | ARIES | ♂ | CONJUNCTION |
| ☾ | MOON | ♉ | TAURUS | ♂♀ | OPPOSITION |
| ☿ | MERCURY | ♊ | GEMINI | □ | SQUARE |
| ♀ | VENUS | ♋ | CANCER | △ | TRINE |
| ♂ | MARS | ♌ | LEO | ✳ | SEXTILE |
| ♃ | JUPITER | ♍ | VIRGO | ∠ | SEMISQUARE |
| ♄ | SATURN | ♎ | LIBRA | ⊞ | SESQUISQUARE |
| ♅ | URANUS | ♏ | SCORPIO | ⋈ | INCONJUNCT |
| ♆ | NEPTUNE | ♐ | SAGITTARIUS | ⋈ | SEMISEXTILE |
| ♇ | PLUTO | ♑ | CAPRICORN | ♊ | QUINTILE |
| ♁ | SOUTH NODE | ♒ | AQUARIUS | ♋♊ | BIQUINTILE |
| | | ♓ | PISCES | ♏♏ | CHIRON |



In the chart above you can see all the various planets placed around the wheel (astrology's "unit circle"), and in many instances you will also see colored lines in the center of the horoscope that are connecting some of the planets. These lines are called aspects, and they indicate the angular separation between the two planets. For example, if two planets are approximately 90 degrees apart, then we call that aspect a square since the interior angles of a square are all 90 degrees. A square is seen as an aspect that creates tension, and if two planets are squaring each other, then it is more difficult for their corresponding drives to work together in a coordinated way, and one drive often becomes suppressed in favor of the other. In contrast to the square is the trine that is characterized by an angle of separation of 120 degrees between the planets. It is an aspect that indicates a high degree of coordination between the two planets/inner drives, and note that if you have three planets each 120 degrees away from the others, then lines connecting those three planets will form a perfect equilateral triangle, and that is why we call a trine a trine. The major aspects that I'll be interpreting a chart are the conjunction, the semisextile, the sextile, the square, the trine, the quincunx or inconjunct, and the opposition, and all their meanings are given below.

Conjunction – When two planets are in conjunction, then their meanings blend together. For example, if Venus is conjunct the Moon in someone's horoscope, then we would expect that person to have a personality (Moon) that seeks a reduction of tension (Venus). Such a person might naturally be kind and be very pleasant to be around. On the other hand, if that person had Moon conjunct Mars, then their drive to increase tension (Mars) would be blended with their personality (Moon), and this might result in a person who is either very energetic or who actively seeks out conflict.

Semisextile – The semisextile is an aspect of 30 degrees, and it is often seen as slightly beneficial. It is the beginning of something that may evolve more fully.

Sextile – The sextile is an aspect of 60 degrees, and it is seen as significantly more beneficial than a semisextile. If two planets are sextile one another, then the drives represented by those planets will be able to coordinate their functions fairly well. It is a harmony similar to that of two separate pitches in any given major chord.

Square – A square occurs whenever two planets are separated by an angular distance of approximately 90 degrees, and when a square occurs the planets involved have a difficult time expressing themselves together. It's like hitting the notes C and C# simultaneously on a piano. It's discordant, and it just doesn't sound right. Thus, when planets form a square with one another, the tension usually results in one drive being repressed in favor of the other. However, repression is never complete, and eventually the things represented by the repressed drive will make their voices heard.



























Trine – A trine is an angle of separation of 120 degrees, twice the sextile, and it represents a maximum of coordination between the two planetary drives. Hence, we would expect that a person with Mercury trine Uranus would find creative (Uranus) mental tasks (Mercury) to come very naturally.

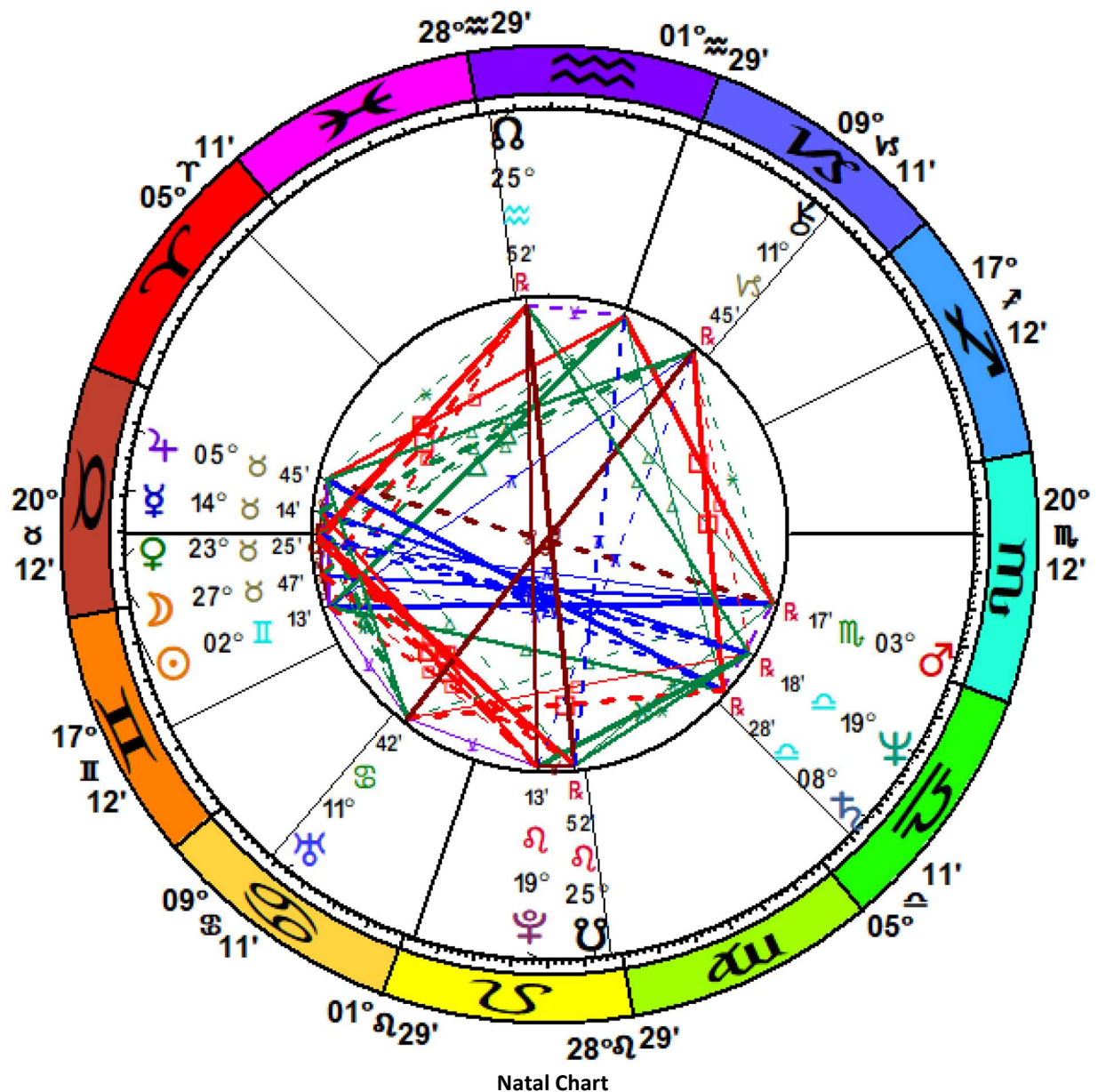
Quincunx or Inconjunct – The inconjunct is an aspect of 150 degrees, and it is seen as mildly discordant. In a relationship it might correspond to that stage where the two people realize that they are different while also being comfortable with their differences. At the same time, there is some impetus to make additional adjustments in order to achieve a more perfect union.

Opposition – When two planets are 180 degrees apart, they are in opposition, and this is a moment during which union and separation are equally highlighted. It is like the Full Moon where the light of the Moon is at its peak and we are aware of the Moon’s individuality just as strongly as we are aware that it and the Sun combine to form a single system. Oneness and diversity are equally present at an opposition as the “other” is being blended with and incorporated into the “self”

Though we don’t do it here and though many astrologers don’t do this at all, it is actually very important to distinguish between whether an aspect is waxing or waning, and in the next chapter we will discuss aspects again with this critical distinction in mind.

Signs

| | | | | | |
|---|------------|---|-------------|--|--------------|
|  | SUN |  | ARIES |  | CONJUNCTION |
|  | MOON |  | TAURUS |  | OPPOSITION |
|  | MERCURY |  | GEMINI |  | SQUARE |
|  | VENUS |  | CANCER |  | TRINE |
|  | MARS |  | LEO |  | SEXTILE |
|  | JUPITER |  | VIRGO |  | SEMISQUARE |
|  | SATURN |  | LIBRA |  | SESQUISQUARE |
|  | URANUS |  | SCORPIO |  | INCONJUNCT |
|  | NEPTUNE |  | SAGITTARIUS |  | SEMISEXTILE |
|  | PLUTO |  | CAPRICORN |  | QUINTILE |
|  | SOUTH NODE |  | AQUARIUS |  | BIQUINTILE |
| | |  | PISCES |  | CHIRON |



The aspects that we highlighted in the previous section all occur at multiples of 30 degrees, and they delineate 12 major angular relationships between planets – conjunction, the waxing semisextile, the waxing sextile, the waxing square, the waxing trine, the waxing inconjunct, the opposition, the waning inconjunct, the waning trine, the waning square, the waning sextile, and the waning semisextile, and then back to a final conjunction that completes the cycle. All in all, though, we have twelve distinct aspects – conjunction, opposition, five waxing aspects, and five waning aspects. The signs of the zodiac represent forms of expression that each have an affinity with one of the major aspects we’ve listed. For example, everything begins with the conjunction, and Aries, the beginning of the zodiac, is like a newborn baby in that it is full of energy and life and not yet very sophisticated. Similarly, the conjunction represents a vision that has yet to unfold. We’ll have more to say about this correspondence later, but for now let’s just look

at some of the basic meanings of the twelve signs of the zodiac. Below are some typical descriptions of the signs of the zodiac that I found online.

| | | |
|---|--|---|
| <p>Aries mar 21-apr 20</p> <p>Adventurous and energetic Pioneering and courageous Enthusiastic and confident Dynamic and quick-witted</p> <p>Selfish and quick-tempered Impulsive and impatient Foolhardy and daredevil</p> | <p>Taurus apr 21-may 21</p> <p>Patient and reliable Warmhearted and loving Persistent and determined Placid and security loving</p> <p>Jealous and possessive Resentful and inflexible Self-indulgent and greedy</p> | <p>Gemini may 22-june 21</p> <p>Adaptable and versatile Communicative and witty Intellectual and eloquent Youthful and lively</p> <p>Nervous and tense Superficial and inconsistent Cunning and inquisitive</p> |
| <p>Cancer june 22-july 22</p> <p>Emotional and loving Intuitive and imaginative Shrewd and cautious Protective and sympathetic</p> <p>Changeable and moody Overemotional and touchy Clinging and unable to let go</p> | <p>Leo july 23-aug 21</p> <p>Generous and warmhearted Creative and enthusiastic Broad-minded and expansive Faithful and loving</p> <p>Pompous and patronizing Bossy and interfering Dogmatic and intolerant</p> | <p>Virgo aug 22-sep 23</p> <p>Modest and shy Meticulous and reliable Practical and diligent Intelligent and analytical</p> <p>Fussy and a worrier Overcritical and harsh Perfectionist and conservative</p> |
| <p>Libra sep 24-oct 23</p> <p>Diplomatic and urbane Romantic and charming Easygoing and sociable Idealistic and peaceable</p> <p>Indecisive and changeable Gullible and easily influenced Flirtatious and self-indulgent</p> | <p>Scorpio oct 24-nov 22</p> <p>Determined and forceful Emotional and intuitive Powerful and passionate Exciting and magnetic</p> <p>Jealous and resentful Compulsive and obsessive Secretive and obstinate</p> | <p>Sagittarius nov 23-dec 22</p> <p>Optimistic and freedom-loving Jovial and good-humored Honest and straightforward Intellectual and philosophical</p> <p>Blindly optimistic and careless Irresponsible and superficial Tactless and restless</p> |
| <p>Capricorn dec 23-jan 20</p> <p>Practical and prudent Ambitious and disciplined Patient and careful Humorous and reserved</p> <p>Pessimistic and fatalistic Miserly and grudging</p> | <p>Aquarius jan 21-feb 19</p> <p>Friendly and humanitarian Honest and loyal Original and inventive Independent and intellectual</p> <p>Intractable and contrary Perverse and unpredictable Unemotional and detached</p> | <p>Pisces feb 20-mar 20</p> <p>Imaginative and sensitive Compassionate and kind Selfless and unworldly Intuitive and sympathetic</p> <p>Escapist and idealistic Secretive and vague Weak-willed and easily led</p> |

Now let's take a deeper look at what the signs of the zodiac actually mean. First, I'll note that some people have their energy more directed outwards towards others, and then there are some who direct their energy more inwards. The former are called extroverted while the latter are called introverted. Another way in which we may classify a person is with regard to whether they are predominantly thinking-oriented or feeling-oriented. For example, some people will respond to a situation by first noting what they think about it while others will focus on how the situation makes them feel. Furthermore, what we've just described results in four different possible classifications for a person – extroverted/feeling, introverted thinking, extroverted/thinking, and introverted/feeling. This results in four modes of being, and the ancient description of these modes was given in terms of the basic elements of fire, earth, air, and water. Below is a table that summarizes what we are saying.

| Element | Signs | Orientation | Description |
|---------|--------------------------|----------------------|---|
| Fire | Aries, Leo, Sagittarius | Extroverted/Feeling | Fire signs exuberantly express their feelings. |
| Earth | Taurus, Virgo, Capricorn | Introverted/Thinking | Earth signs think inwardly about their world. |
| Air | Gemini, Libra, Aquarius | Extroverted/Thinking | Air signs love to express their ideas to others. |
| Water | Cancer, Scorpio, Pisces | Introverted/Feeling | Water signs reflect inwardly about how things make them feel. |

Yet another way in which the signs of the zodiac are classified is according to whether they are cardinal, fixed, or mutable. Cardinal signs like to initiate actions and programs even if there is no good reason to start something new. It's just their nature! Likewise, fixed signs like to preserve and maintain things, and mutable signs are good at sizing up a situation and making whatever changes are needed. The twelve signs of the zodiac are classified according to mode as follows.

| Mode | Signs |
|----------|------------------------------------|
| Cardinal | Aries, Cancer, Libra, Capricorn |
| Fixed | Taurus, Leo, Scorpio, Aquarius |
| Mutable | Gemini, Virgo, Sagittarius, Pisces |

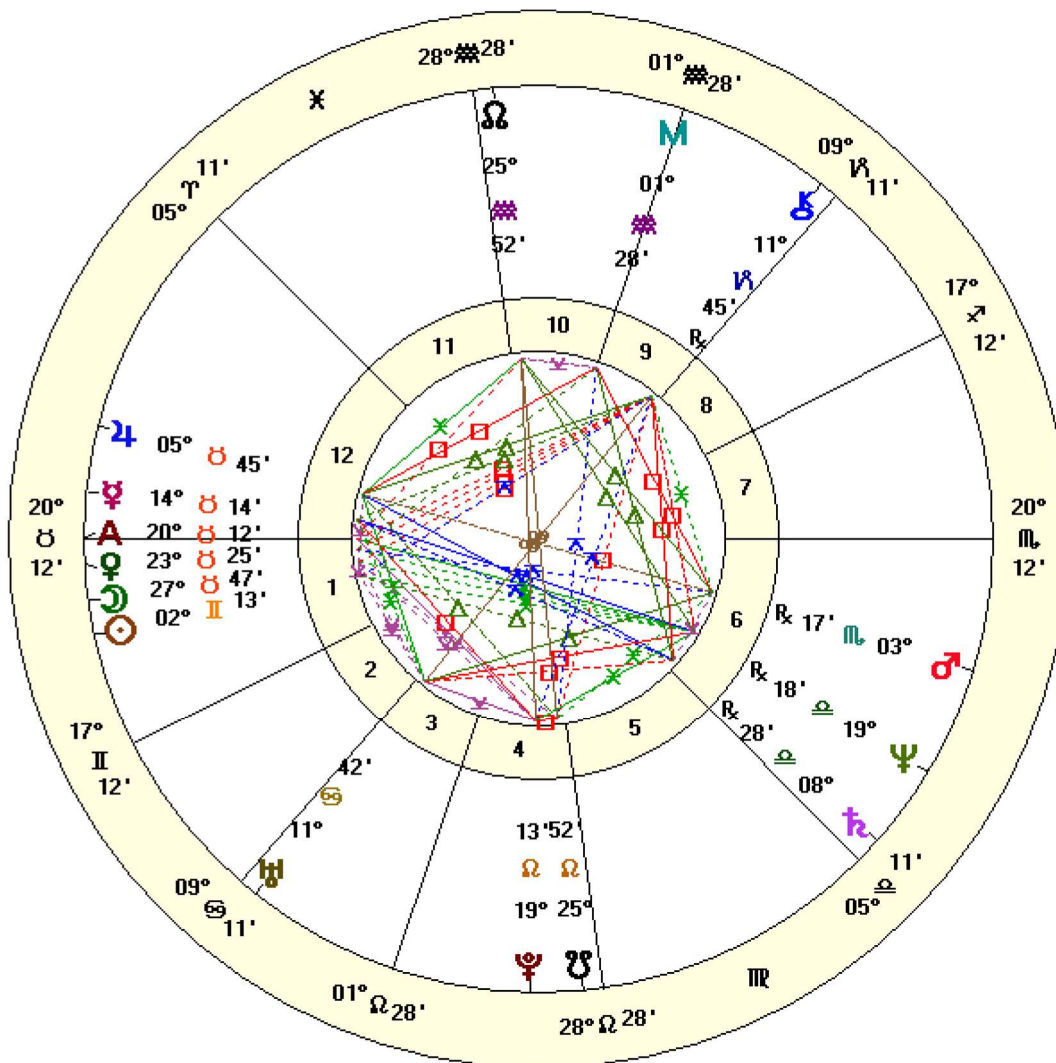
And now, we can completely determine each sign by its element and mode.

| Sign | Mode/Element | Description |
|-------------|----------------|---|
| Aries | Cardinal/Fire | Extroverted/Feeling oriented/Initiates actions |
| Taurus | Fixed/Earth | Introverted/Thinking oriented/Persevering |
| Gemini | Mutable/Air | Extroverted/Thinking oriented/Changeable |
| Cancer | Cardinal/Water | Introverted/Feeling oriented/Initiates actions |
| Leo | Fixed/Fire | Extroverted/Feeling oriented/Persevering |
| Virgo | Mutable/Earth | Introverted/Thinking oriented/Changeable |
| Libra | Cardinal/Air | Extroverted/Thinking oriented/Initiates actions |
| Scorpio | Fixed/Water | Introverted/Feeling oriented/Persevering |
| Sagittarius | Mutable/Fire | Extroverted/Feeling oriented/Changeable |
| Capricorn | Cardinal/Earth | Introverted/Thinking oriented/Initiates actions |
| Aquarius | Fixed/Air | Extroverted/Thinking oriented/Persevering |
| Pisces | Mutable/Water | Introverted/Feeling oriented/Changeable |

Notice that the Fire and Air signs are extroverted while the Earth and Water signs are introverted. In 1977, psychologist Hans Eysenck published a study in which he had administered the Eysenck Personality Inventory to 917 men and 1407 women, and he found that both men and women with their Sun in a Fire or Air sign were significantly more likely to be extroverted when compared to men and women born with their Sun in Earth or Water signs. Some follow up studies have confirmed this result while others haven't. Statistics can be tricky.

Houses

If you look at the horoscope below, you will see that it is divided up into twelve sections called houses. The houses are numbered counterclockwise in the inner ring starting on the left, and the signs of the zodiac are portrayed along the outer ring. In between the two rings you'll find the placements of the planets, and in the center are lines and symbols indicating the aspects between them



Houses in the Natal Chart

Each house corresponds to a different area of activity that a person might engage in, and as before, I'll first list some of the traditional meanings of the houses, and then we'll look at them in a little more detail.

| House | Traditional Meaning |
|-------|---|
| 1 | You and your characteristics |
| 2 | Money and possessions |
| 3 | Your mind and mental activities |
| 4 | The home and family |
| 5 | Pleasure, recreation, and personal creativity |
| 6 | Health and work |
| 7 | Others, partnerships, and marriage |
| 8 | Death, transformation, other people's money |
| 9 | Universities, religion, long trips, the collective knowledge of humankind |
| 10 | Professional honors and status in society |
| 11 | Friends, hopes, and wishes |
| 12 | Self-undoing, hidden enemies, withdrawal from society |

Now let's go deep. As soon as you are born, your brain establishes yourself as a point of reference, and soon afterwards you also establish others as another point of reference. At this point you know that at least two things exist – you and others. But you continue your explorations, and you realize that you also exist in both a personal environment and a social environment. The former involves just you and the inanimate objects around you while the latter is the milieu created by the interactions of the people in your world. In both our personal and social environments, it's important to know what we should notice first and what we can safely ignore. Thus, in both environments we create hierarchies of importance, and in our social environment this results in a ranking of people according to status. These four reference points – ourselves, our personal environment, others, and our social environment – correspond to houses 1, 4, 7, and 10 in a horoscope. These houses are also called angular houses, and they are similar in many ways to the four cardinal signs that like to initiate things.

The next four houses – houses 2, 5, 8, and 11 – are called succedent houses, and like the fixed signs of the zodiac, they like to maintain and preserve things. Thus, the activity of the second house is to maintain the self, and today that usually means that you need money and other resources. The fifth house maintains the fourth, the personal environment, and if you want to understand what recreation has to do with your personal space, then just try going without sleep for a few days. You'll discover that if you get too stressed and don't relax from time to time, then your brain will begin to have great difficulty making heads or tails of what it's seeing. Recreation rejuvenates us so that we can clearly perceive where we are. Continuing with this pattern, the eighth house should maintain the activity of the seventh, but how does death maintain a marriage? Well, while a horoscope might indicate a chance of death at some point in the future, regarding our day to day functioning we might say that the eighth house actually refers to the death of the ego. In other words, for a marriage, a friendship, or any type of partnership to flourish, a bit of one's awareness of oneself as a separate being must die so that the partnership can grow. Thus, relationships not only bring about the death of our "separateness," they also transform us. And additionally, this house rules the money and resources of others because those things are often needed to maintain the relationship. The eleventh house similarly maintains the social environment of the tenth house, and we

basically maintain our social environment by reinforcing it through group activities. Thus, the eleventh house is really about collaborative endeavors and group creativity.

The last four houses – houses 3, 6, 9, and 12 – are called cadent houses, and they are similar to the mutable signs in the zodiac. The cadent houses are all about feedback and analyzing what has come before so that adjustments can be made. Thus, the third house analyzes data on the individual self and its maintenance, and this results in thinking and other basic mental activities. The sixth house is the feedback house not only for the personal environment (house 4), but also for all the previous houses up to this point. As with house 3, the sixth house is connected with mental activity, but it is seen as more practical and less abstract in application. Also as with the third house, the sixth identifies adjustments that have to be made, and now we can understand why the sixth house is traditionally associated with health and occupation. If we have gotten out of balance with ourselves or our environment, then illness can result, and it takes work to set things right again. In many ways, houses seven through twelve are just the social counterparts of houses one through six. Thus, just as the third house is connected with the individual mind, the ninth house is related to the group or collective mind, and it is associated with those activities and institutions that collect this knowledge. And lastly we have the twelfth house which is a feedback house not only for houses 10 and 11, but also for all of the previous houses. It is here that we must experience the consequences of any imbalances, and this is why it is often give very negative attributions. However, it can also represent things which are very positive. It is the last house in the horoscope, the end of a cycle, and it is at the endings of things that we can learn to let go and evolve into new cycles. Thus, the twelfth house is also associated with withdrawal from society, meditation, monasteries, and a greater awareness of non-physical realms.

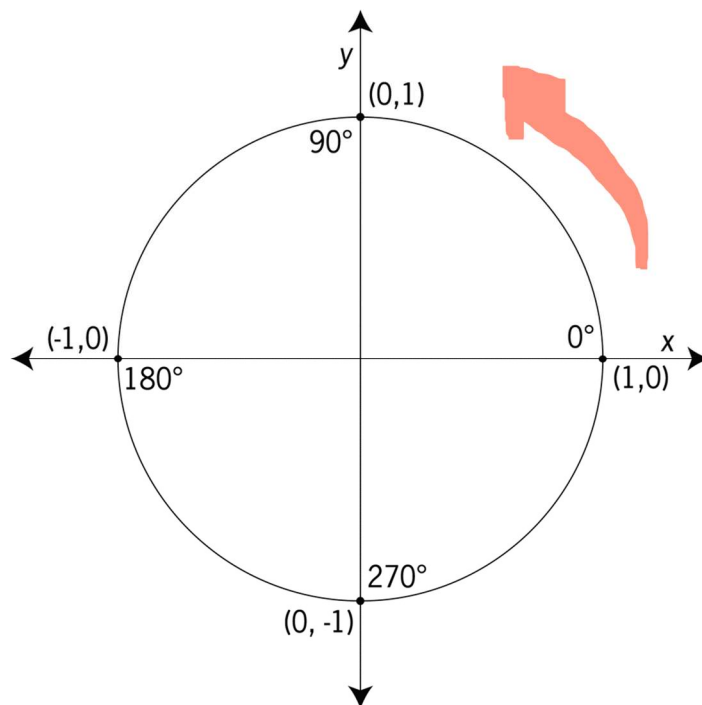
Below is a list of the twelve houses with their more contemporary meanings.

| House | Modern Meaning |
|-------|---|
| 1 | The self as a point of reference. |
| 2 | Maintenance of the self. |
| 3 | Mental activities, analysis of how well the self is being maintained. |
| 4 | The personal environment as point of reference. |
| 5 | Re-creation and personal creativity. |
| 6 | Maintenance of the self and personal environment with illness and work as possible consequences. |
| 7 | The other as a point of reference. |
| 8 | Maintenance of the other, death of the individual self, the possessions of the partnership. |
| 9 | The knowledge of humankind for feedback and analysis. This house often involves religion, higher education, and long distance traveling. |
| 10 | The social environment as a point of reference. We set up hierarchies so that we know who is important and who isn't. |
| 11 | Group creativity and activities. |
| 12 | Feedback or karma regarding all of the previous houses. In this house we sometimes experience sorrow, but we also often withdraw from the world and experience peace. |

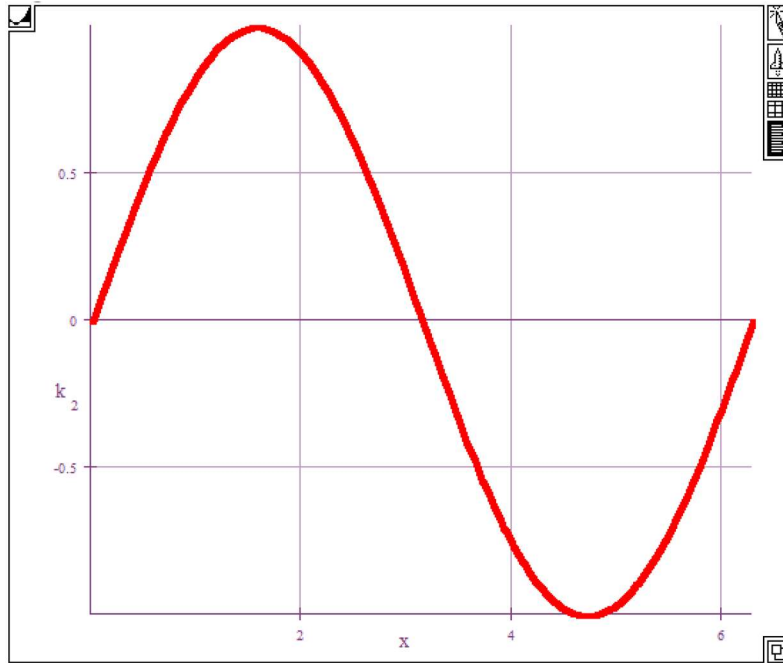
THE CYCLE OF BECOMING

There are many things in this world that we tend to think of as binary, characterized by just two possible states. An example of such might be a simple overhead light which is either on or off. However, upon closer examination a situation such as turning on or off a light may not be so binary after all. For example, if you control the light with a standard wall switch, then we could say that the switch actually passes through an infinite number of positions as it moves from down to up. Similarly, we could point out that if we slowed down time then we would see the light itself also going through an infinite number of states from off to dim to fully lit, and we could see this even more clearly by just using a standard dimmer switch. But in other words, in many instances where we might think that the world is binary, it is in fact non-binary as it goes through a cycle containing an infinite number of stages.

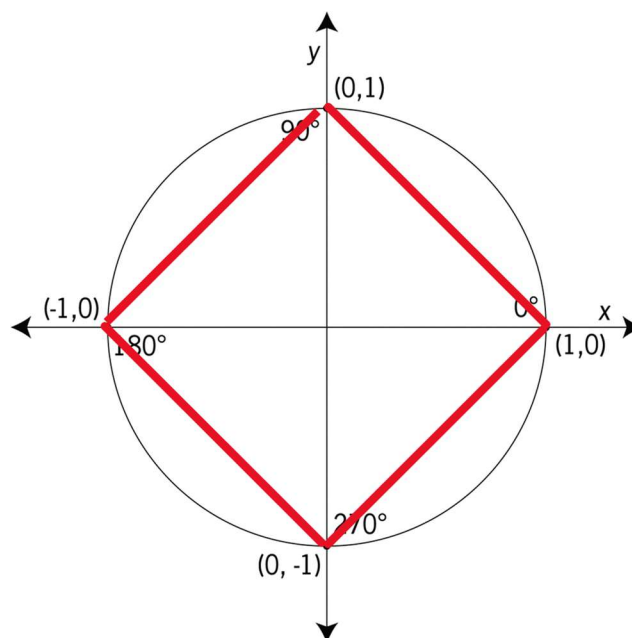
Visually, the simplest way to depict a cycle is as a circle such as the one below that I've placed in a coordinate plane.



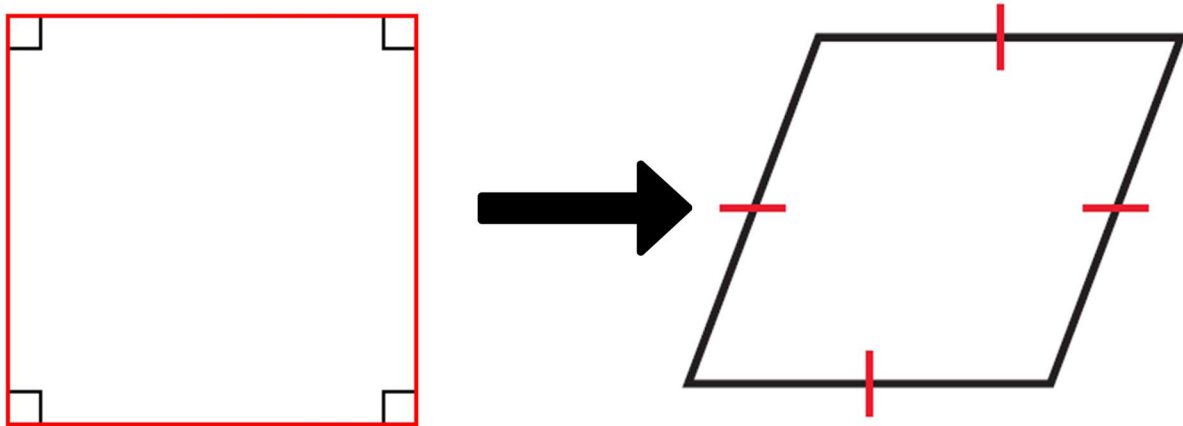
In this picture, imagine starting on the right at the point labeled (1,0) and then traveling counterclockwise around the circle. When we are at 0 degrees (the point (1,0)) our elevation above horizontal is zero units. However, when we reach the point labeled (0,1), we are at the 90 degree point and our elevation is now 1 unit above horizontal. At 180 degrees (the point (-1,0)) we are back to zero elevation above the horizontal axis again. As we continue to 270 degrees (the point (0,-1)) we find ourselves 1 unit below the horizontal axis, and then when we arrive back at (1,0) we complete the cycle as we return to zero elevation. This type of cyclic journey is also represented by the kind of curve below (a sine curve) that goes from zero elevation to 1 unit above horizontal, from 1 unit above to zero and then to 1 unit below, and finally back to zero elevation to complete the cycle.



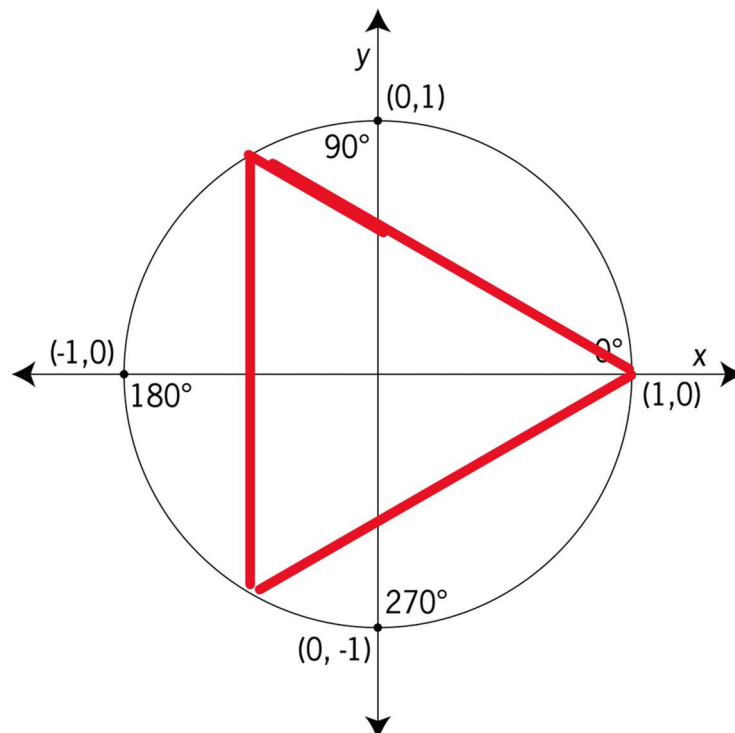
In this diagram it's much easier to see that those points that are at the "top of the hill" or "bottom of the valley" are turning points where our elevation above horizontal switches from either increasing to decreasing or decreasing to increasing. Likewise, there are other turning points as we change from positive to negative and back again from negative to positive. Mathematically, turning points are always, however brief, moments of instability. It's like when you are changing gears on a car. There's a brief moment when the car is in neutral and is momentarily out of your control! Basically, we find turning points of various sorts at every quarter of our cycle, and if we consider the monthly lunar cycle, then these turning points would correspond to New Moon, First Quarter, Full Moon, Third Quarter, and then back to New Moon as the cycle begins anew. If we now draw in some points to mark off the quarters of our cycle and if we connect these points with straight lines, then notice that we get a square.



What's interesting about a square, though, is that it is not by itself a very stable structure. If you apply just a little stress to one of the sides, then it's not too difficult to distort the square into another shape.

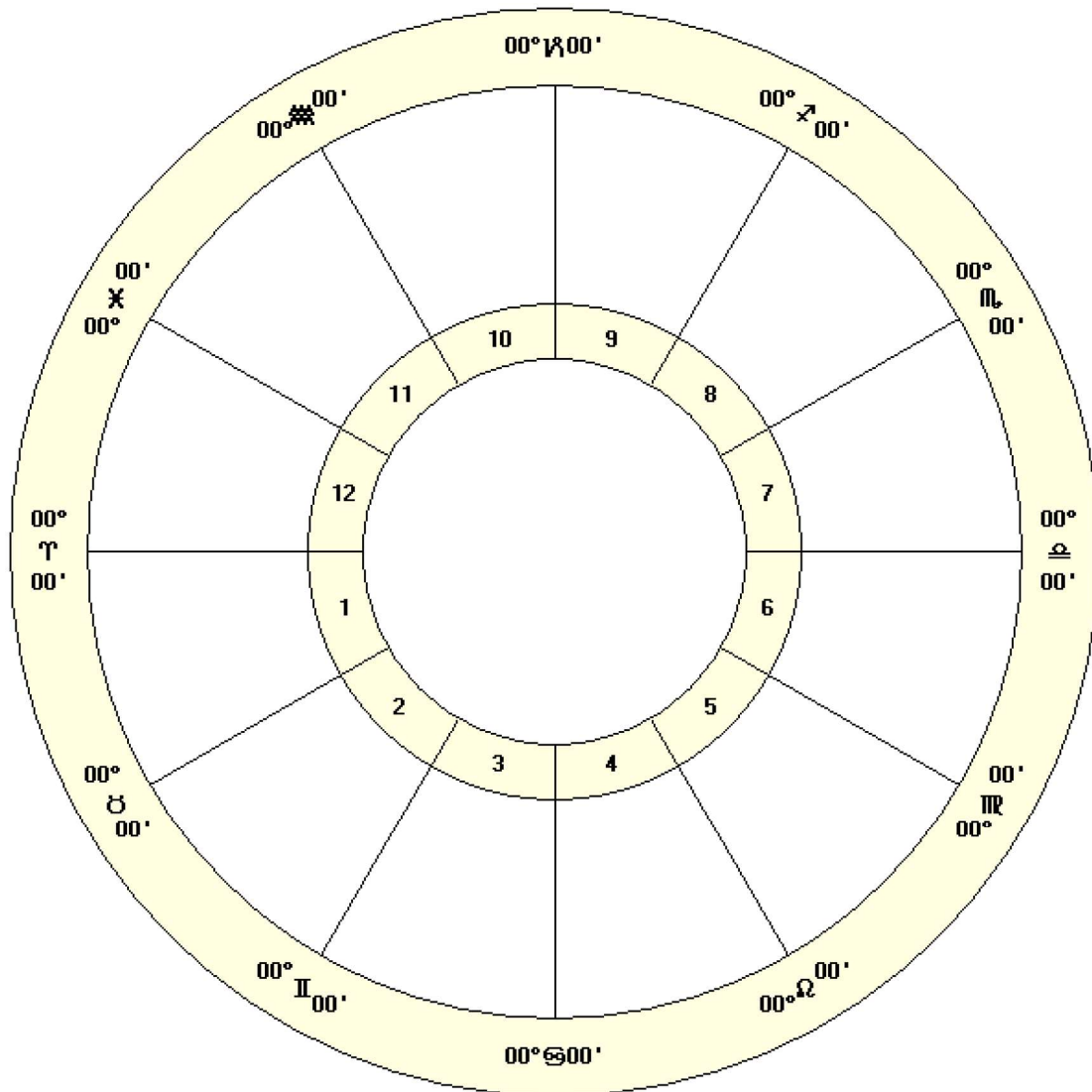


This suggests that those turning points of various sorts that occur at multiples of 90 degrees are, indeed, moments of instability when things are more likely to change. Now, however, let's see what happens if we decide to divide up our cycle into thirds. This is a natural thing to do because every journey has three parts – a beginning, a middle, and an end.

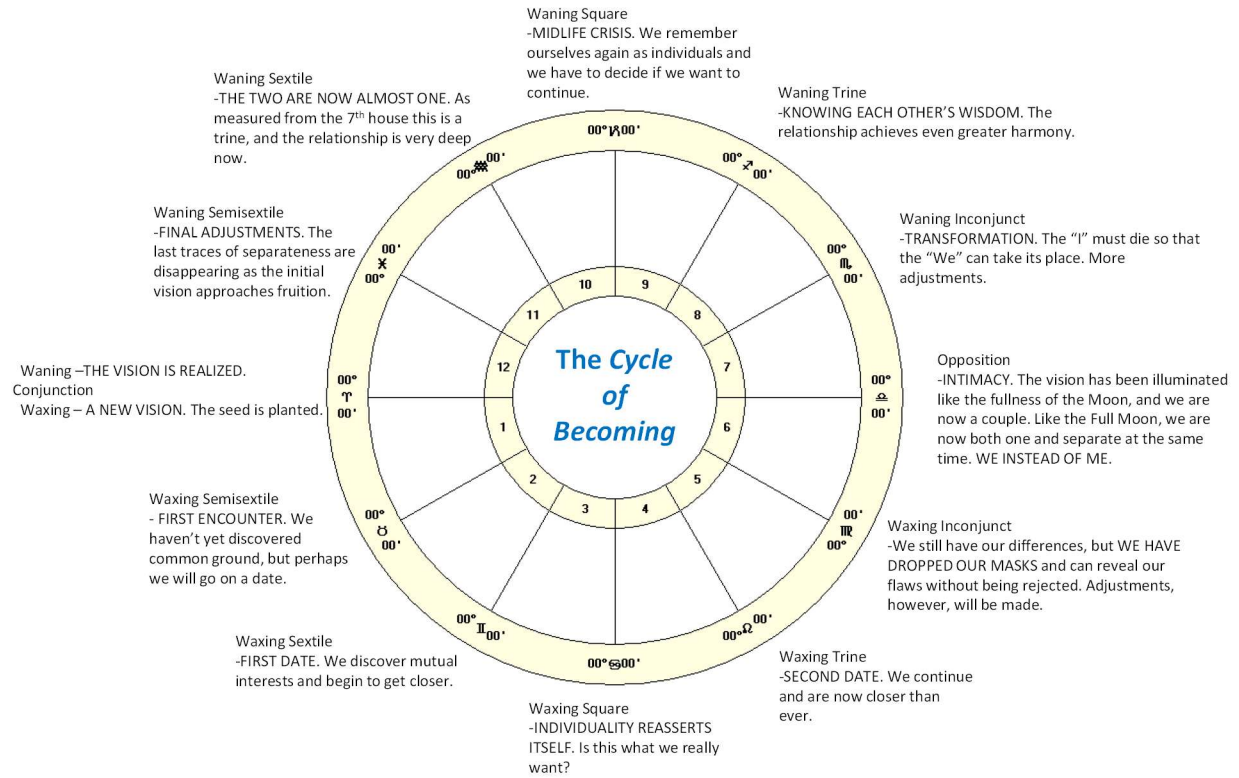


When we divide our circle into thirds and connect the dots, the result is an equilateral triangle which, unlike the square, is a very stable structure. This suggests that perhaps divisions of a cycle into thirds identifies points of stability within the overall structure. If we now divide each quarter of our cycle into

thirds, then will obtain something that looks like our usual blank horoscope of a circle divided into twelve sections that can equally contain 30 degrees each.



Thus, rather than trying to describe a cycle as binary with only two states such as off or on, it is more meaningful to focus on the nonbinary nature of a cycle as a process that goes through a variety of phases. We are breaking up our cycle into 12 equal parts or phases that are traversed from beginning to end, and we can associate these phases with the stages that a typical relationship, whether a friendship or a romance, might go through. Below we give descriptions of these phases and then we'll show how these phases relate to the corresponding aspect, house, and sign. Also, we start our zodiac at the traditional starting point of 0 degrees Aries.



Below now is a table that again details the primary stages of a relationship, and it shows how each of these stages winds up defining the meanings of the corresponding aspect, house, and sign.

| Angle | Aspect | Meaning | House | Sign |
|-------------|--------------------|--|---|--|
| 0 degrees | Conjunction | The relationship begins. All is but a vision, a small seed, at this point. | House 1 - The focus is squarely on the beginning. | Aries - The first sign of the zodiac assists the relationship with its energy. |
| 30 degrees | Waxing Semisextile | After the initial meeting, the two separate with intention to see each other again. | House 2 - The focus of this house is to maintain what was begun in the previous house. | Taurus - This sign is persevering, and the beginning of any relationship is assisted by perseverance. |
| 60 degrees | Waxing Sextile | The two come back together in greater harmony. | House 3 - The focus of this house is to analyze how the relationship is going and to make adjustments toward harmony. | Gemini - This sign assists the relationship through analysis of its progress followed by the necessary adjustments. |
| 90 degrees | Waxing Square | This point is both stable and unstable at the same time. It is stable in the sense that this is a station along the way that things will pause at for a while. But it is also unstable in the sense that tension exists at this point. This is the point at which one will have to decide to either pursue deeper harmony or to sever the relationship completely. Will the relationship continue or will it end? That is the decision that must be made here. | House 4 - This house represents our personal environment, and within this environment we have to set up a hierarchy of what's important to notice and what isn't. If the relationship isn't going to continue, then its importance will be reduced to zero. | Cancer - This sign assists this phase of the relationship by being more sensitive to its surroundings than most of the other signs of the zodiac. |
| 120 degrees | Waxing Trine | This is a point of maximum harmony in the relationship. | House 5 - This house facilitates harmony in the relationship by promoting pleasure, recreation, and personal creativity. It also maintains our perception of our personal environment by relieving stress. When we are overcome with stress, our ability to correctly perceive elements of our environment is impaired. | Leo - This sign puts the most focus on our self. How does this assist the harmony of the relationship? Because the closer we get to understanding who we really are, the more love and unity we will feel since our awareness is an undivided whole. By aligning with our real self, we are aligning with the source of our life and creativity. |
| 150 degrees | Waxing Inconjunct | The two are close enough that they can now be around each other without having to wear their masks. Additional adjustments, however, will likely have to be made before the culmination of the relationship. | House 6 - This house is traditionally associated with health and employment. In actuality, it is a feedback house for the first six. In this house, personal karma is met, corrections are made, and this usually takes work and may also involve some illness. | Virgo - This sign assists with this phase of the relationship through its attention to minutia and the details of any situation. By striving for perfect order, Virgo sets the stage for the final flowering. Also, since Virgo is ruled by Mercury, this suggests that at this point the adjustments have to be made by the verbal, left hemisphere of the brain. |

| Angle | Aspect | Meaning | House | Sign |
|-------------|-------------------|---|--|--|
| 180 degrees | Opposition | Like the Full Moon in the Lunar cycle, the opposition represents the peak of the relationship. At this point both the union and the individuality are experienced with equal force. The other and the self are being integrated to form the "we." | House 7 - This is traditionally the house of marriage and partnerships, and this facilitates the integration of opposites that the opposition wants to achieve. | Libra - This sign is ruled by Venus, and it is social and seeks harmonious relationships with others. This form of expression facilitates the goal of the opposition. |
| 210 degrees | Waning Inconjunct | At the waning inconjunct, the opposition has been experienced and passed, and now the focus is on maintaining the "we." | House 8 - This is traditionally the house of death and transformation. However, it is also the second house when counting from the seventh, and so it works to maintain the union that flowered at the opposition. To maintain the union, however, the ego and the sense of separateness from the other must die and be transformed. This is how House 8 assists this stage of the relationship. Also, since the eighth house is the second from the seventh, it rules the resources needed by the relationship. | Scorpio - This sign is introverted and feeling-oriented, and it is ruled by Pluto. This means that Scorpio has very strong emotions and feelings, and it is this sort of strength of attachment that is needed in order to convince the self to abandon separateness in favor of union. Additionally, because of the strong emotions and feelings that are involved at this point of the relationship, any adjustments to be made will be more right brain than left brain. More related to feelings than verbal thoughts. |
| 240 degrees | Waning Trine | At the waning trine the two are now one as they reside in great harmony. | House 9 - The ninth house traditionally rules religion, higher learning, and long distance traveling. These are all activities that expand our perspective. Also, the ninth house is the third from the seventh, and as such it represents the group mind or the mind of the other. This suggests that in order to have a strong relationship we must not only know ourselves, we must also deeply know the other person. | Sagittarius - This sign is ruled by Jupiter, and, thus, it is all about growth and expansion. It is also extroverted and feeling oriented, and its exuberance facilitates this phase of the relationship. |
| 270 degrees | Waning Square | At the waning square, individuality reasserts itself one more time. Perhaps it is a midlife crisis. Perhaps the union was never meant to be after all. However, if this last crisis is successfully traversed, then the union will be headed toward its final completion. | House 10 - Houses 4 & 10 both create crises for the relationship because attention is being directed to other things, either the personal environment or the social environment. Consequently, in these houses there is a danger of being pulled away from the relationship into something else. However, a balance between competing interests can always be found. | Capricorn - This sign is an earth sign (introverted-thinking), and it is ruled by Saturn which seeks to control and regulate things. This personality type seeks to control the social environment as represented by the tenth house, and through control one can increase one's status. However, such inclinations towards control can also facilitate a crisis in the relationship. |

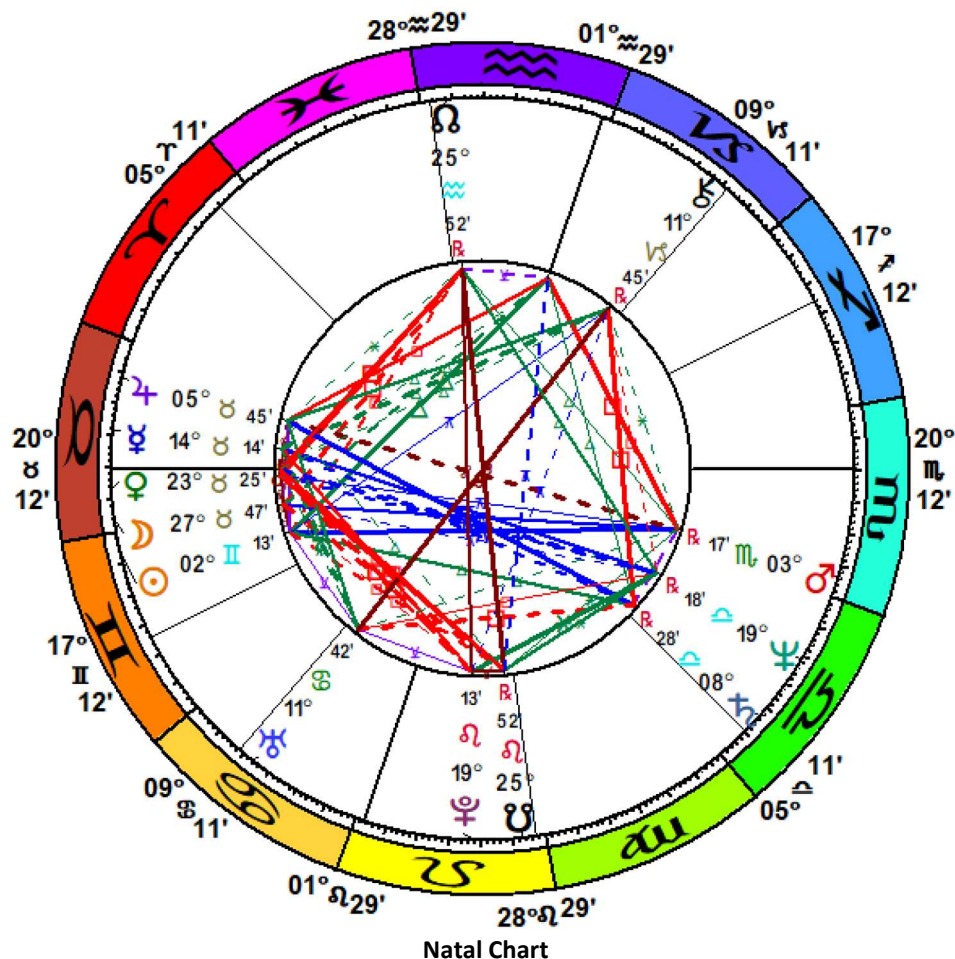
| Angle | Aspect | Meaning | House | Sign |
|-------------|--------------------|---|--|---|
| 300 degrees | Waning Sextile | The waning sextile is also a waxing trine when measured from the seventh house. This is a point at which midlife crises have been successfully maneuvered, and the union is stronger than ever. | House 11 - Traditionally, this is the house of friends, hopes, and ambitions. It is actually a house that is associated with group activities and group creativity, and this also suggests that we can create great harmony in society if we only work together. | Aquarius - This sign is opposite Leo which is focused primarily on the self. Hence, as its opposite, Aquarius is focused more on the collective rather than the individual, and this focus on the collective fosters the sense of "we" that is now very strong in the relationship. |
| 330 degrees | Waning Semisextile | The waning semisextile is the last station before the completion of the cycle. At this point everything is being left behind that does not conform to the perfect union. | House 12 - Traditionally known as the house of self-undoing and hidden enemies, the twelfth house is really about a withdrawal from manifestation as the cycle nears completion. Every cycle we undergo is about learning something, and once the task is complete, the knowledge remains, but the vehicle can be jettisoned. House 12 is also the sixth as measured from House 7, and so it speaks to those minor adjustments that must be made in order to complete the original vision. | Pisces - This sign is ruled by Neptune which dissolves the boundaries that define many of our perceptions. This facilitates the withdrawal from action that occurs as the task is completed. |

Following the waning semisextile is the final conjunction, and this is the completion of our cycle. The knowledge that was sought has been obtained, and a new cycle can now begin. However, one of the very important points of the above was to illustrate how the aspects, the houses, and the signs of the zodiac all correspond to and facilitate the different stages of the relationship as they unfold in the cycle. Hence, instead of thinking of the zodiac as corresponding to constellations and points in space, we can think of it as being defined by points in time. Also, by decoupling the zodiac from the constellations and showing that a zodiac is implied by every cycle, we are greatly extending the range of events that may be understood by this process. Pay attention to this because this is a very important point – every cycle is characterized by phases similar to the ones that we have described above, and, thus, every cycle defines a zodiac!

Our theory of the phases of a cycle that we have presented here is not unique to us. It builds upon earlier work of both the late 20th century astrologer Dane Rudhyar and of astrologer Michael Erlewine who was the first person to create a computer program for computing a horoscope. Rudhyar describes in his book “Astrological Aspects: A Process Oriented Approach” the twelve phases of a relationship that we’ve presented above as (1) being, (2) focusing, (3) organizing, (4) deciding, (5) expressing, (6) improving, (7) realizing, (8) sharing, (9) understanding, (10) revaluing, (11) reorganizing, and (12) releasing. These same relationships are described by Michael Erlewine in his book “Astrology’s Mirror: Full Phase Aspects” as (1) impulse, (2) planning, (3) embrace, (4) start, (5) embody, (6) extend, (7) experience, (8) know, (9) conserve, (10) detach, (11) trim, and (12) capsulate. Both Rudhyar and Erlewine, in my opinion, provide valuable reflections upon the real meanings behind the stages of any cycle.

THE ART OF INTERPRETATION

Even with a fairly coherent theory of astrology, giving a good interpretation of a horoscope can be quite a feat. The challenge is to find within the chart those things that uniquely characterize that person. Additionally, one should guard against being too broad when interpreting. In other words, a single square between two planets is unlikely to be the cause of every problem a person experiences in their lifetime. Make sure there is a clear astrological path between what you see in the chart and how you believe it is affecting the person in reality! Also, while most people may simply want to know about love, money, and profession, those questions pale in importance when compared to queries that are designed to reveal who we are, what our mission is in this lifetime, what our strengths are, what are challenges are, and how can we succeed in our mission. In what follows below I'll give a brief overview of my own horoscope as well as an introduction to my heliocentric chart. The usual horoscope that people look at is called a geocentric chart since it is drawn with the Earth at the center and the other planets orbiting around it. In a heliocentric chart the Sun is placed at the center with the planets orbiting it, and the feeling is that the geocentric chart is more about our karma and earthly persona while the heliocentric chart, sometimes called the dharma chart, is about our goals and mission at higher soul level that lies beyond our current incarnation. And when interpreted from this perspective, it seems to ring true. But let's begin with my geocentric natal chart!



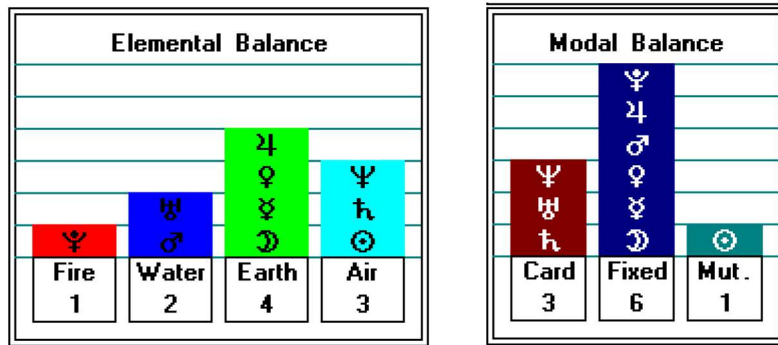
Normally when interpreting a birth chart, I begin with the Sun and then go on to the Moon and rising sign, and then I look at aspects, signs, and houses, and gradually fill in more details. For this quick reading, however, I'll do something a little different. I'm going to try and pick 10 things that define who I am and show how they may be found within my horoscope by using the interpretations from the previous chapter. Let's begin!

1. I am, as I would call it, self-contained. I am rather private in many ways, and I am very comfortable with just me, myself, and I.

My most personal planets (Sun, Moon, Mercury, and Venus) are in the 1st and 12th houses clustered around the Ascendant. This automatically puts the chart's focus on oneself, and with Mercury and Jupiter in the 12th house, I am very comfortable with the company of just my own thoughts. Also, since Pluto rules my 7th house of relationships and since Pluto is in my 4th house squaring my Ascendant and most of my 1st and 12th house planets, that also tends to isolate me. Additionally, the 11th house of friends has Aries on the cusp, and its ruler Mars is in the 6th house in opposition to Jupiter. Since Jupiter is more prominently placed among my personal planets, the aggression and activity of Mars tends to often be suppressed in favor of more meditative and mentally expansive activities. However, in my chart, distance from these things also distances me from friendships. However, most of those friendships I've had as an adult have been related to either work (6th house) or occasional group endeavors (11th house) in the social environment. I also have a lot of friends from the time in my youth when I was a dancer (Mars in 6th house ruling Aries on the cusp of the 11th house).

2. I am both very grounded and very persevering, and I am more likely to work to support and improve the initiatives of others than I am to initiate things myself. I'm also predominantly thinking oriented, and I stick with people for years and years.

With Moon, Mercury, Venus, and Jupiter in Taurus and Taurus rising, this will be apparent to anyone versed in astrology. Taurus is a fixed, earth sign, and its abundance within me makes me extremely persevering and extremely grounded and stable. I may not be the first to finish a race, but I will also continue until I do and anyone I accept as a friend is probably a friend for life. Additionally, look below at the elemental and modal balance within my chart. Most of my planets are in earth and air signs, and that makes me more thinking-oriented as opposed to feeling-oriented. Similarly, I have 6 planets in fixed signs, 3 in cardinal signs, and 1 in mutable signs. I always say that in any work environment there are those who want to initiate things and start new programs even if there is nothing wrong with the old programs. The people who want to do that are the cardinal sign people. That is their nature. However, I am primarily a fixed sign person, and that means that my mission is to preserve and maintain what is already there. Thus, I function best as a support person. Also, while I do have 3 planets in cardinal signs and only 1 in a mutable sign, that one planet is the Sun in Gemini, and that makes my mutable Gemini influence (abstract thought, flexible intellect) all the more important and it gives me the ability to quickly identify patterns and adjust things as needed. In contrast to this, the three cardinal planets (Saturn, Uranus, and Neptune) are less personal in nature.



- Family life was very difficult for me as I was growing up, and I had several lessons to learn before I finally got married.

Pluto in the 4th house is strongly squaring my Ascendant and my Moon, Mercury, and Venus. The 4th house rules the family environment, and Pluto also rules my 7th house of marriage and partnership relationships. Consequently, my childhood was very difficult in many ways, and there were many lessons to be learned before I was fit to be married to anyone. Furthermore, this is another push towards isolation.

- One of my greatest strengths is my intellectual creativity.

Our horoscope shows us both our strengths and our challenges. For me, intellectual creativity has emerged as one of my greatest strengths. This is seen in my chart where Uranus is conjunct the cusp of my 3rd house (the mind) in Cancer and fairly strongly aspects my Mercury (2 degrees, 32 minutes from exact). Furthermore, since Cancer is 60 degrees away from Taurus, there is a general sextile by sign between Uranus and Moon, Mercury, Venus, Jupiter, and Ascendant, and since the 3rd house has a natural correspondence with Gemini, the creativity of Uranus also resonates with my Sun sign.

- I am at heart a kind person, and my kindness is much stronger than my aggression.

Since Venus is only 3 degrees, 12 minutes, away from my Ascendant, I have a strong desire to pursue peace and reduce tension. Mars, on the other hand, is in opposition to my Jupiter, and since Jupiter is more prominently placed with my personal planets, aggression tends to be suppressed, and while there are some things in my chart that pushed me as a youth towards dance and athleticism, in the long run it was expansion (Jupiter) of the mind that prevailed. Also, the planet Mercury is at the midpoint between Jupiter and Venus, and as I'll discuss in another chapter, this imbues my mind with an even greater desire for growth and harmony.

- I have good powers of concentration and self-discipline.

Natal Saturn trines my Sun, and is 6 degrees, 15 minutes, from exact. It's not the strongest trine

but it's also not the weakest and it is applying rather than separating. Since it is trine my Sun, I see focus and discipline as an integral part of who I am. Furthermore, since my Sun is in Gemini, this specifically enhances my mental abilities, and since Saturn is in the 6th house, my powers of control will be used in service to others. Since Saturn also rules my 9th house which represents higher education and the collective wisdom of humankind, it's no wonder that I got a PhD in mathematics and then chose community college teaching for a career so that I could give back to as many people as possible.

7. I am outraged by social injustice and feel a personal obligation to intervene.

In my horoscope I have Uranus square Saturn, and it is fairly strong as it is only 3 degrees, 14 minutes, from exact. Uranus is creative, but it does so by disrupting things, and with Uranus in Cancer (feelings) in the 3rd house (the mind), it is emotions and feelings that will be disrupted. Meanwhile, Saturn is in Libra (harmony) where it often manifests as justice (Saturn) seeking balance (Libra), and the 6th house is all about making adjustments. Consequently, all my life I have experienced outrage upon witnessing injustice, and I've often felt a personal responsibility to respond to it.

8. In spite of my self-isolation, all my life I've just wanted to have a friend.

It is said that the North Node of the Moon represents desires that we were not finished with in our past life and things that we are hungry for in this one. In my case, my North Node is conjunct the cusp of my 11th house, and this seems to reflect my lifelong hunger for a friend. When I was about 4-years old, my family moved to a new town, and we initially lived in an old rent house in a neighborhood with old oak trees and plenty of kids to play with. It was a healthy paradise for me! However, it wasn't too long until my father found a place to buy in a neighborhood with few trees and few kids, and I keenly felt that loss of companionship. That sense of loss and the desire to overcome it has been a prominent theme in my life.

9. It has always been important to me to be creative.

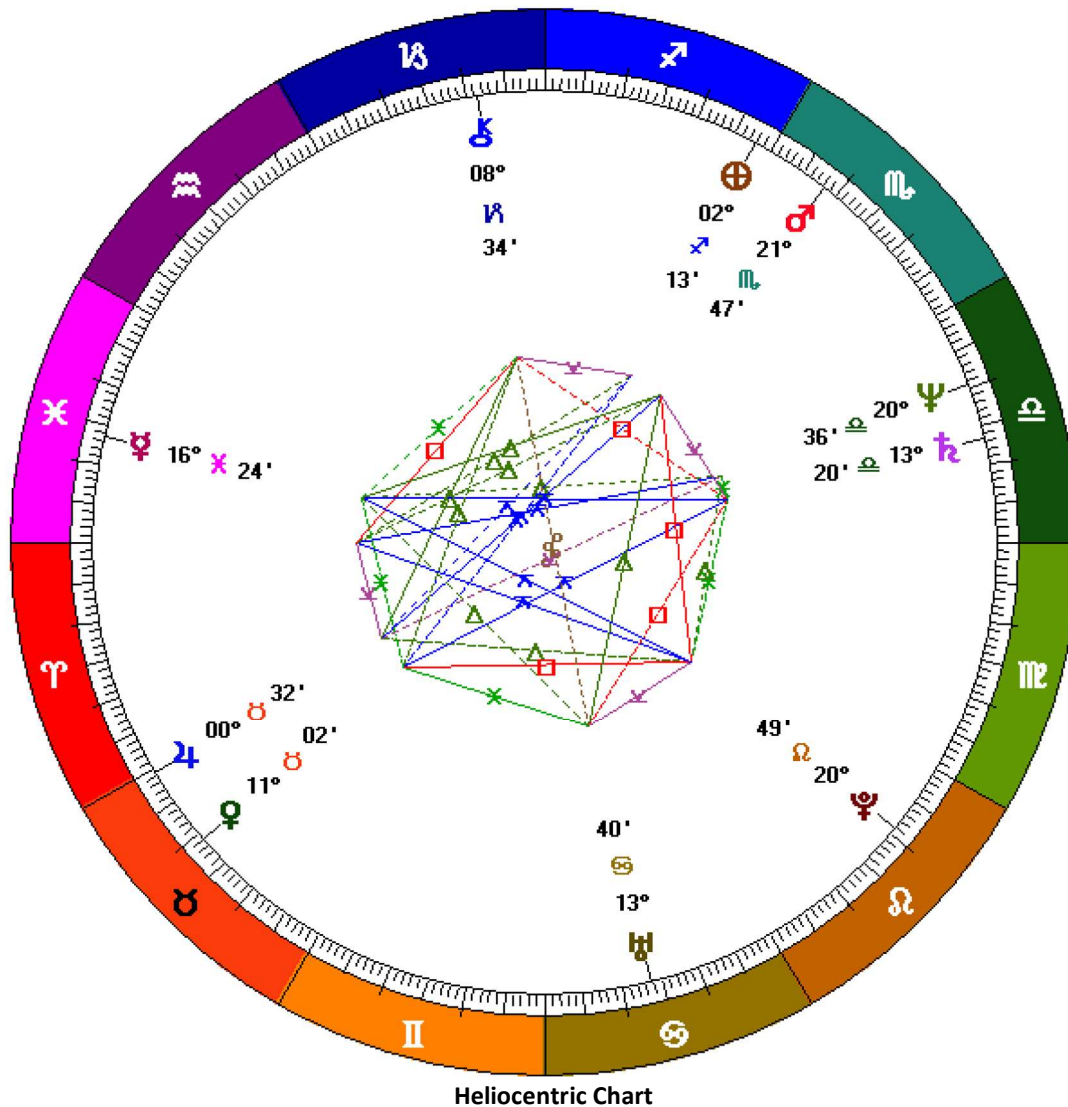
Whenever the Moon's Nodes interact with other elements of the horoscope, those elements become energized and elevated. In my case, the Nodes are conjunct my 5th and 11th houses with the former representing personal creativity and the latter corresponding to group creativity. Hence, I have a heightened need to create. However, in light of the rest of my horoscope, most of that creativity is mental in nature.

10. My whole life has been a quest for transcendence.

It is generally believed that the closer an aspect is to exact, the more powerful it will be. In my case, the closest aspect in my chart is Chiron in opposition to Uranus. This aspect is only 2 to 3 minutes away from being exact. Uranus in Cancer in my 3rd house represents a creative mind that feels things as easily as it thinks about them, and Chiron in Capricorn in the 9th house represents the old, spiritual wisdom of humankind. In particular, Chiron seeks to move one from

the personal to the transpersonal, and with every spiritual leap I've made, I've noticed that Chiron has been involved. The opposition is always about the integration and assimilation of the opposite poles, and consequently, my entire life has focused on my spiritual quest. Also, notice in my natal chart how Chiron is on one side while all the other planets are on the other side. This further amplifies the importance of Chiron as it is, in a sense, responsible for that entire other half of the chart. This is what astrology suggests, and that is how my life has been – a quest that can only end in enlightenment and the realization that enlightenment is both more and less than what most people think it is.

In addition to the usual geocentric natal chart, some astrologers also look at the heliocentric chart which looks at things from the perspective of the Sun being at the center. The belief is that the heliocentric chart reveals aspects of who we are that transcend personality and the usual earthly concerns. The heliocentric chart tells a person who they were before taking on human form and what their orientation is at a level that transcends earthly existence. Thus, let's take a look at my heliocentric chart!



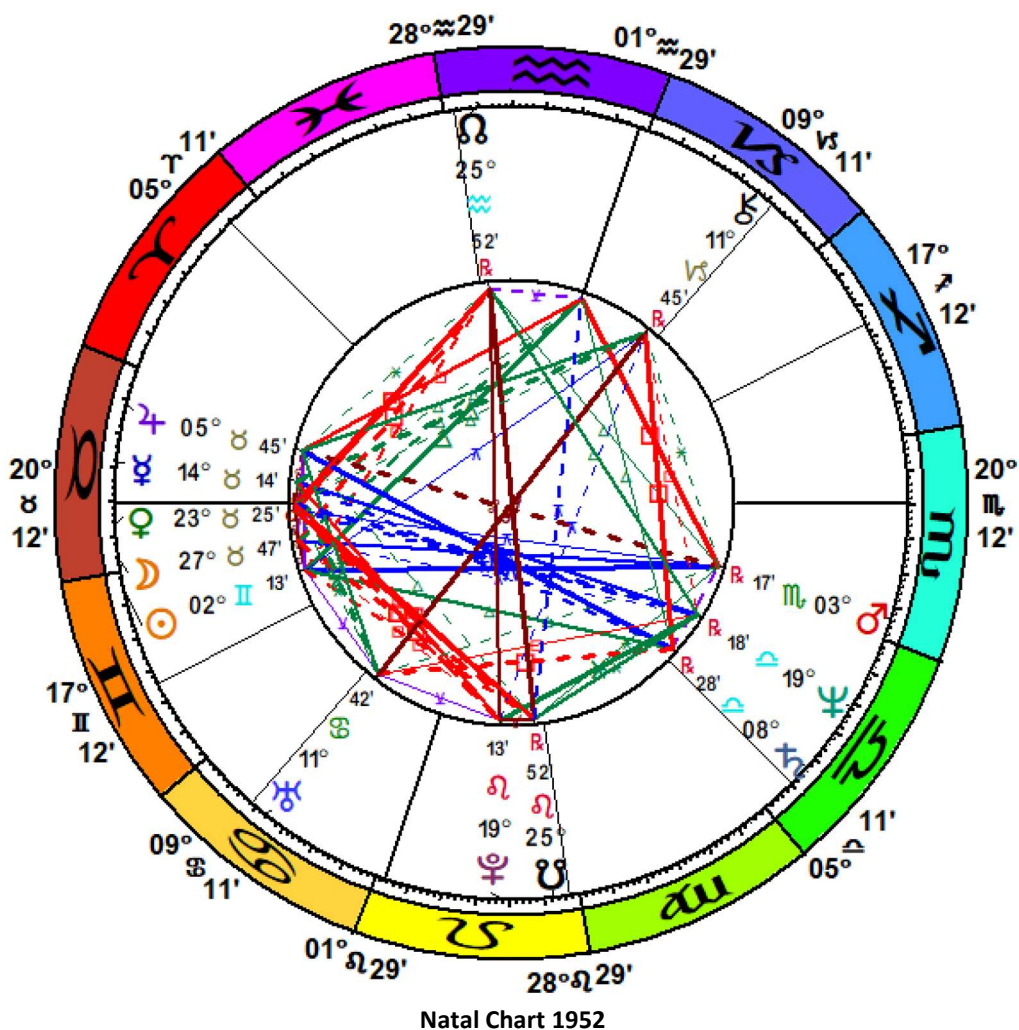
First, notice that this chart contains a grand trine between Mercury (mind), Mars (energy), and Uranus (creativity) in water signs (feelings). This shows once again that I come into this life bearing a very strong and creative mind. Additionally, because these planets are in water signs I am aware of the feeling tone that lies behind things in this world. Notice, too, that the planets in my heliocentric chart are more scattered around the wheel than they are in my geocentric chart. This reflects that while outwardly I am often a hermit (planets clustered around the 12th and 1st houses), within I am constantly connecting my mind with others in order to see how they are doing and what they need. Also, the chart pattern in the heliocentric chart appears to be well integrated with planets being connected by both good and bad aspects in a way that creates an energetic dynamism. There is also the opposition of Uranus to Chiron appearing in this chart as well as my natal, and that reinforces the prominence of the spiritual quest in my life. And lastly, the two closest conjunctions are between Jupiter and Venus and between Saturn and Neptune. The former represents the kindness that is also promised by my geocentric chart, and the latter is a blend of discipline with certain higher states of consciousness and will be explored in additional detail in another chapter. Nonetheless, I hope these examples illustrate some of the information that can be culled from both the geocentric and heliocentric versions of a horoscope.

BACK TO THE FUTURE!

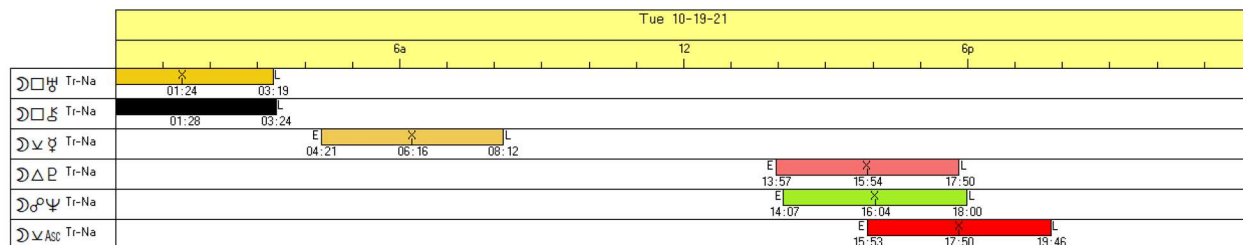
People always want to know their future. That's just human nature, and Western astrology provides a lot of tools to aid in this quest. However, let me also say that in astrology we don't (or shouldn't) really predict the future for people. We just give a weather report, and then it's up to the individual to decide what they are going to do with it.

Transits

The most common method of prediction used in Western astrology is planetary transits. This is where we compare the current positions of the planets with their positions in the natal chart, and when we see good aspects like trines and sextiles we know things will be easy, and when we see difficult aspects like squares and oppositions we know there will be some challenges. Below is my natal chart along with some information on my current transits. Also, to make things easier, I'll look at transits over several time periods.

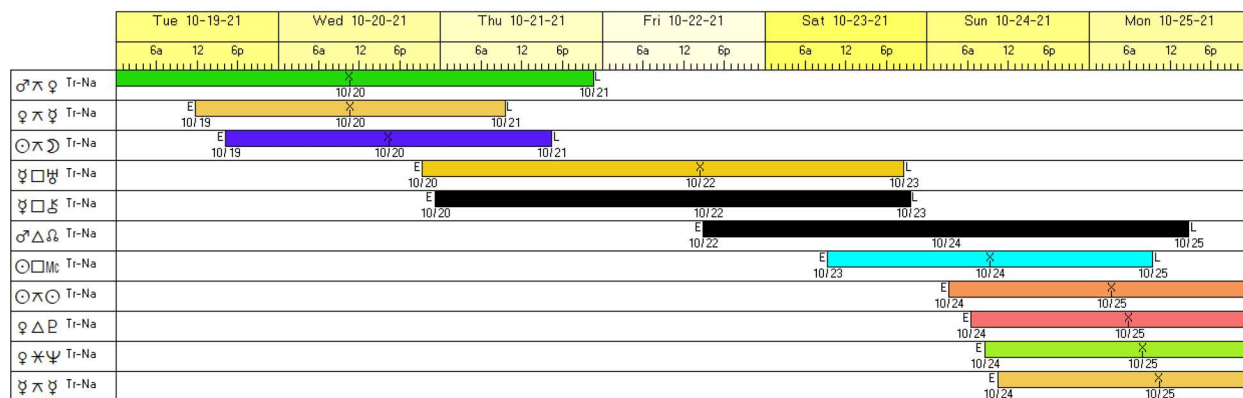


When it comes to transits, I often begin by looking at transits for just a single day. This usually contains just transits by the Moon, and those are usually very fleeting and too weak for me to notice. Nonetheless, I like to look at them anyway to be more in tune with the rhythms of the universe.



daily transits

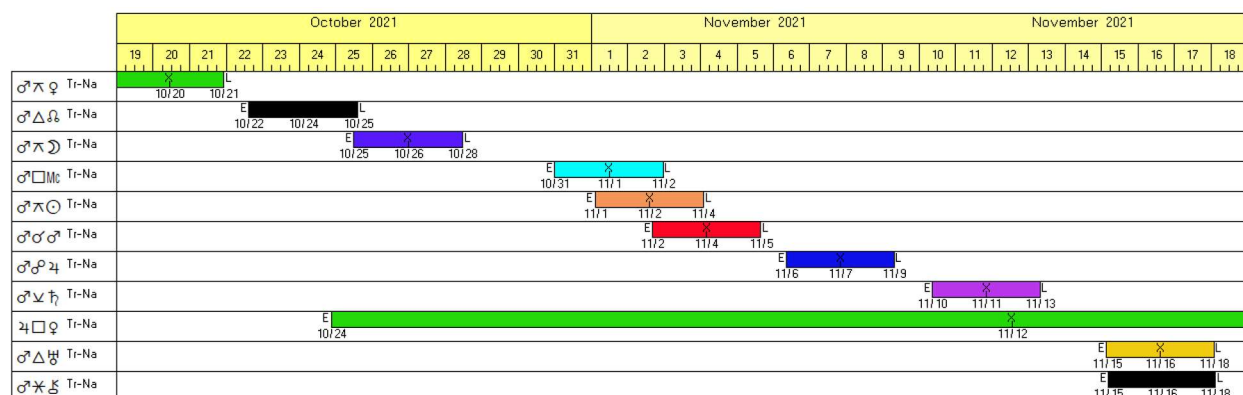
In my transits for today I start with Moon square Uranus and Chiron. One should always be aware of the relationship between the planets in the natal chart because that is the primary reference point for everything else. In my case I have Uranus in a very, very tight opposition to Chiron, and that aspect delineates the spiritual quest I've been on my entire life. Thus, an aspect like this square from the Moon could trigger some higher states of consciousness, but without other supporting aspects it is nothing that would be very strong. Also, these aspects were exact while I was still asleep. Next, about the time I woke up, transiting Moon was semisextile Mercury. The semisextile is mildly positive, so again there's not much to see here. Later in the afternoon I have transiting Moon trine Pluto and in opposition to Neptune. Since Pluto rules my 7th house of marriage, I'm looking forward to a pleasant afternoon with my wife. As for the opposition to Neptune, my awareness will probably expand a bit on its own accord today. And since these lunar aspects are so fleeting, I don't usually get too worked up about negative ones. The final aspect of the day, though, is transiting Moon semisextile Ascendant, and that, too, is a mildly positive aspect. All in all, the mood of the day looks pretty good, and I'm going to enjoy talking and watching TV with my wife this afternoon.



Weekly Transits

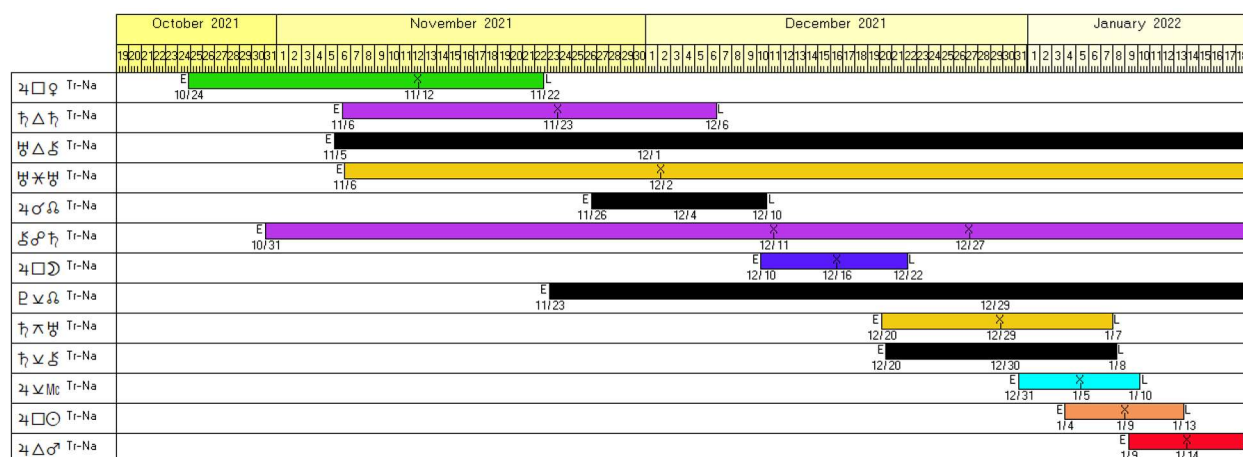
After looking at my transits for the day, I usually expand the time period to a week, and this is where my program (Time Search by Matrix) switches from the Moon to mainly Sun, Mercury, and Venus. Also, I can see in the chart above that my week begins with three inconjuncts. I don't usually worry too much about

those aspects. The inconjunct is like an old couple that is comfortable enough with each other to sit around in curlers for her and old underwear for him. The waxing inconjunct may require some intellectual adjustments to be made, and the waning inconjunct may require emotional adjustments since these aspects are also connected with Libra (air sign) and Scorpio (water sign), but aside from that I don't usually find the inconjunct too difficult. Following the inconjunct, though, is a square to natal Uranus and Chiron from Mercury. This is not a long lasting aspect, but it is important for me because I've had transiting Uranus conjunct Mercury for several months now and transiting Chiron has been square my Uranus/Chiron opposition in my birth chart, and as I've indicated previously, this opposition has a lot to do with my spiritual quest, and I experienced a few days of higher consciousness and spiritual epiphanies the last time that transiting Mercury was squaring Uranus and Chiron. Something pleasant to look forward to at the end of the week! Following this aspect is one that has transiting Mars trine the North Node. Since my North Node affects both my 10th house of honors and my 11th house of friends, something nice may happen in those areas this week. However, keep in mind that we are still looking at the faster moving planets, and that means that either these aspects won't last very long, or they will simply act as triggers for some longer lasting, more serious aspect. I also have Sun square Midheaven, but I'm not particularly worried about that one even though it could counter the trine to the North Node. I also see a couple of additional inconjuncts (Sun/Sun and Mercury/Mercury) that I will note but not worry about. At the end of this period on Sunday and Monday, transiting Venus will be trine my Pluto and sextile Neptune, and those should be very pleasant days for spending even more time with my wife. All in all, the weekly transits are more important than the daily lunar ones, but they will still usually be fleeting and not overly powerful. Nonetheless, they will sometimes make the difference between a good day and a challenging day.



Monthly Transits

The monthly transits are usually just about Mars, and I typically pay attention mostly to any negative transits I see since those are times when I might be more prone to anger or accidents. For example, I see that transiting Mars will be conjunct natal Mars and in opposition to natal Jupiter from about 11/2/2021 to 11/13/2021. Since Jupiter rules my 8th house of death, I don't want to take any chances! Thus, I'll probably just take it easy those days and try not to let anything upset me or make me act impulsively. There is also a square from transiting Jupiter to Venus for most of the month, but this never seems to bother me much. The action of Jupiter is to expand or magnify things, and magnifying my Venus has never worked out badly. And finally, from 11/15/2021 to 11/18/2021 transiting Mars will be trine Uranus and sextile Chiron. That will stimulate my enlightenment in enjoyable ways!



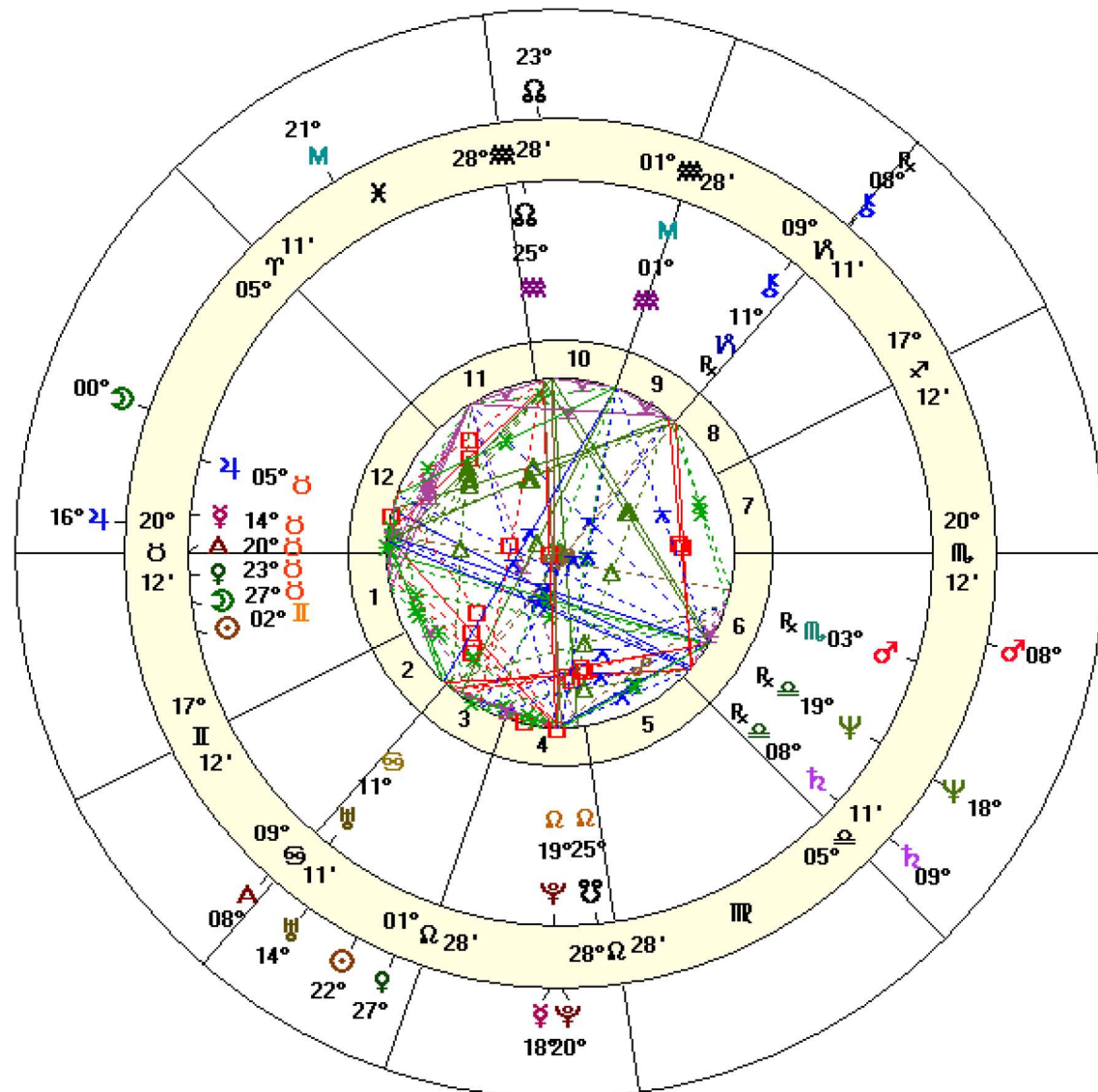
Three Month Transits

This three month overview of transits usually involves the slower moving planets, and these transits make a bigger impact on things. For much of this period, transiting Uranus will be trine my natal Chiron and sextile my natal Uranus, and that will just continue the creativity and enlightenment that I've been experiencing for several months. From 11/26/2021 to 12/10/2021 transiting Jupiter will be conjunct natal North Node, and that could positively impact my status in society and/or group collaborations since the North Node affects both the 10th and 11th houses in my birth chart. Also noteworthy is the opposition from transiting Chiron to Saturn that will be in play for most of the month. This aspect can urge one to take concrete steps towards enlightenment and adjusting one's perspective. Again, I'm not worried about the inconjuncts, and the squares from Jupiter are just reminders not to let anything get out of hand. And as for any remaining sextiles or trines, I typically just note the planets and houses involved and then enjoy them. All in all, there are no serious, long-lasting transits in my chart right now, but this is not always the case. Sometimes something is going on that will cause difficulties for a person for months at a time, and that's what the transits over a longer time period will show one.

Progressions

Next to transits, some people will use what are called "secondary progressions" to divine the future. This method is based upon a formula that each day after birth corresponds to one year of life. On the one hand, such a formula seems to be based on an understanding that the effects of trauma or any strong experience will unfold over time. Thus, the impact from being born unfolds over a lifetime. However, there is another explanation as to why such a formula (1 day = 1 year) might work, and that is because, based upon our discussion of "The Cycle of Becoming," all cycles are structurally the same. All cycles embody the same phases as, for example, the monthly lunar cycle – beginnings, first quarter, the flowering at full moon, the waning quarter, and the ending of the cycle. At one level, all cycles are the same, and, thus, one cycle may be substituted for another when the cycles appear so connected. However, for all things in astrology the proof is always in the pudding, and so the big question is does this work? Does the daily cycle mirror the yearly cycle? In practice, I and others find that this works, but I also find that its scope is limited. This is because the outer planets move so slowly that they are not really signs of change in this method. Instead, one is left with only the faster moving inner planets, but even so they make an impact only when within one degree of orb of the aspected planet, and that doesn't happen all that often.

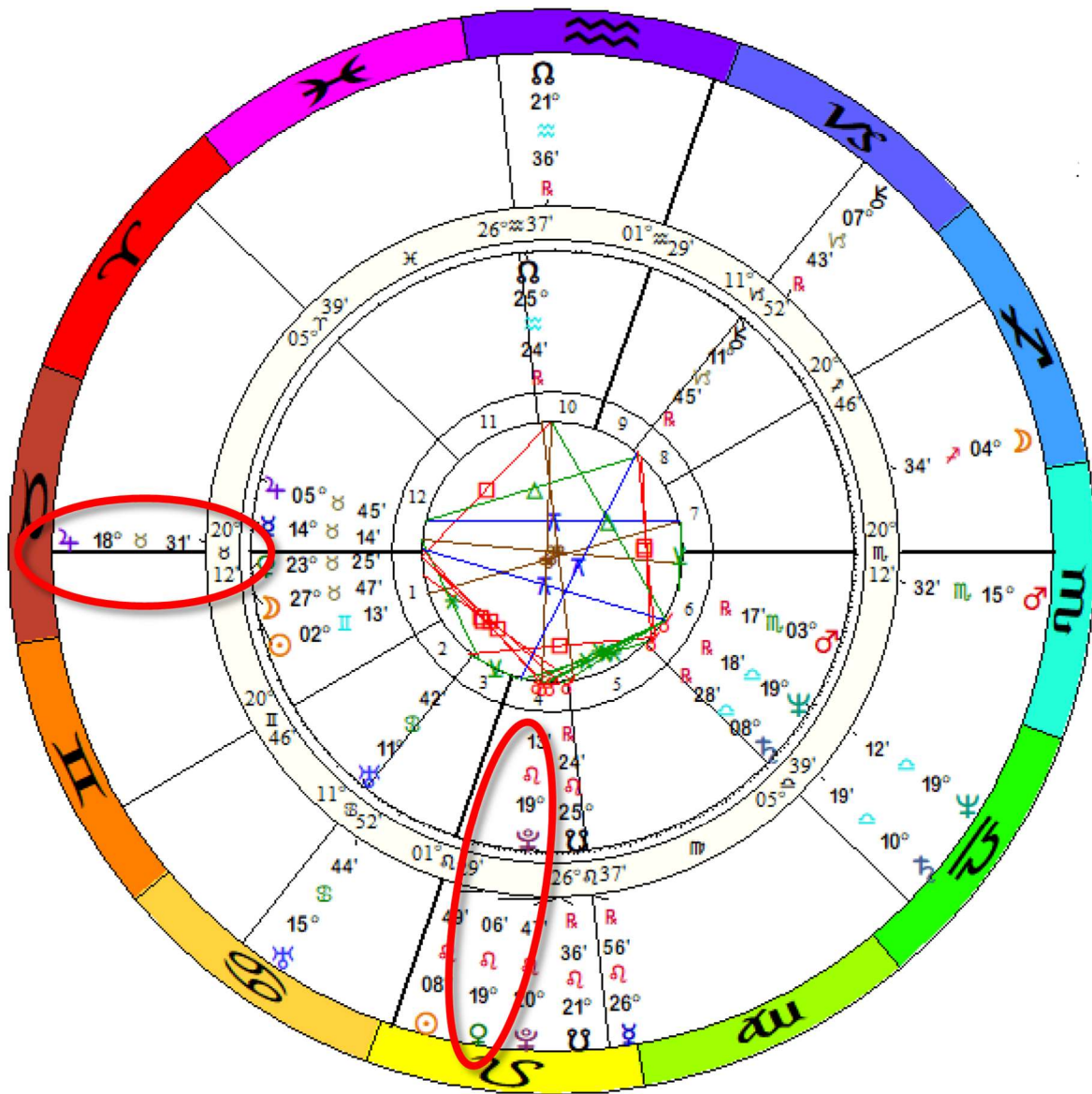
However, when it does, the influence is usually over the period of a year or two, and that also makes it more difficult to time events. Nonetheless, when it happens, its impact is often undeniable. In the biwheel below, my birth chart is the inner chart while the outer wheel shows my secondary progressions in Fall 2004. Progressed Venus at 27 degrees Cancer is sextile my natal Moon, and progressed Sun at 22 degrees Cancer is making an applying sextile to my natal Venus. The end result? I got engaged that year to a woman I loved but hadn't seen in over twenty years, and life has been blissful ever since!



Progressed Chart 2004

In my current progressed chart, progressed Venus is almost conjunct my natal Pluto. Normally, this might represent trauma (Pluto), particularly since Pluto in Leo squares so many of my planets in Taurus. However, as an old man, I have worked through and resolved many of the issues that I had to deal with when younger. Hence, this aspect is now more likely to manifest in a positive way, and since Pluto rules my 7th house of marriage, I am looking forward to being closer to my wife than ever. Additionally,

progressed Jupiter will move into conjunction with my Ascendant in a few years, and so it looks like good times lie ahead!

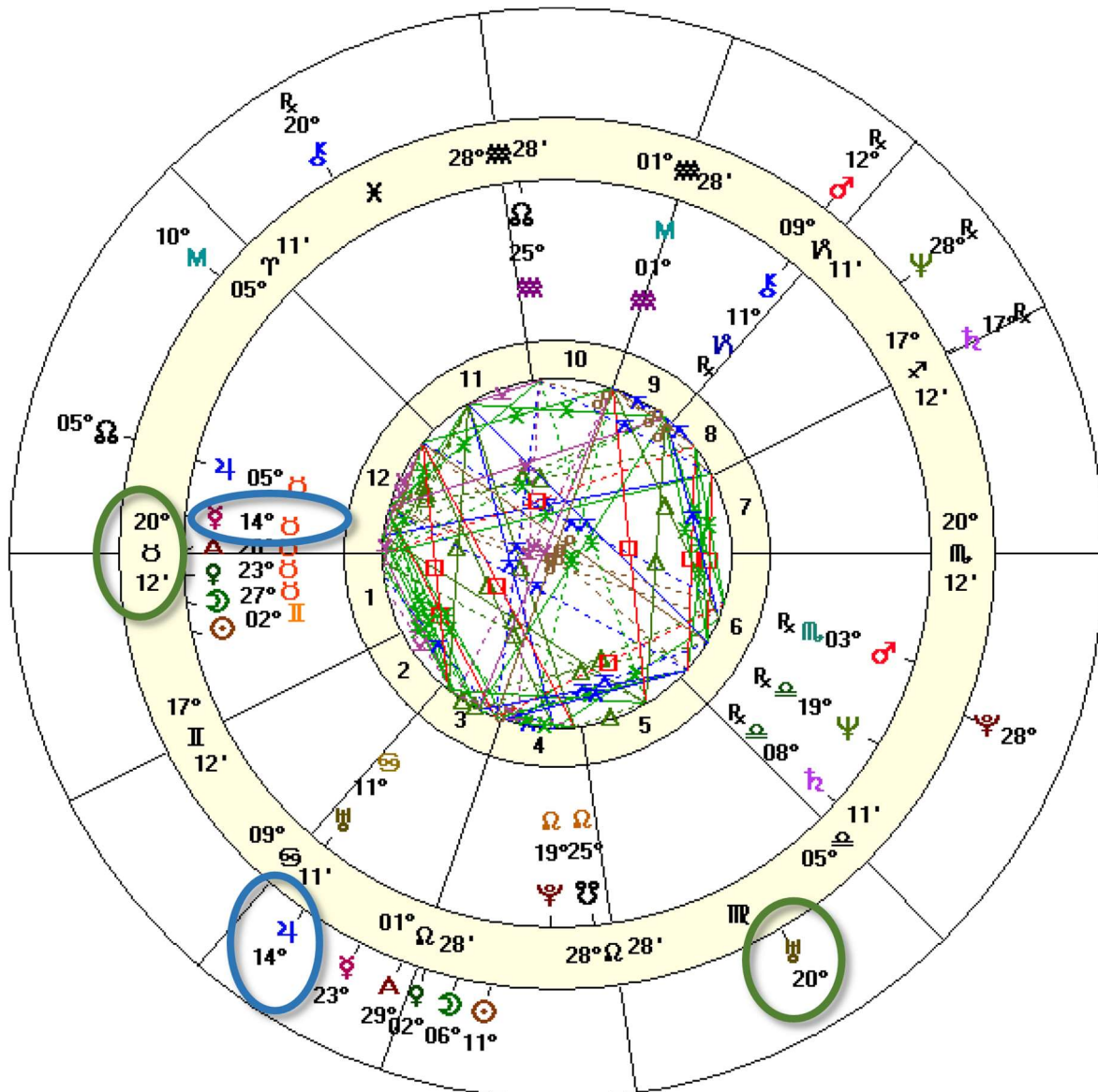


Current Progressions

Solar Arc Directions

Few people seem to use solar arc directions these days even though the late astrologer Noel Tyl regularly described it as the most reliable method of prognostication known to astrology. However, I have been using it more of late, and I have a new found respect for it. Like progressions, it seems to set the tone for a period of time, but unlike progressions, the outer planets come into play just as often as the inner planets. The methodology behind solar arc directions is to first progress the Sun exactly as one does in secondary progressions. Next, one adds to the other planets the same degree of arc that has been added to the Sun. Thus, if the Sun has moved 30 degrees since birth, then all the other planets are similarly

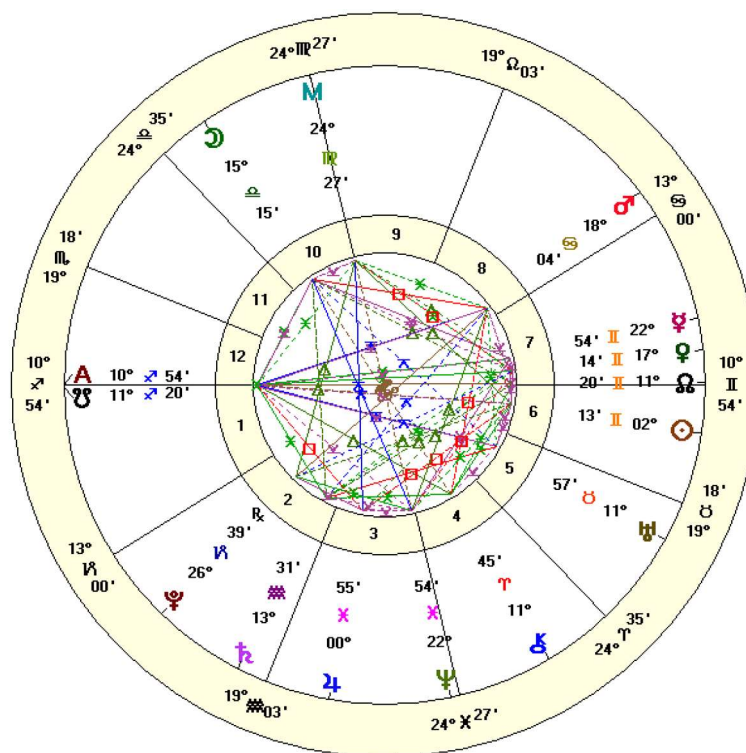
advanced by 30 degrees. As a result, it is like taking your entire birth chart and rotating the entire thing a given number of degrees based upon your current age. Consequently, this method reflects the impact that all the planetary relationships make upon one at birth by keeping all of these angular relationships in tact as the chart is progressed. This also means that all the planets in the chart progress at the same rate (roughly, one degree per year), and this results in the effects of each planet lasting for the same amount of time. In this way, an aspect from a faster moving planet like Venus can be just as powerful as an aspect from a slow moving planet like Pluto. Below is a biwheel showing my solar arc directions for fall of 2024. In this chart, Jupiter is sextile my natal Mercury and Uranus is trine my Ascendant. Good, creative, intellectual times are ahead!

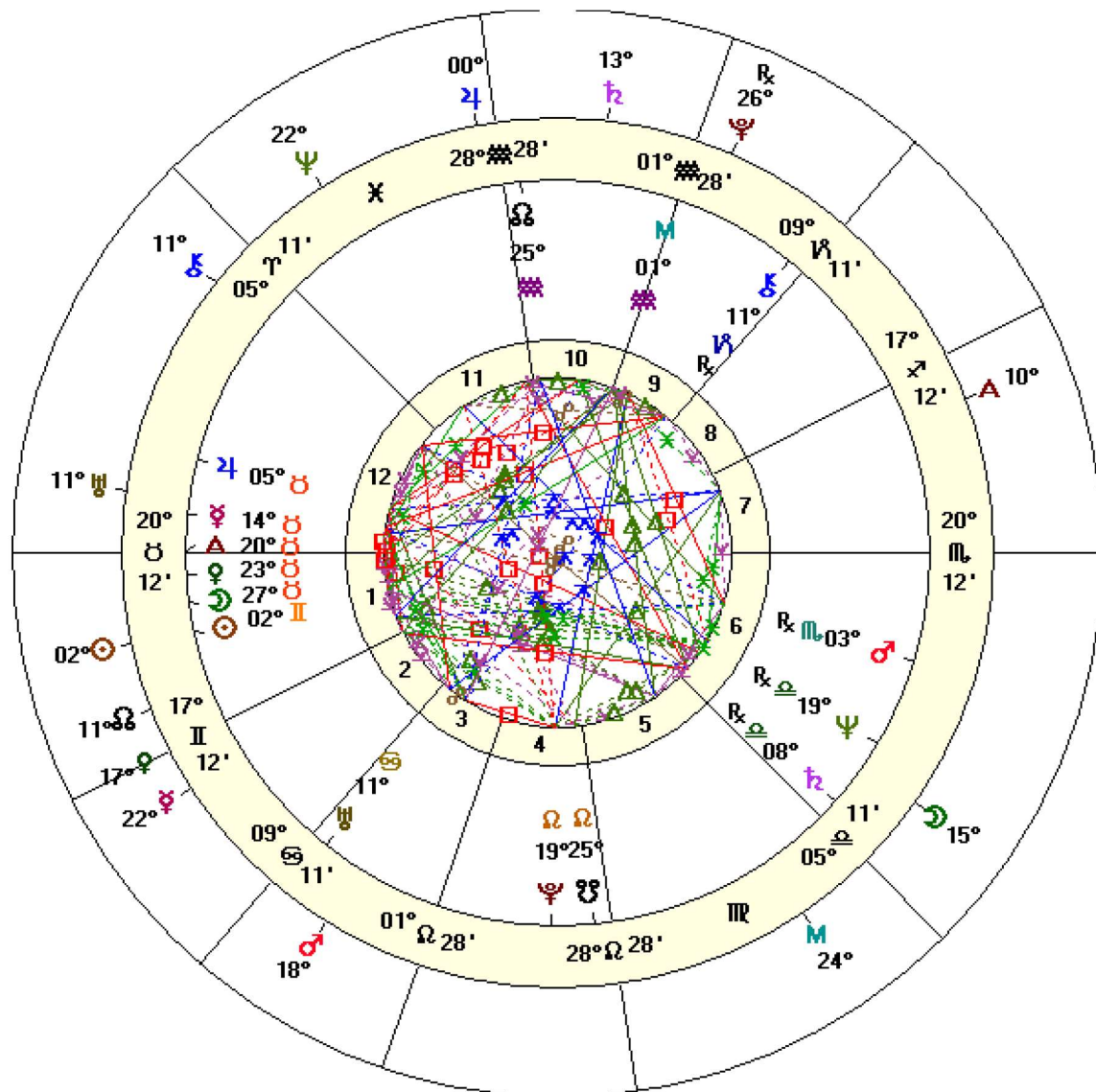


Solar Arc Directions 2024

Solar Returns

One of the more fun methods of prognostication is the solar return. This is a chart that is set up each year for the time when the Sun returns to the exact position that it occupied when you were born. The theory behind this is that because of the trauma of birth that this is a point of longitude that will always resonate with us in a very personal way. The fun part of this method, though, is that while the positions of the planets for this moment are fixed, we can, nonetheless, determine what sign is rising by choosing the place we want to be during our solar return. As a result, by traveling we can pick a location where the influence of Venus or Jupiter will be strong in the coming year, or, similarly, we can move a negative planet away from the angles of the chart to a less powerful location. One can (and should!) look at the solar return chart both as a stand alone chart and as a chart making aspects to and interacting with the birth chart. In my case, I find that the effects of the solar return chart increase over the first six months (the waxing phase of the cycle) and then the final six months focus on assimilation of experiences (the waning phase). Also, when I was younger and travel was cheaper, my wife and I used to regularly travel to better locations for our solar returns. However, these days I don't like to travel as much, and so unless things look particularly dire, I'm happy to just stay where I am! In my latest solar return chart, Sagittarius is rising which puts a focus for the year on growth, freedom, and an overall expansive feeling. Also, Gemini is on the cusp of the 7th house of marriage, and Sun, Mercury, Venus, and North Node are all in Gemini. Well, a year of focusing on my wife is fine by me. Additionally, Jupiter, the ruler of Sagittarius is in Pisces and Neptune is conjunct the cusp of the 4th house. It promises to be a very mystical year. And finally, Aquarius is on the cusp of the 3rd house (the mind, writing) and its ruler Uranus is in the 5th house (personal creativity). Thus, this is a good year for creative writing (what I'm doing now!), and with Moon in Libra close to the cusp of the 11th house, it is also a good year for collaborating with others. I can live with all that!



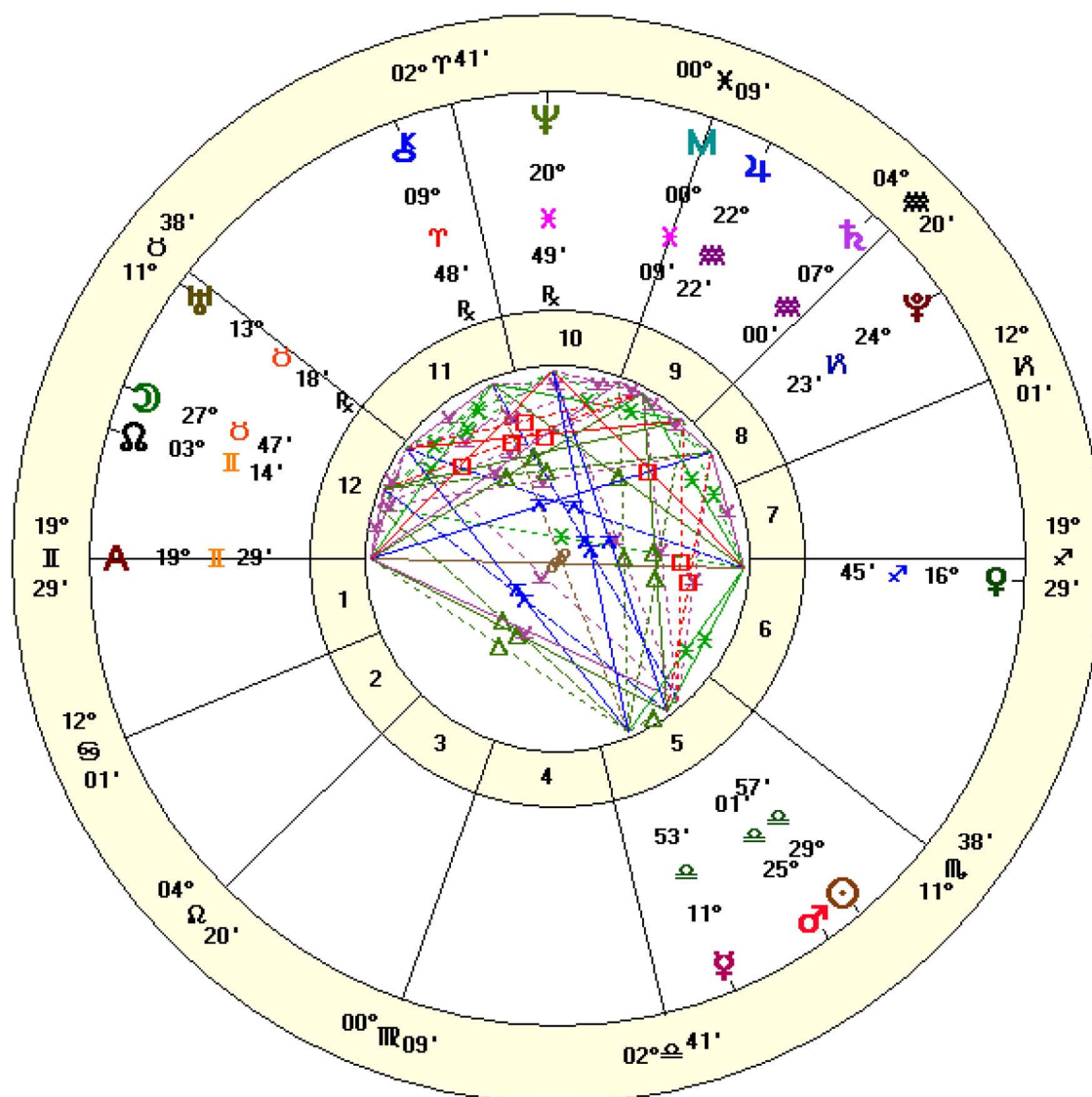


Natal/Solar Return Biwheel

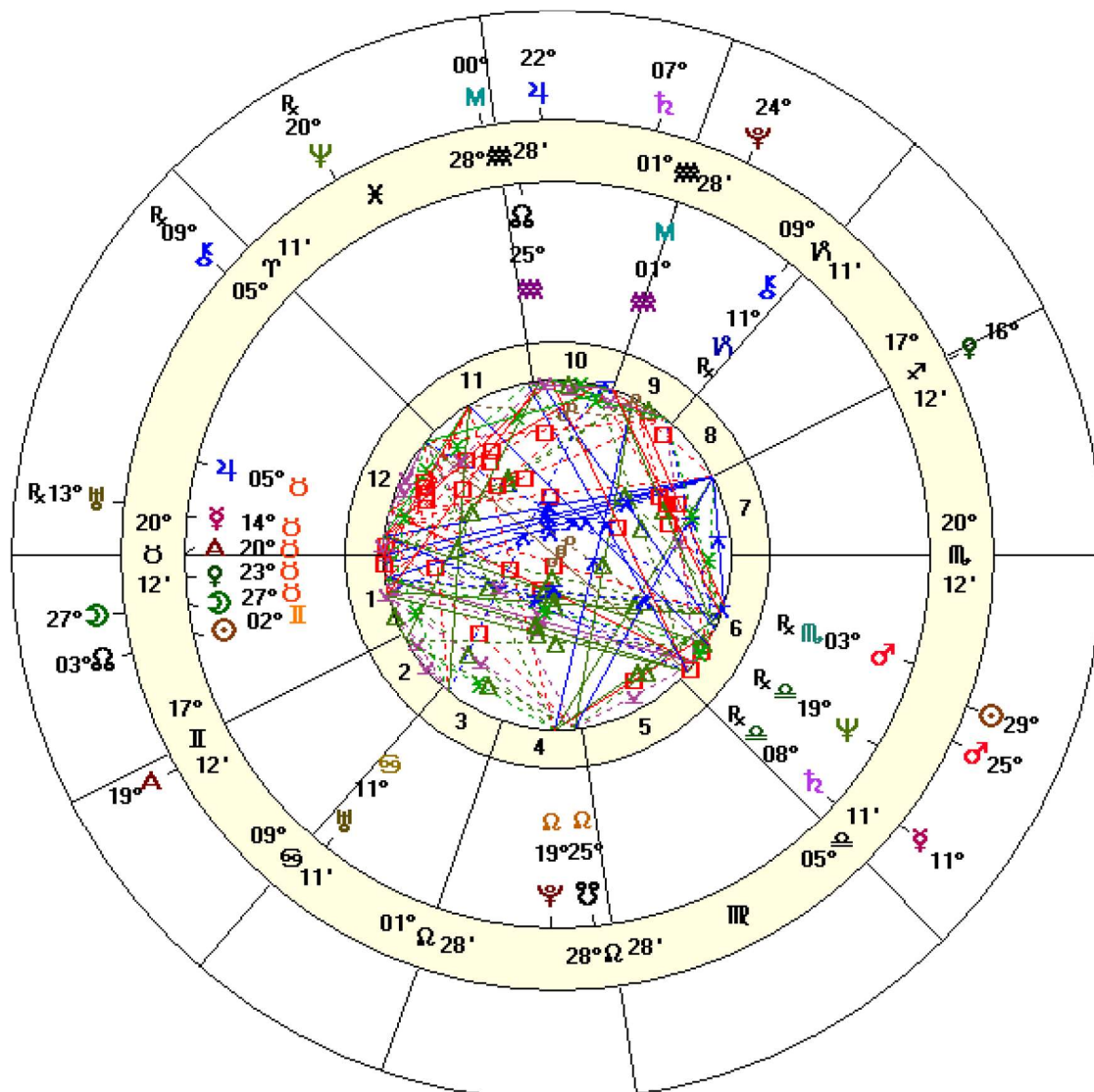
Lunar Returns

One more chart I look at occasionally is my lunar return chart. The theory behind it is exactly the same as that of the solar return, but unlike the solar return which occurs only once a year, the lunar return occurs monthly. My next lunar return arrives in two days, and it promises a happy month with my wife (Venus conjunct 7th house), a focus, most likely in my case, on the study of astrology, mathematics, and statistics (Saturn in Aquarius on the cusp of the 9th house), deep and important, destined research (Moon in the 12th house conjunct the North Node), and honors for mystical activities (Pisces on the cusp of the 10th house and Neptune in the 10th house). In comparing my lunar return to my natal chart, I see my return Uranus conjunct my natal Mercury (creativity will continue!), return Saturn trine natal Saturn and return Mercury conjunct natal Saturn (the work of writing), return Pluto trine my natal Venus (I love my wife!),

and return Mercury square my natal and very close Uranus/Chiron opposition (enlightenment is ongoing!).



Lunar Return October 2021



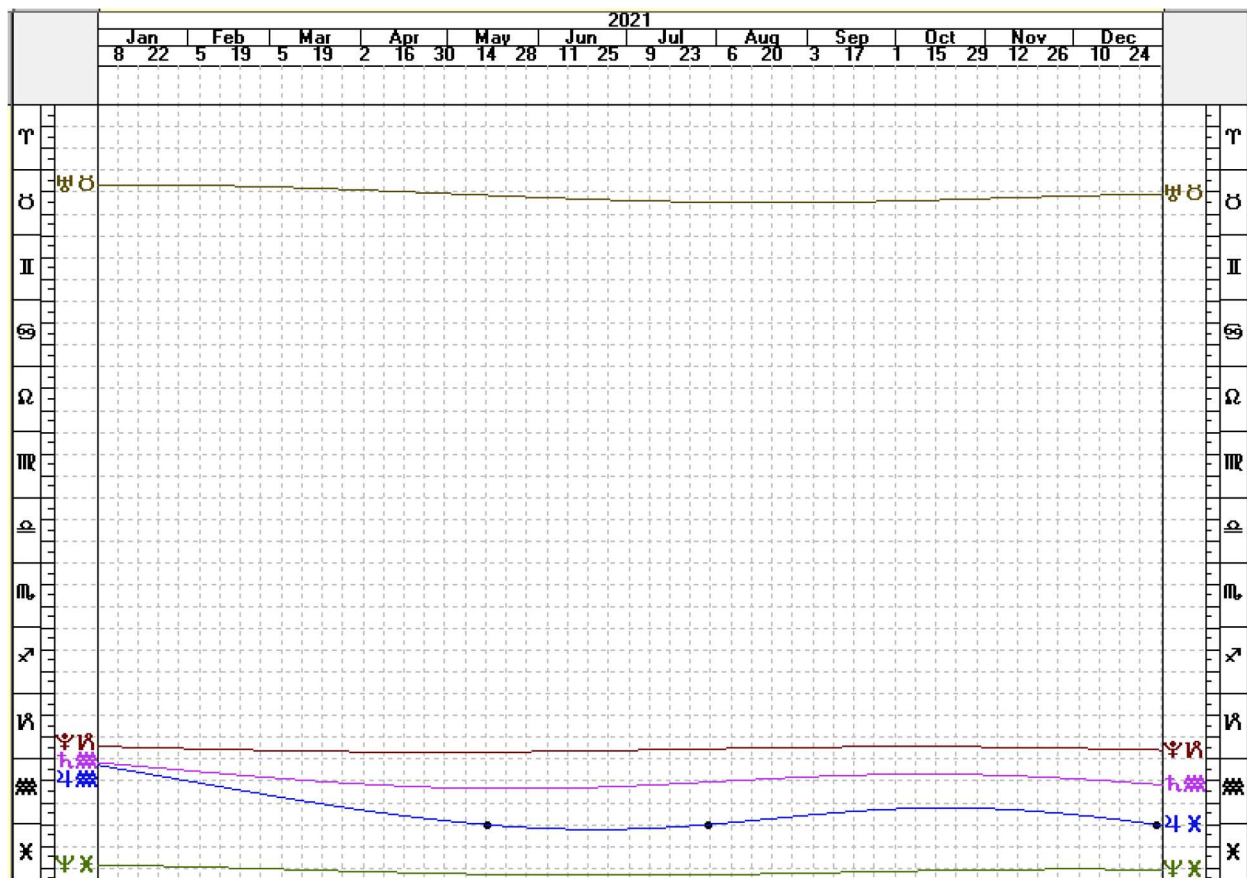
Natal/Lunar Return Biwheel

Summary

There are so many different methods for predicting the future, can they possibly all work? My feeling and my experience is yes, they all work. In this regard, I also draw upon my experience with mathematical models for other things such as physics. Time and time again we have found that when a pattern exists in the mathematical model, it also finds some way to manifest in reality. I believe the same thing is true regarding astrological models. Everything seems to have an influence, though most people would rate some techniques as stronger than others. Specifically, I would wager that most astrologers see transits as their bread and butter. Next in line are secondary progressions, solar arc directions, and solar returns which can set the tone for a year, and then lastly I place lunar returns which have a definite effect, but one that is weaker and more ephemeral than the solar return.

HARMONIC ASTROLOGY AND MIDPOINTS

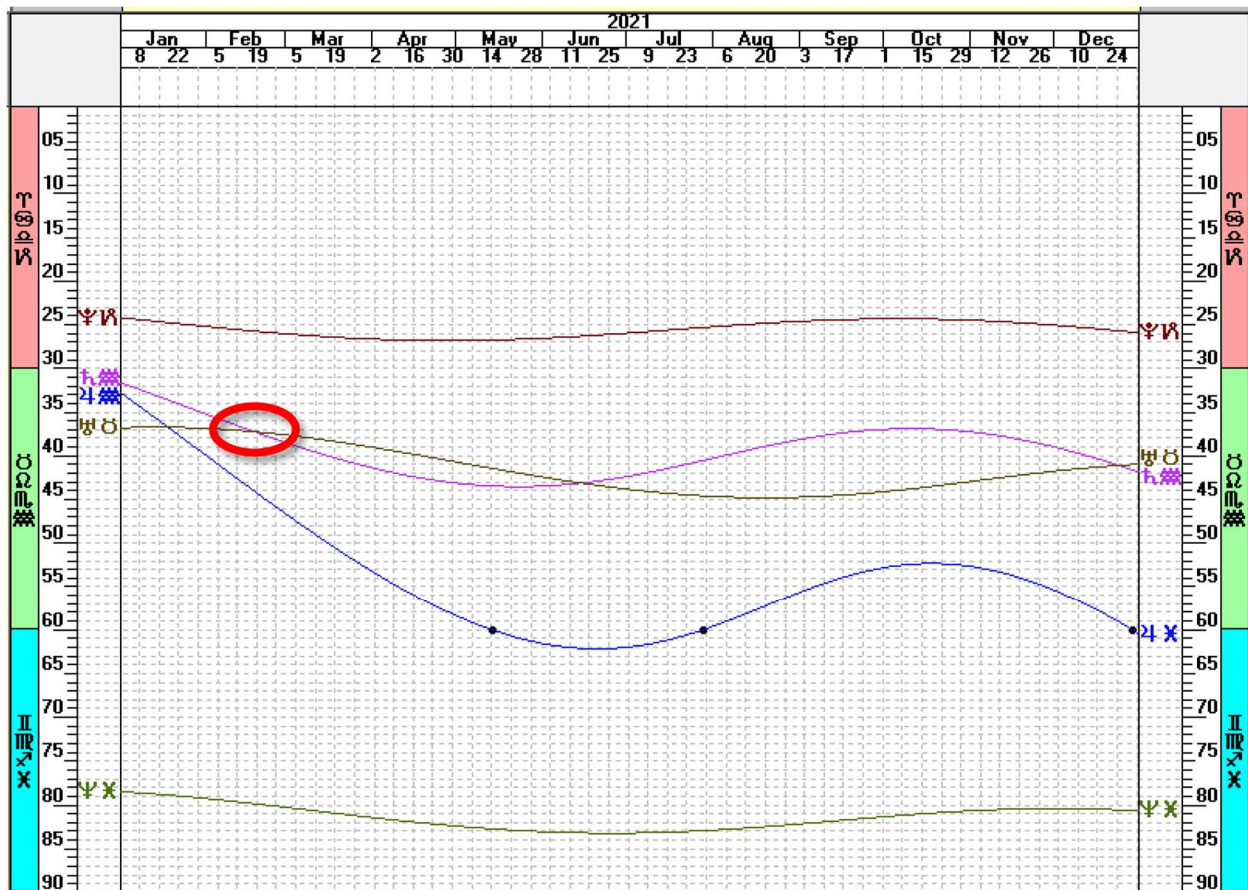
One of the newer things in astrology is harmonic astrology, and when it is combined with midpoint analysis, it is referred to as vibrational astrology. I am saying that harmonic astrology is new, but the reality is that the history of harmonic astrology goes back at least fifty years in the west and it is based upon techniques of Vedic astrology that have been practiced for hundreds of years. Thus, it is only new in the sense that there are still many astrologers today that aren't using this technique, and, hence, it is new to them. To explain what a harmonic chart is (and actually, there are an infinite number of harmonic charts that can be derived from a single birth chart), let me first show you what a graphical ephemeris looks like. Below is a graphical ephemeris for 2021 that shows the exact position of each of the outer planets over the course of a year. Because it is visual, it is appealing, but it also is not easy to see that Uranus will be square Saturn three times in 2021. To remedy this, we can instead look at a graphical "90 degree" ephemeris.



360° Graphical Ephemeris

In a 90 degree graphical ephemeris our scale on the left hand side goes up to 90 degrees, and when we reach the beginning of Cancer (90 degrees from the beginning of Aries), we wrap back around to zero. It's like clock arithmetic, but instead of going from 0 to 12, we go from 0 to 90, and the end result is that planets that are 90 degrees apart will appear conjunct in a 90 degree ephemeris. For example, if Saturn is

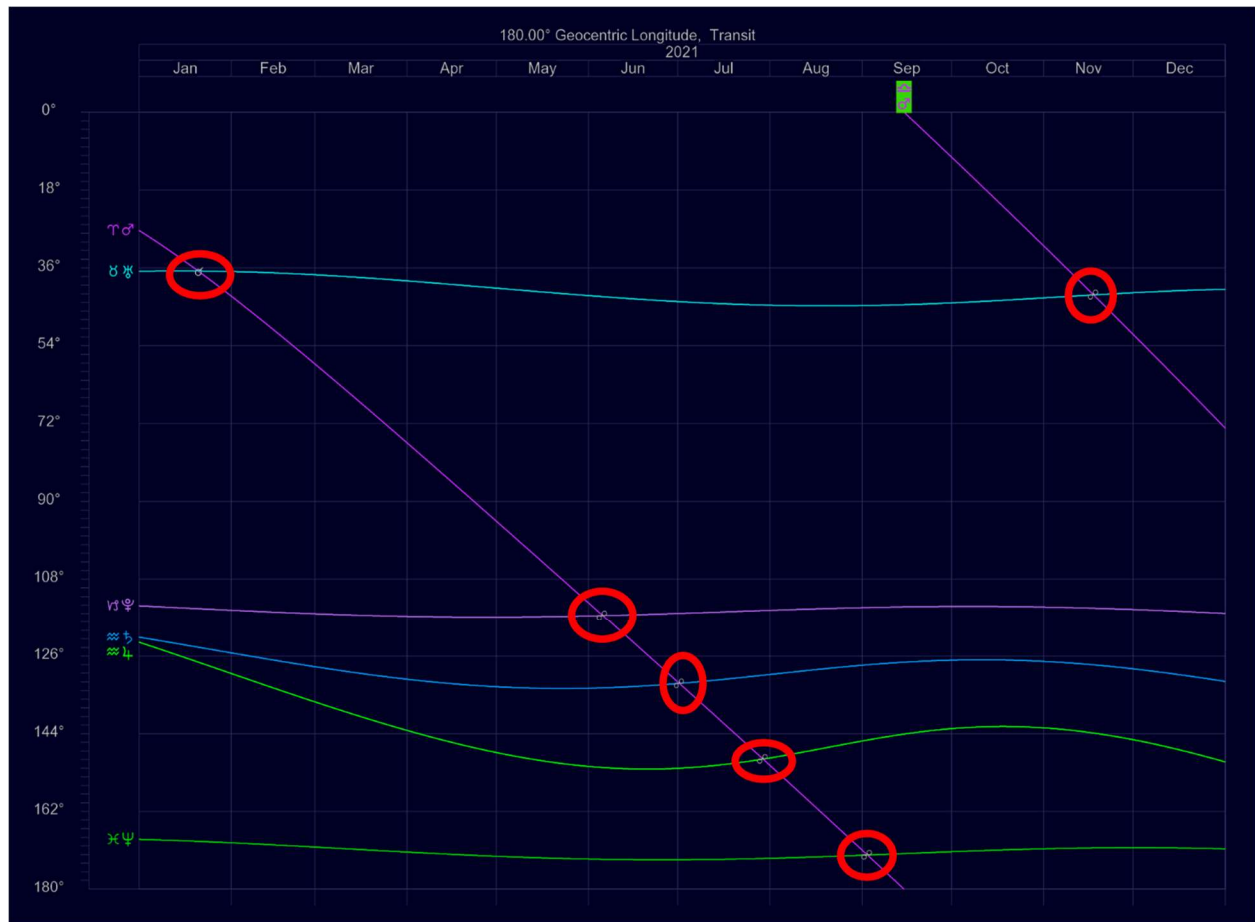
at 7 degrees Aquarius squaring Uranus at 7 degrees Taurus (as they were on 2/17/2021), then in a 90 degree graphical ephemeris they will appear conjunct at position 37 (Degree 7 of a fixed sign. The first 30 degrees correspond to cardinal sign positions.).



90° Graphical Ephemeris

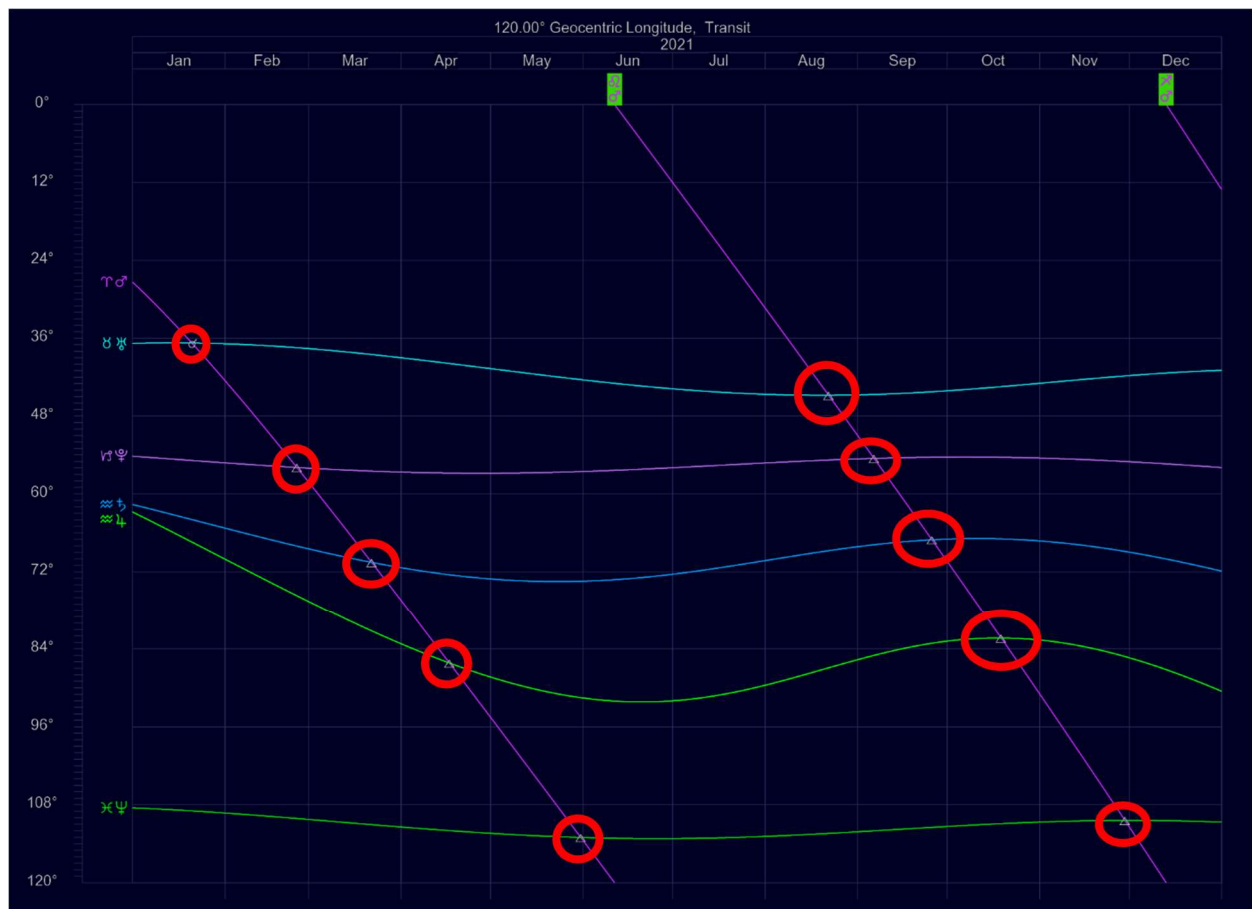
Similarly, a 180 graphical ephemeris will make planets that are 180 degrees apart appear conjunct, and a 120 degree graphical ephemeris will make any planets that are whole number multiples of 120 degrees appear conjunct, and this makes it easier to identify these aspects. Below are some examples generated using Sirius 3.0. Previous examples were made using Winstar 6.01.04.

This 180 degree graphical ephemeris for 2021 shows that Mars is conjunct Uranus in January, opposite Pluto in June, opposite Saturn at the beginning of July and Jupiter at the end, and in opposition to Uranus in September and November.



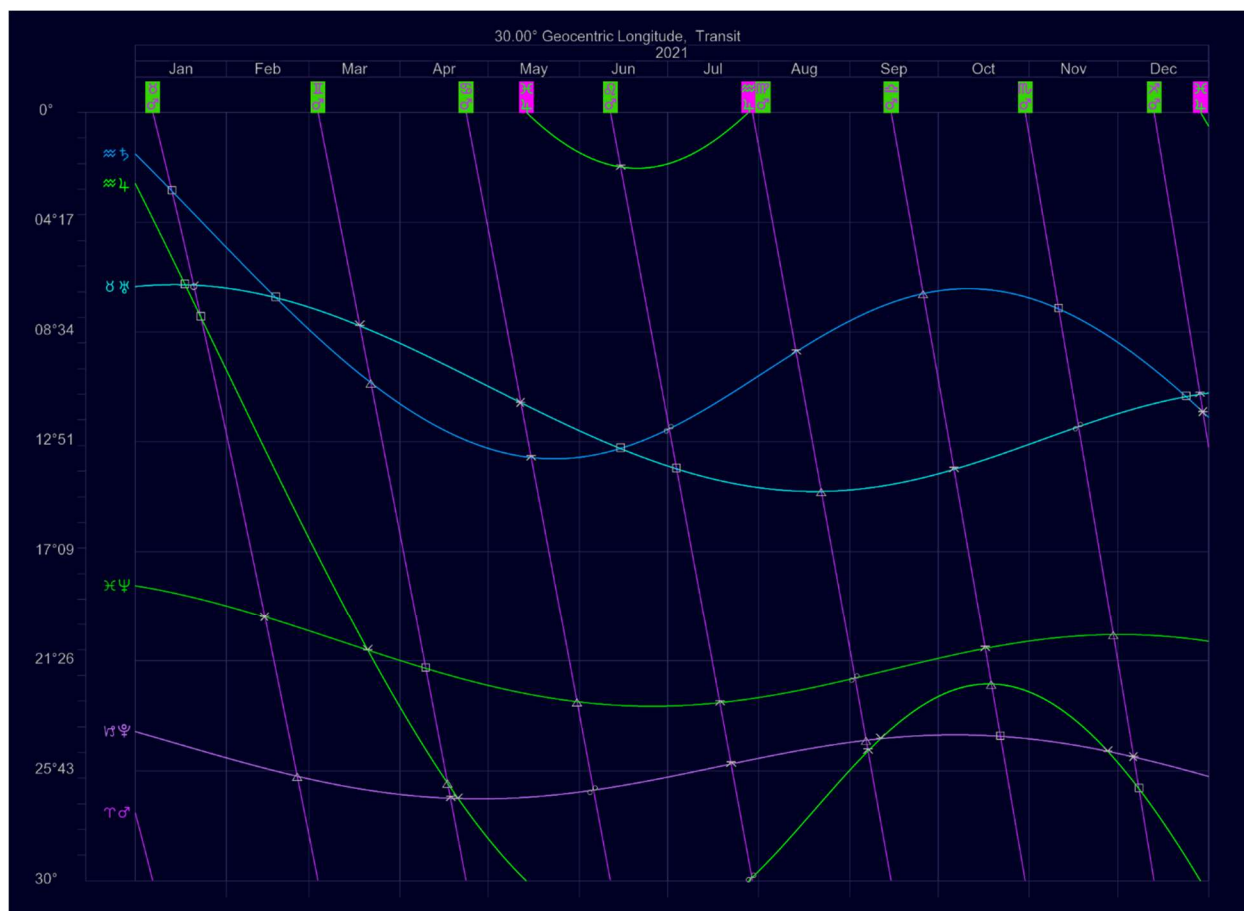
180° Graphical Ephemeris

Similarly, the 120 degree graphical ephemeris for 2021 shows us when transiting Mars will be trine or conjunct Jupiter, Saturn, Uranus, Neptune, or Pluto throughout the year.



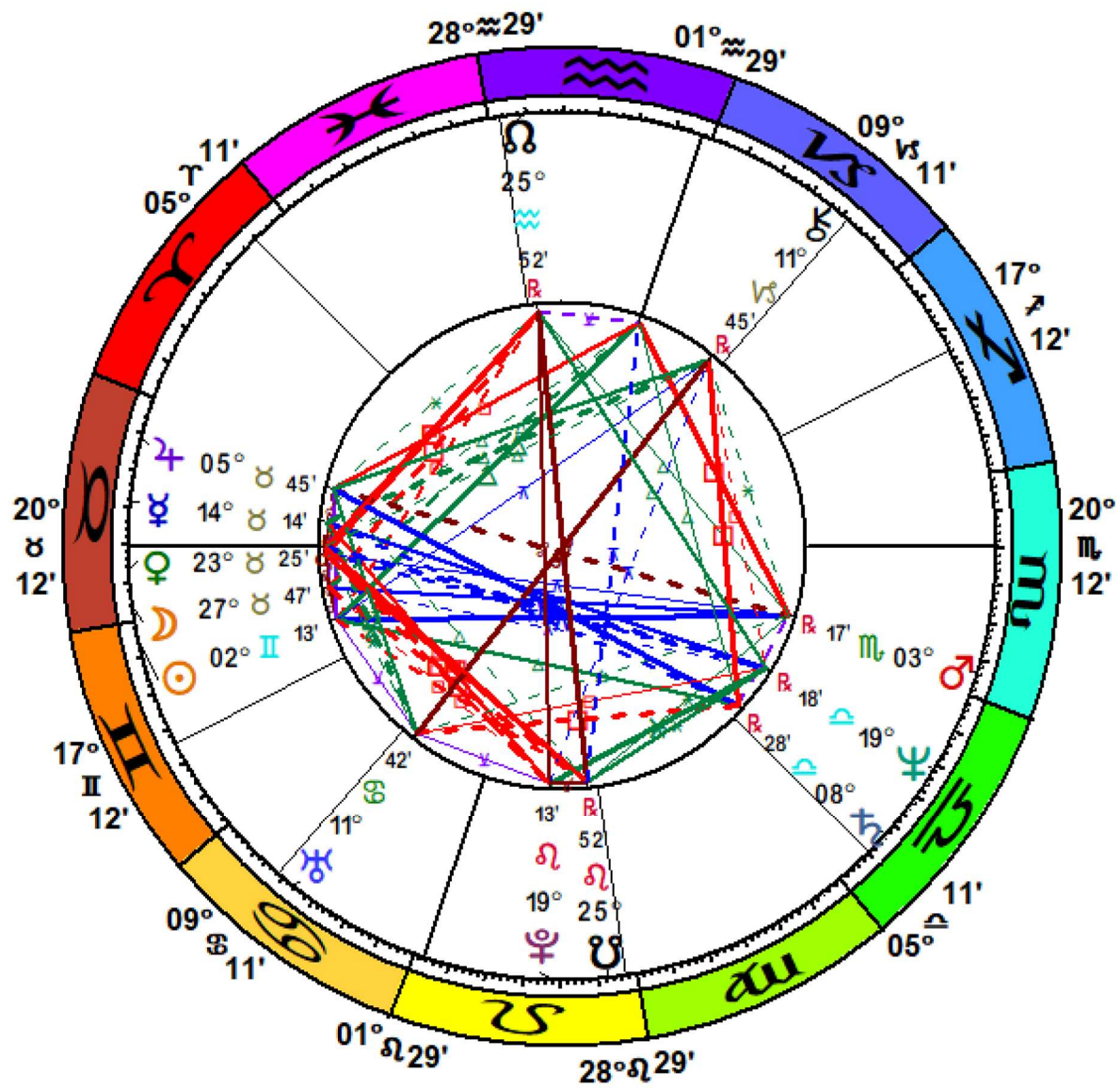
120° Graphical Ephemeris

One of my favorites, though, is to periodically check a 30 degree graphical ephemeris since this will show all those aspects based on 30 degrees. In other words, the conjunction, semisextile, sextile, square, trine, and opposition.

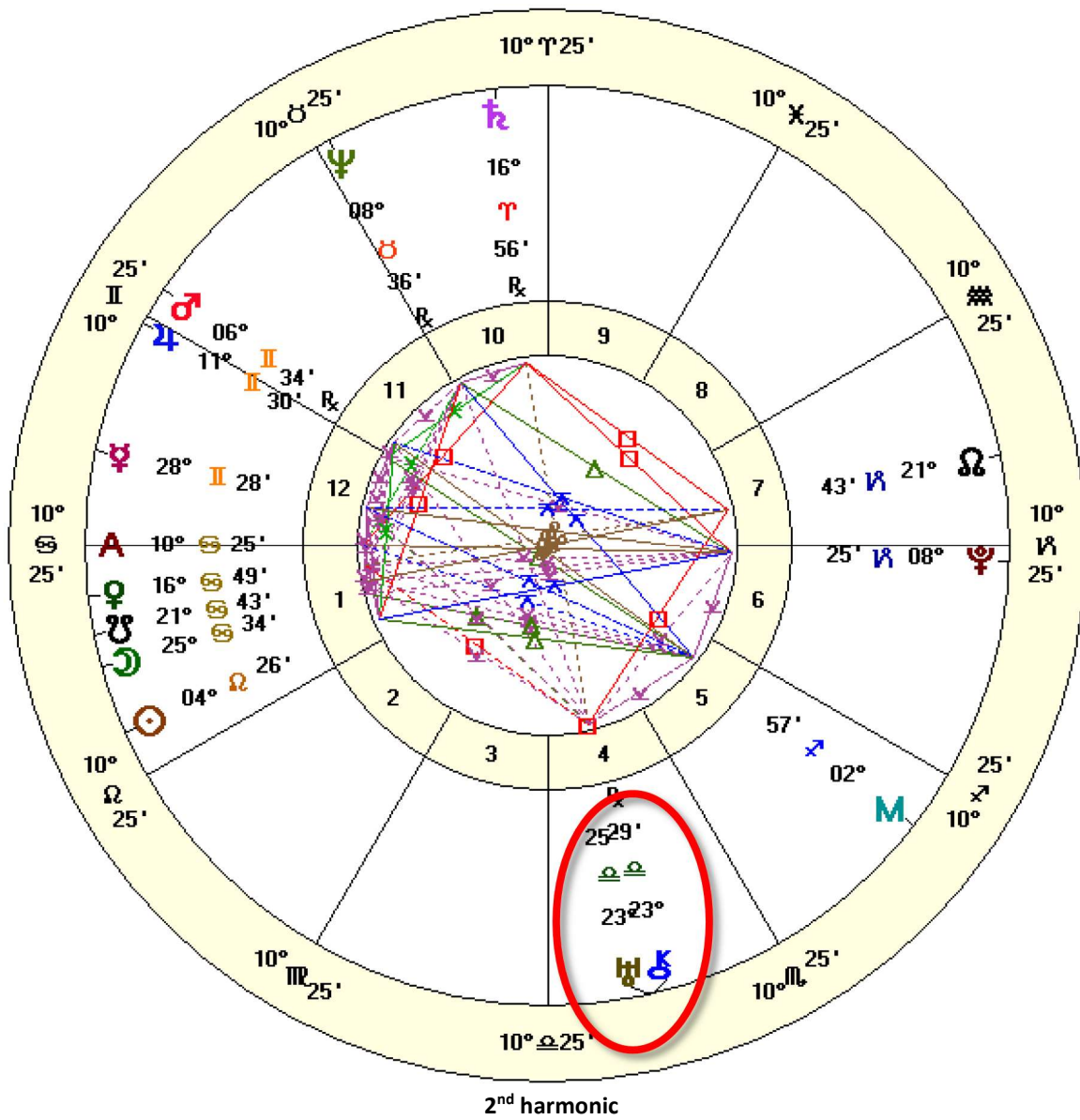


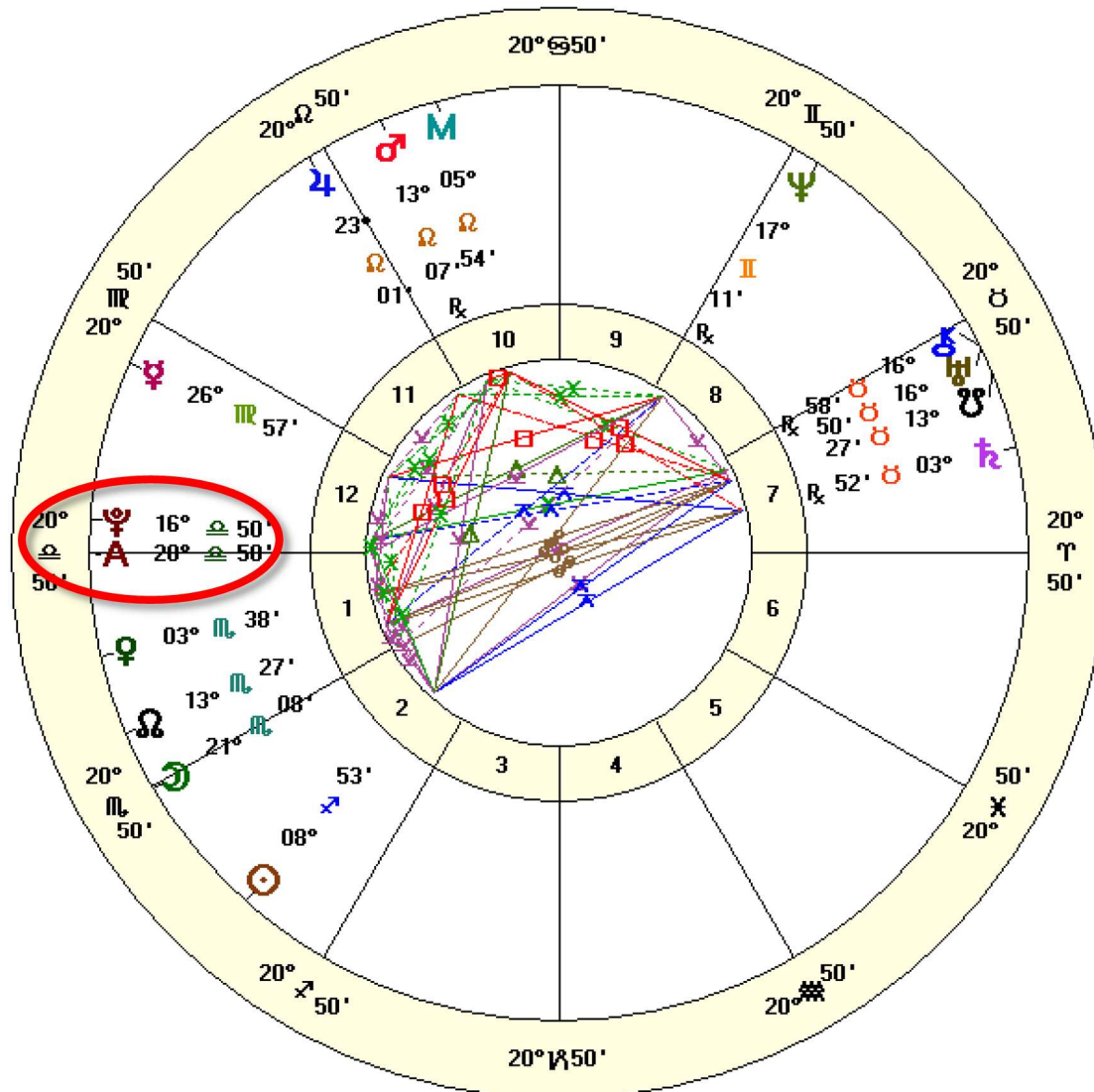
30° Graphical Ephemeris

The reason why I've given you this introduction to graphical ephemerides, however, is because the kind of modular or clock arithmetic that is so often used when examining a graphical ephemeris is also used in the construction of harmonic charts. For example, in the 2nd harmonic chart, planets that are 180 degrees apart in the birth chart will now appear conjunct. We'll call this the 2nd harmonic because $\frac{360}{2} = 180^\circ$. Similarly, to find the harmonic corresponding to any positive real number, we just divide 360° by that number. Hence, the 3rd harmonic chart will make trines appear conjunct ($\frac{360^\circ}{3} = 120^\circ$), and the 4th harmonic will make squares appear conjunct ($\frac{360^\circ}{4} = 90^\circ$). For example below is my birth chart, and in the 2nd harmonic Uranus and Chiron are conjunct while in the 4th harmonic Pluto and the Ascendant appear conjunct since they are square one another in the birth chart.



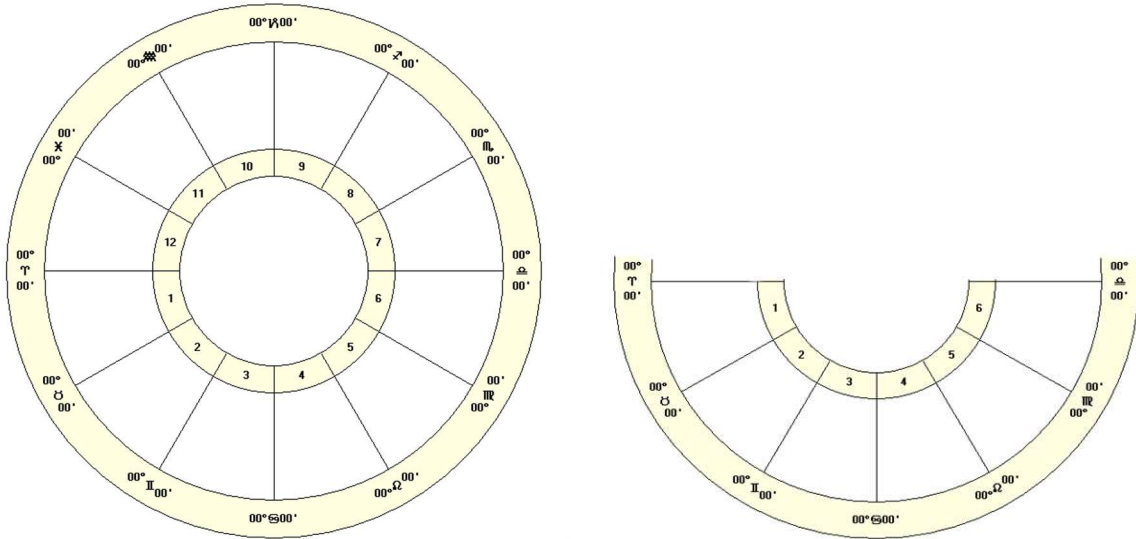
Natal Chart





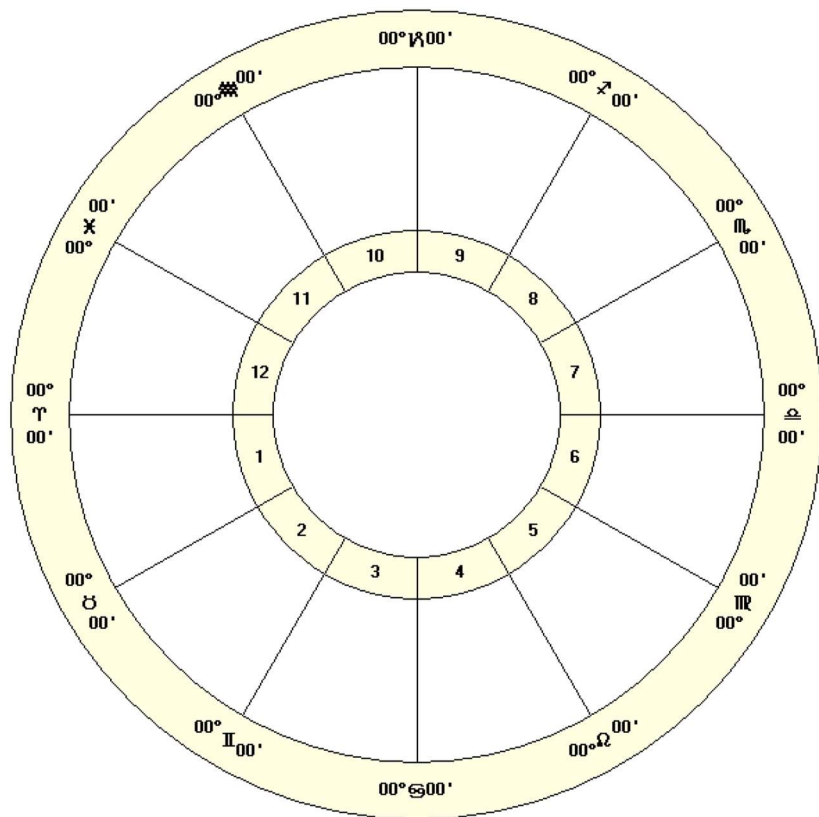
4th harmonic

To construct, for example, a 2nd harmonic chart, we have to do the following. In a horoscope wheel for the 2nd harmonic, every point in the second 180 degrees of the chart, everything from Libra through Pisces, is identified with the position 180 degrees away in the signs from Aries through the end of Virgo. The result is that everything is collapsed down to half a chart.



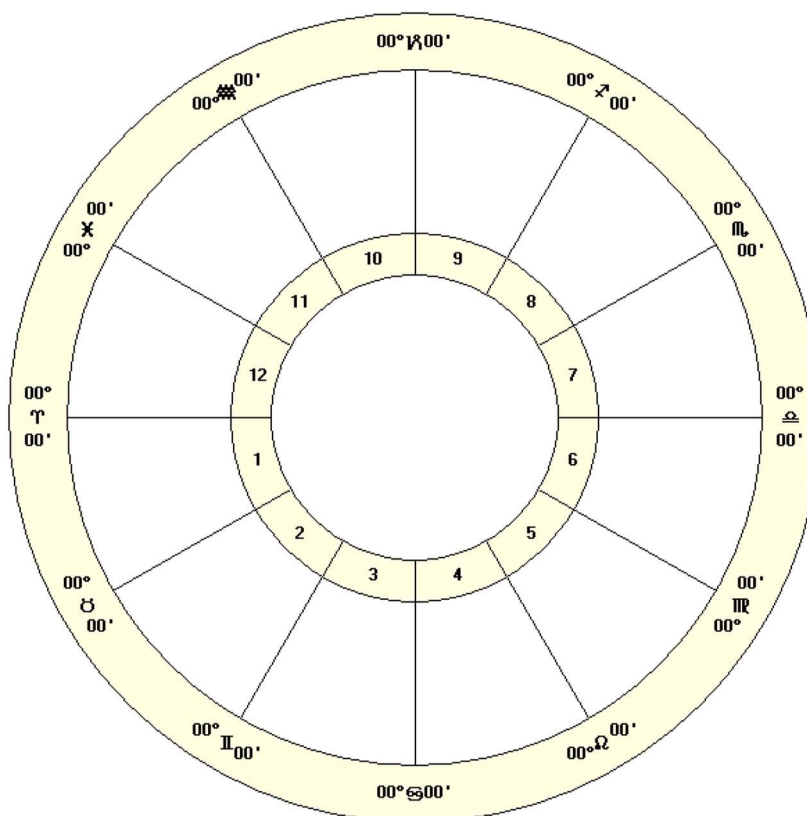
Technically speaking, we should make this second diagram a wheel so that it looks like a clock again. This is because when we add degree positions, we wrap around back to zero when we reach 180 degrees just like we do with clock arithmetic, $0^\circ = 180^\circ$.

0 degrees = 180 degrees



However, we are used to analyzing things on a 360 degree wheel, so to achieve this final format we can take each planet in our 180 degree chart, measure its angular distance from 0 degrees Aries, and multiple each position by 2 in order to get a 360 degree chart once again.

0 degrees = 360 degrees



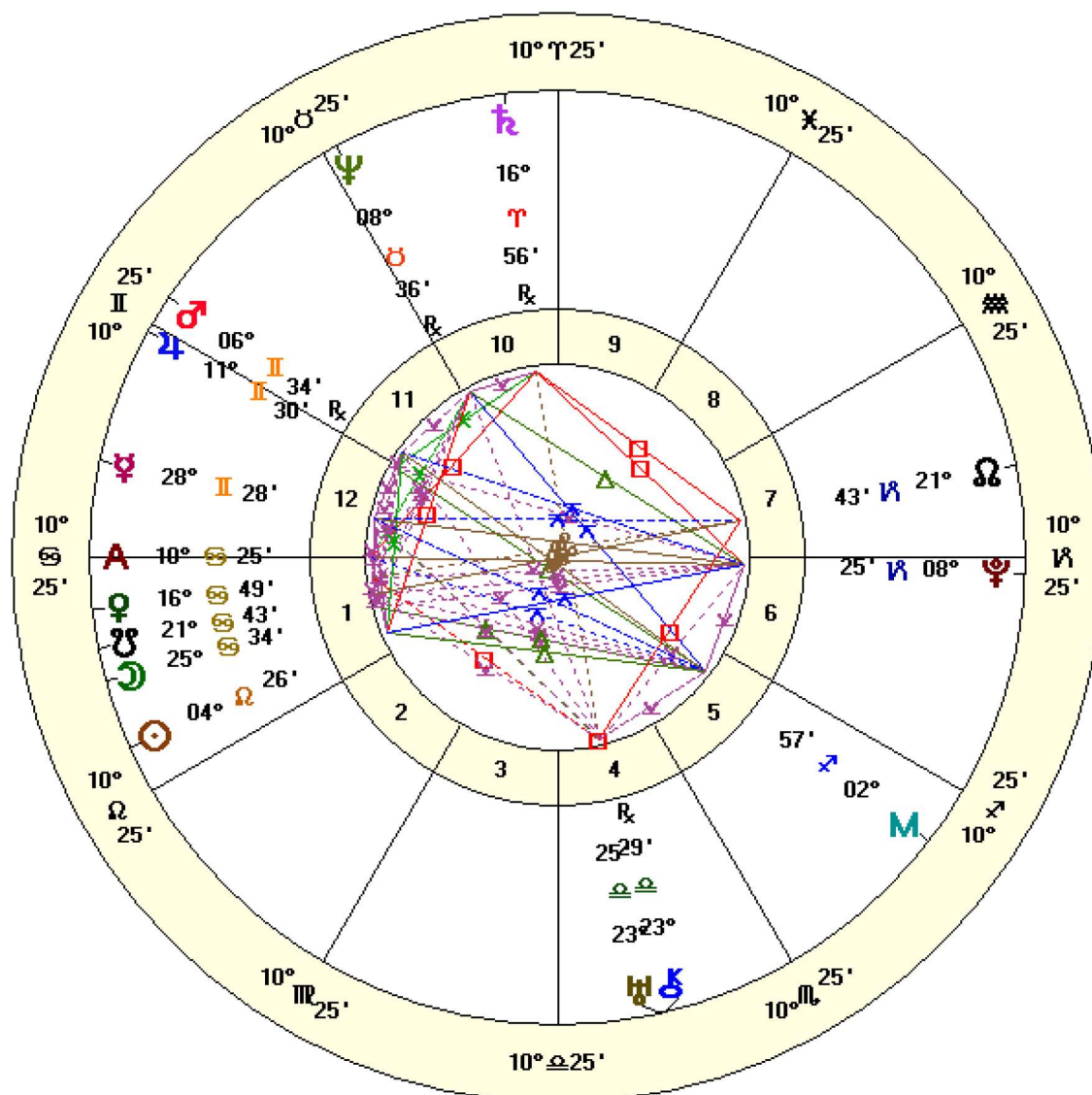
Let me illustrate with an example. In my birth chart I have Uranus at 11 degrees, 42 minutes, Cancer, and Chiron is at 11 degrees, 45 minutes, Capricorn. Since we want the 2nd harmonic, we want to express every planetary position in terms of the first 180 degrees of the zodiac. Thus, Uranus is fine where it is, but we'll change the position of Chiron to its opposite, 11 degrees, 45 minutes, Cancer. Next, we convert each position from degree-minute notation to decimal degrees. Thus, in decimal degrees, Uranus is at $11 + \frac{42}{60} = 11.7^\circ$ Cancer and Chiron is at $11 + \frac{45}{60} = 11.75^\circ$ Cancer. Now we represent these positions in terms of angular distance from the starting point of 0° Aries. Thus, Uranus is at $90^\circ + 11.7^\circ = 101.7^\circ$ and Chiron is at $90^\circ + 11.75^\circ = 101.75^\circ$. And finally, we'll stretch everything out to 360 degrees again by multiplying everything by 2 and converting back to degrees-minutes. Hence, the final position of Uranus is $2 \times 101.7^\circ = 203.4^\circ = 23.4^\circ$ Libra = $23^\circ \pm 24'$, and the final position of Chiron is $2 \times 101.75^\circ = 203.5^\circ = 23.5^\circ$ Libra = $23^\circ \pm 30'$. We can summarize these steps with the following table.

| Planet | Original position | 2nd harmonic position | Decimal Degrees | Position from 0 Aries | Times 2 | Sign Position | Degrees/Minutes |
|--------|-------------------|-----------------------|-----------------|-----------------------|---------|---------------|-----------------|
| Uranus | 11 Cancer 42 | 11 Cancer 42 | 11.7 Cancer | 101.7 | 203.4 | 23.4 Libra | 23 Libra 24 |
| Chiron | 11 Capricorn 45 | 11 Cancer 45 | 11.75 Cancer | 101.75 | 203.5 | 23.5 Libra | 23 Libra 30 |

And that's it! Many people, however, will do these steps in a slightly different order to arrive at the same result. In particular, you can begin by first multiplying every position by the harmonic and then adjusting it to a 360 degree wheel by subtracting multiples of 360 as necessary. We illustrate this below.

| Planet | Original position | Decimal Degrees | Position from 0 Aries | Times 2 | Modulo 360 | Sign Position | Degrees/Minutes |
|--------|-------------------|-----------------|-----------------------|---------|------------|---------------|-----------------|
| Uranus | 11 Cancer 42 | 11.7 Cancer | 101.7 | 203.4 | 203.4 | 23.4 Libra | 23 Libra 24 |
| Chiron | 11 Capricorn 45 | 11.75 Capricorn | 281.75 | 563.75 | 203.5 | 23.5 Libra | 23 Libra 30 |

If we look at the 2nd harmonic chart as calculated by our software, however, we notice that the final minutes are slightly different from what we've computed. Why the discrepancy? This is simply due to round-off error generated because we only know the planetary positions to the nearest minute while our programs calculate these positions internally with greater accuracy.



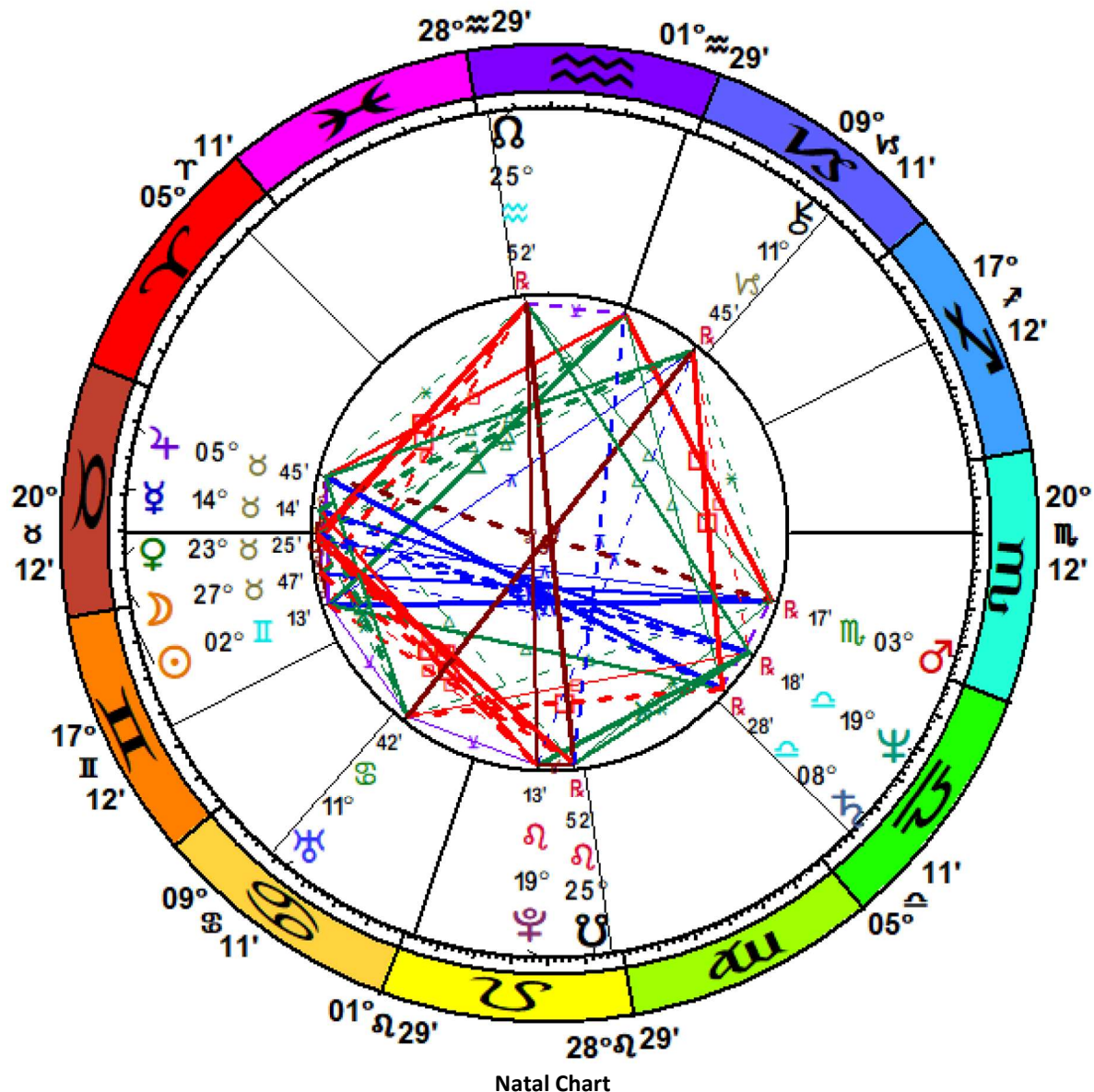
2nd Harmonic Chart

Now let's introduce some notation. If we want to find the n^{th} harmonic, then the corresponding angle of separation will be $\frac{360}{n}$ degrees, and in the n^{th} harmonic chart planets that are $\frac{360}{n}$ degrees apart in the

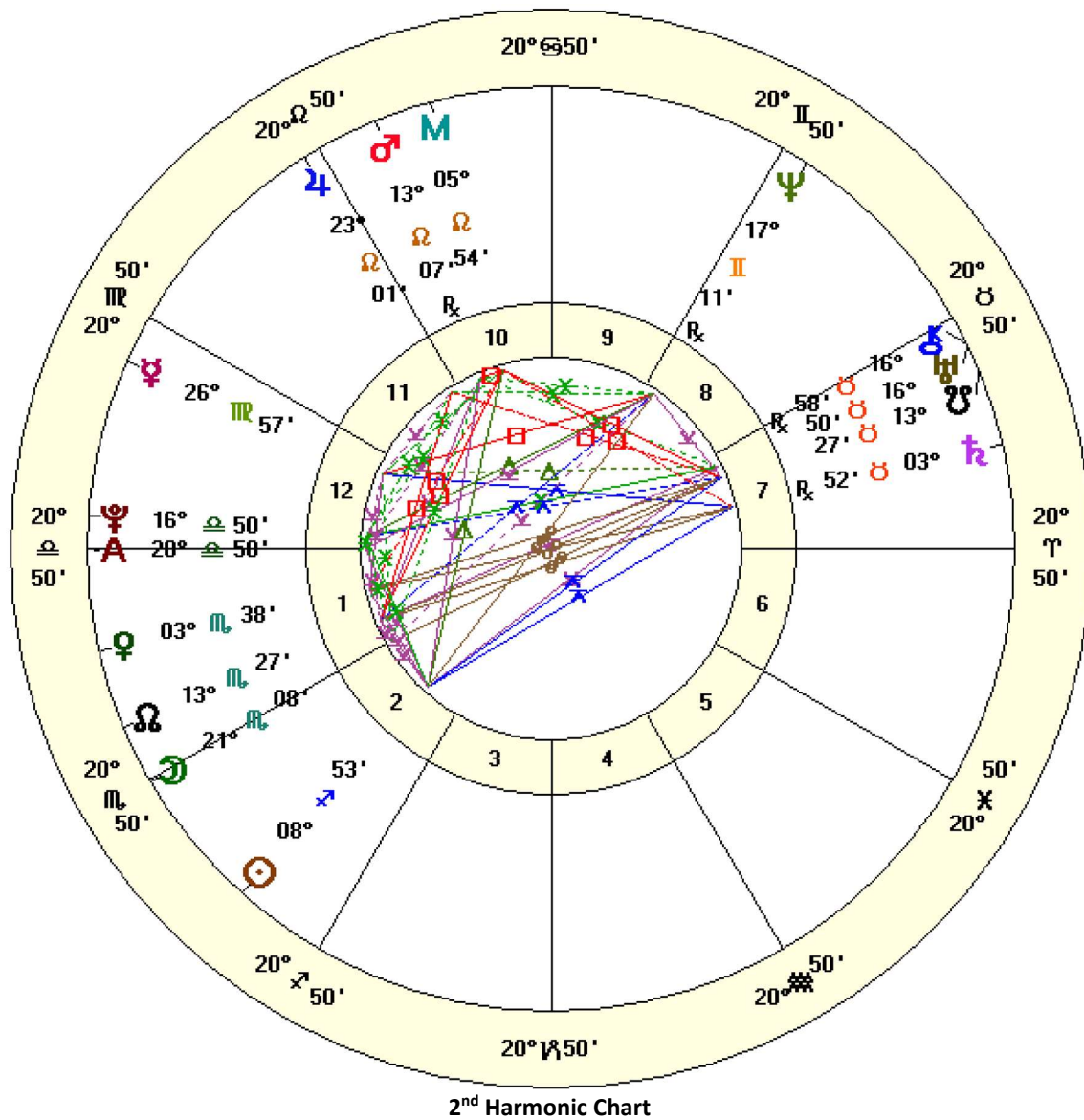
natal chart will now appear conjunct. However, because in one of our final steps we stretch out everything back to a 360 degree zodiac by multiplying by the appropriate harmonic, this will also magnify the separation between planets, and, thus, we generally use fairly wide orbs for aspects in a harmonic chart, even up to 16 degrees! Also, we will frequently refer to $\frac{1}{n}$ and its multiples as n^{th} harmonic angles even though this is just shorthand for $\frac{1}{n} \times 360$ degrees. Thus, by 2nd harmonic we will usually mean the chart, and by 2nd harmonic angle $\frac{1}{2}$, we will actually mean $\frac{1}{2} \times 360^\circ = 180^\circ$.

There's something else we've done that should not be glossed over. Namely, what sense does it make to talk about a zodiac in a harmonic chart? In fact, what the heck is the zodiac in the first place? This is not a trivial concern. For example, if you ask the average person on the street what it means when they call themselves a Gemini, they might say that this means that the Sun was in Gemini when they were born. However, while this would be true roughly 2000 years ago, it's not true today because of something called the "precession of the equinoxes" which is really just the recognition that even the constellations slowly rotate around some larger center. Consequently, while approximately 2000 years ago a person with "Sun in Gemini" would literally have been born with the Sun in Gemini, today the positions of the constellations have drifted by about 23 degrees. In Vedic astrology, this drift is accounted for, and the zodiac they use is called a sidereal zodiac. However, in Western astrology, the beginning of Aries is set at the first day of Spring, the Spring Equinox, and we call this zodiac the tropical zodiac. Hence, while my Sun is at 2 degrees, 13 minutes, Gemini in the tropical zodiac, it's located at 9 degrees, 2 minutes, Taurus in the sidereal zodiac. About a 23 degree difference! The real essential difference between the two zodiacs, though, is that the starting point for the sidereal zodiac is determined by a location in space while the starting point for the tropical zodiac is determined by a location in time. This is an important distinction because we are going to take things even further and define the zodiac as being defined (as we did in "The Cycle of Becoming") by the phases of a cycle as they unfold in time. Hence, rather than being defined by the physical constellations with definite locations in space, we define the zodiac as stages of a cycle that unfold in time, and this definition allows any cycle to come with its own zodiac where the signs correspond to forms of expression that facilitate the different phases of the cycle. Consequently, when looked at in this way, I have no problem with my harmonic or any other derived chart containing the usual twelve signs and houses. In my understanding, both the signs and the houses are defined by the cycle, and experience seems to verify this. Hence, regardless of whether it is a harmonic or a composite chart, I interpret signs, houses, and aspects in the usual way.

Now, however, let's take a look at some of the aspects within our 2nd harmonic chart, and let's speculate what they might look like in the original natal chart or other harmonics. For example, in my 2nd harmonic chart I have Pluto in opposition to the Ascendant. What does this aspect look like in the natal chart? Well, recall that one of my steps in the construction of the 2nd harmonic chart was to multiply every position by 2. This also magnifies the angle of separation between planets by 2. Hence, to get back to the way things are in the natal chart, just divide your harmonic angle by 2. Hence, if Pluto is opposite the Ascendant in the 2nd harmonic chart, then it should be 90 degrees from or square the Ascendant in the natal chart. And that's exactly what we see!



On the other hand, suppose we want to construct a harmonic chart that has Pluto conjunct the Ascendant. Since in the 2nd harmonic chart we have Pluto in opposition to Ascendant, we can bring them into conjunction by taking the 2nd harmonic of the 2nd harmonic chart. Or, since in the natal chart we have Pluto square the Ascendant, we can force them into conjunction by taking the 4th harmonic of the natal chart. Notice, too, that the degree measure of the 4th harmonic is $\frac{360^\circ}{4} = 90^\circ$, and, hence, in the 4th harmonic all planets that are separated by whole number multiples of 90 degrees will appear conjunct. Interestingly (and fortunately!), these two methods of bringing Pluto and the Ascendant into conjunction both result in the 4th harmonic chart.



In the calculations that we have just completed, we have illustrated two things that are extremely important. The first is that, technically speaking, we can construct a harmonic chart for any positive real number! Thus, not only do harmonics exist for numbers such as 2, 3, 4, and so on, we can also construct harmonic charts for fractions such as $\frac{1}{2}$ or $\frac{2}{3}$ and we can also construct harmonic charts for positive irrational numbers such as $\sqrt{2}$ or π . Additionally, notice that above that we were able to arrive at the 4th harmonic chart either directly or by taking the 2nd harmonic of the 2nd harmonic. The key to this alternate method is to simply notice that $4 = 2 \times 2$. Consequently, it turns out that every natural number harmonic can be understood in terms of its prime factorization, and this imposes a particular algebraic structure on the space of harmonic charts. In particular, because of its structure, we can take the following statements as equivalent:

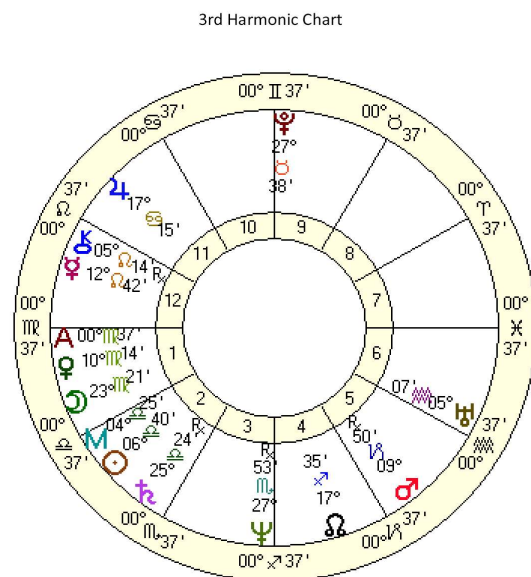
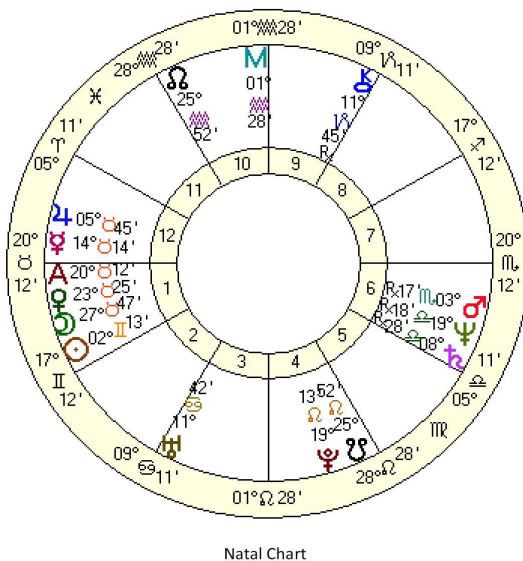
$$2 \times 3 = 6$$

The 2nd harmonic of the 3rd harmonic chart is the 6th harmonic chart

The 3rd harmonic chart of the 2nd harmonic chart is the 6th harmonic chart

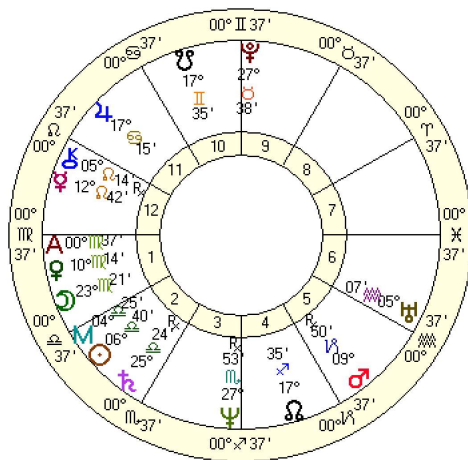
The product of the 2nd and 3rd harmonic charts is the 6th harmonic chart

This last statement make look even stranger the more you look at it because we are saying that you can multiply one horoscope times another! How can this be? Isn't multiplication supposed to work only with numbers, not charts? However, mathematicians are used to doing such things, and it's the correspondence between the multiplication of harmonics and the multiplication of positive real numbers that makes all of this possible. Well, discuss this in more detail later on, but for now just be glad that just as we can understand a number like 9 in terms of 3×3 , so can we understand the 9th harmonic in terms of the 3rd harmonic, and the 9th harmonic chart is also the 3rd harmonic of the 3rd harmonic chart. And in the 9th harmonic, planets that are trine in the 3rd harmonic chart will appear conjunct. Also, planets that are trine in a waxing or waning trine in the 3rd harmonic chart will appear separated by $\frac{120^\circ}{3} = 40^\circ$ or $160^\circ = 120^\circ + 40^\circ$ or $280^\circ = 2(120^\circ) + 40^\circ$ or $\frac{240^\circ}{3} = 80^\circ$ or $200^\circ = 120^\circ + 80^\circ$ or $320^\circ = 2(120^\circ) + 80^\circ$, respectively, in the natal chart.

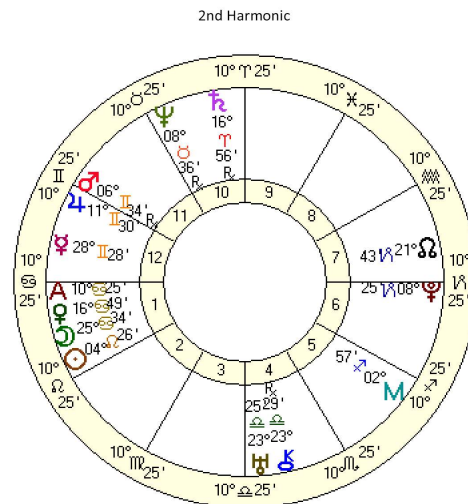


Notice that Sun and Uranus are in a waxing trine in the 3rd harmonic and are about 40° apart in the natal chart, and that while Pluto makes a waning trine to the Moon in the 3rd harmonic, their separation is about 80° in the natal.

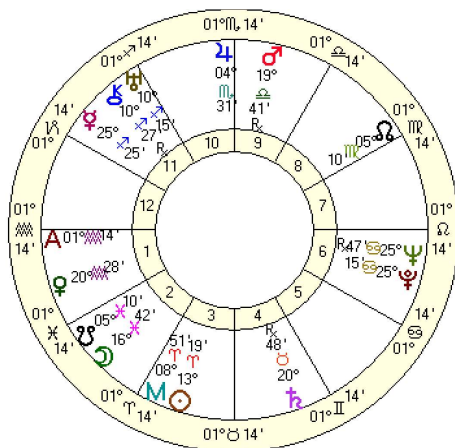
To give another example, the following illustrates that the 3rd harmonic times the 2nd harmonic is, indeed, equal to the 6th harmonic. Hence, we can multiply harmonic charts together just as we do real numbers, but the product of two harmonic charts is another harmonic chart!



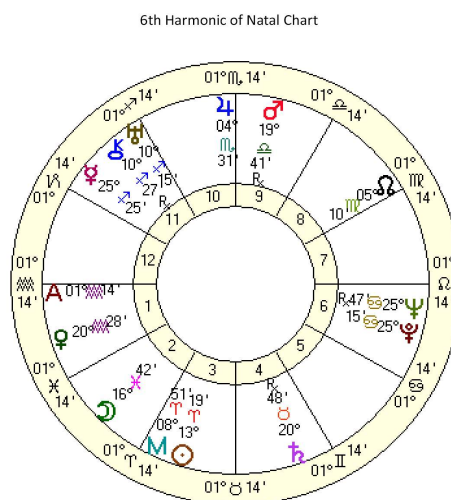
3rd Harmonic



2nd Harmonic



2nd Harmonic of 3rd Harmonic Chart



6th Harmonic of Natal Chart

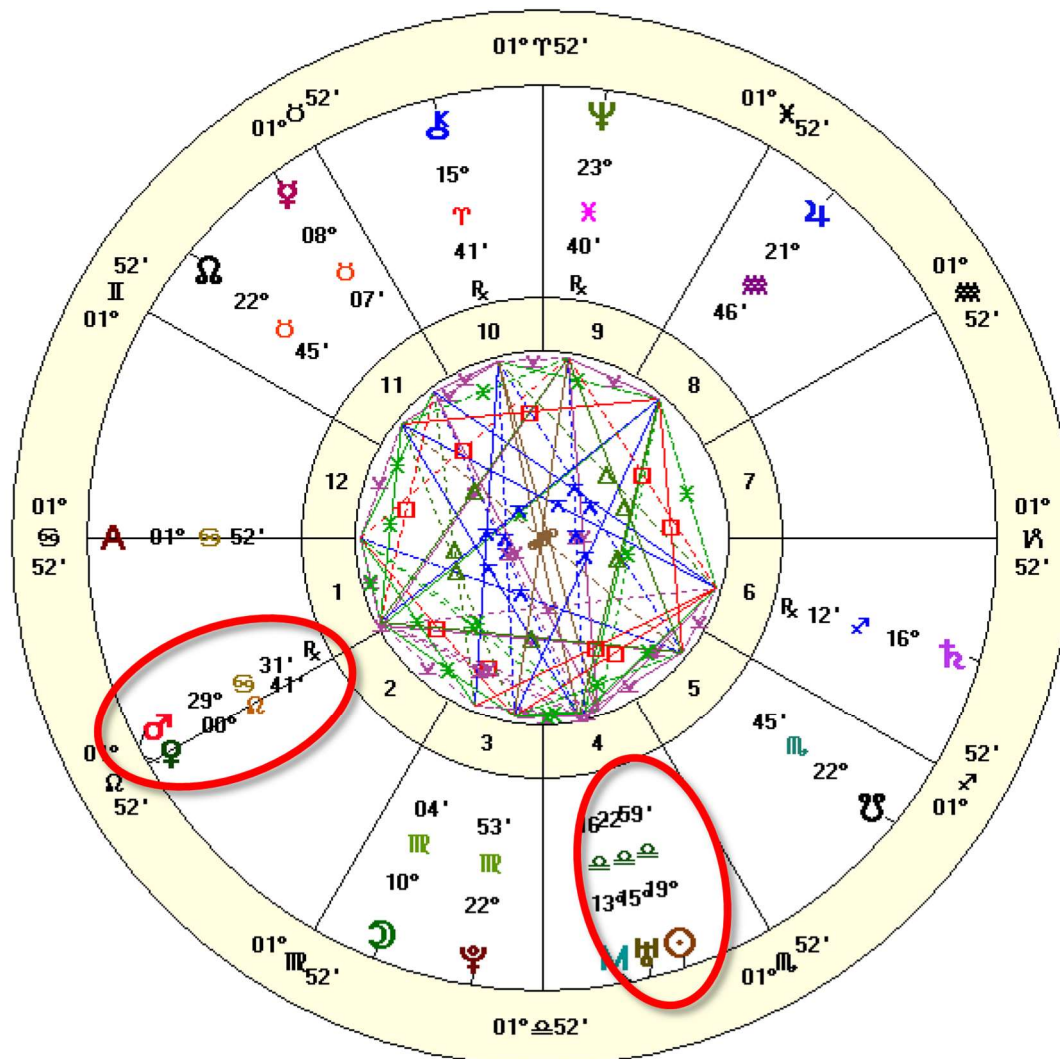
Again, there are an infinite number of harmonic charts for any given natal chart, but we currently understand the meanings of only a handful of them. At its most basic level, a harmonic chart is simply just another way to identify certain aspects. Hence, planets that are in opposition will appear conjunct in the 2nd harmonic chart, planets that are trine will appear conjunct in the 3rd harmonic chart, planets that are square will appear conjunct in the 4th harmonic chart, and planets that are sextile appear as conjunct in the 6th harmonic chart. Furthermore, we will refer to 180 degrees as the $\frac{1}{2}$ harmonic, a waxing trine (120°) as the $\frac{1}{3}$ harmonic, and a waning trine (240°) as the $\frac{2}{3}$ harmonic. The nonzero 4th harmonics are $\frac{1}{4} = 90^\circ$, $\frac{2}{4} = \frac{1}{2} = 180^\circ$, and $\frac{3}{4} = 270^\circ$. Similarly, the nonzero 6th degree harmonic angles are $\frac{1}{6} = 60^\circ$, $\frac{2}{6} = \frac{1}{3} = 120^\circ$, $\frac{3}{6} = \frac{1}{2} = 180^\circ$, $\frac{4}{6} = \frac{2}{3} = 240^\circ$, and $\frac{5}{6} = 300^\circ$. Notice, too that in the 6th harmonic that everything except $\frac{1}{6}$ and $\frac{5}{6}$ reduces to a lower harmonic, and we customarily refer to an angle by the lowest harmonic that it reduces to.

There is a sense that the 2nd harmonic chart gives us information about the things that we are trying to integrate into our lives, the 3rd harmonic gives us information about those things that work smoothly for us, and the 4th harmonic gives us information about the challenges that await us. Now suppose we have a trine in our 3rd harmonic chart. What does this mean? Well, it means that whatever planets are involved in the trine will function together as allies, and they will appear as conjunct in the 9th harmonic chart since the 9th harmonic is also the 3rd harmonic of the 3rd harmonic ($9 = 3 \times 3$). Hence, in a way, the 9th harmonic makes things that are easy even easier!

At the very least, the 2nd harmonic chart makes it easier to spot planets in opposition because they will now appear as conjunct, and similarly the 3rd harmonic chart easily identifies trines and the 4th harmonic chart readily pinpoints squares. However, those who have ample experience with harmonic charts believe that they are more than just an alternative way to identify aspects. It is believed, as previously stated, that the 2nd harmonic chart reveals more details about those things we are trying to integrate into our lives, the 3rd harmonic and its aspects show additional details about those abilities that come to us naturally in life, and the 4th harmonic gives us detailed information about the challenges we face. However, what about dividing our horoscope wheel into fifths or sevenths? These divisions correspond to aspects that some but not all astrologers use on a daily basis. In particular, the root 5th harmonic is written as $\frac{1}{5} = 360^\circ \times \frac{1}{5} = 72^\circ$ and the root 7th harmonic is $\frac{1}{7} = 360^\circ \times \frac{1}{7} \approx 51.43^\circ$. These aspects that I and others often refer to as the 5th and 7th harmonics are also the minor aspects known as the quintile and the septile that were introduced long ago by Johannes Kepler (1571 CE – 1630 CE). However, in spite of these aspects being around for almost 500 years, there is still not complete agreement on what they mean. Nonetheless, some harmonic and vibrational astrologers believe that the 5th harmonic has a connotation of playfulness and creativity while the 7th harmonic indicates a degree of discipline and focus. To help me interpret these harmonics, I consider where they fall within the “cycle of being.” In my discussion of this generic cycle in a previous chapter, I liken the sextile to the first date in a relationship. With regard to this, the septile or 51.43° aspect comes right before the sextile (60°) and so I liken it to the focus and discipline that one engages in right before this encounter. Similarly, the quintile (72°) comes right after the sextile, and, thus, it can represent the euphoria and creativity that one feels after a successful initial engagement.

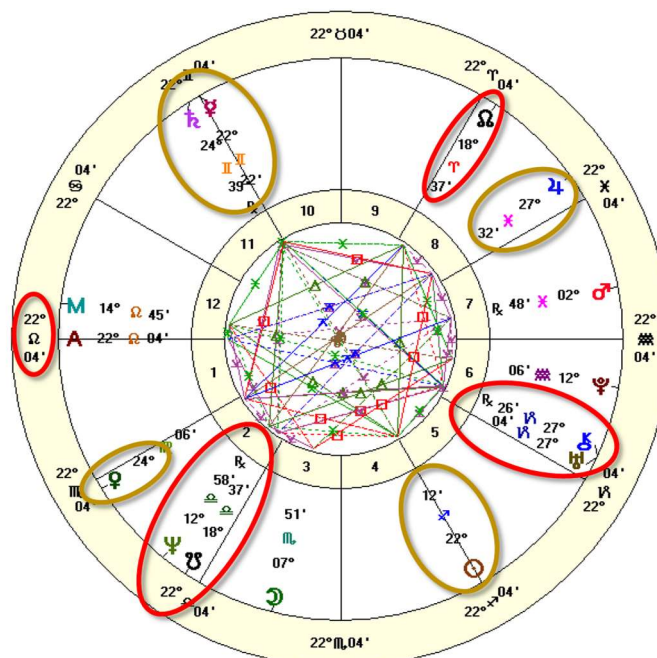
Determining the meanings of prime number harmonics can be quite difficult, and we have to rely on the observations of others until a coherent, collective understanding emerges. However, for those numbers

that are composite, products of primes, there are other ways to analyze their likely effect. For example, the 2nd harmonic (opposition) is considered to be a little difficult, and, thus, since the 4th harmonic is 2^2 and the 8th harmonic is 2^3 , every harmonic of the form 2^n should contain a degree of difficulty brought on by the duality of 2. In a similar way, since the 9th harmonic is 3^2 , we would expect this to be the “trine of trines” since trines in the natal chart become conjunctions in the 3rd harmonic and trines in the 3rd harmonic go on to become conjunctions in the 9th harmonic! In Vedic astrology the 9th harmonic chart is considered very important, and it is called the *Navamsa* chart. In particular, this chart is said to reveal details about marriage and other matters of fate and destiny. I specifically think of the 9th harmonic as showing us what we really want out of life. In other words, what a perfectly happy life might look like to us. In my case in my 9th harmonic I have Sun conjunct Uranus in Libra in the 4th house, Cancer rising, and Mars in Cancer conjunct Venus in Leo conjunct the cusp of the 2nd house. Thus, I want nothing more than a creative home environment that nurtures a loving relationship that is greatly valued. That is all I want out of life. Well, maybe more. Challenges and struggles that bring great rewards are also wanted, but the 9th harmonic shows what a moment of paradise would be like for me.



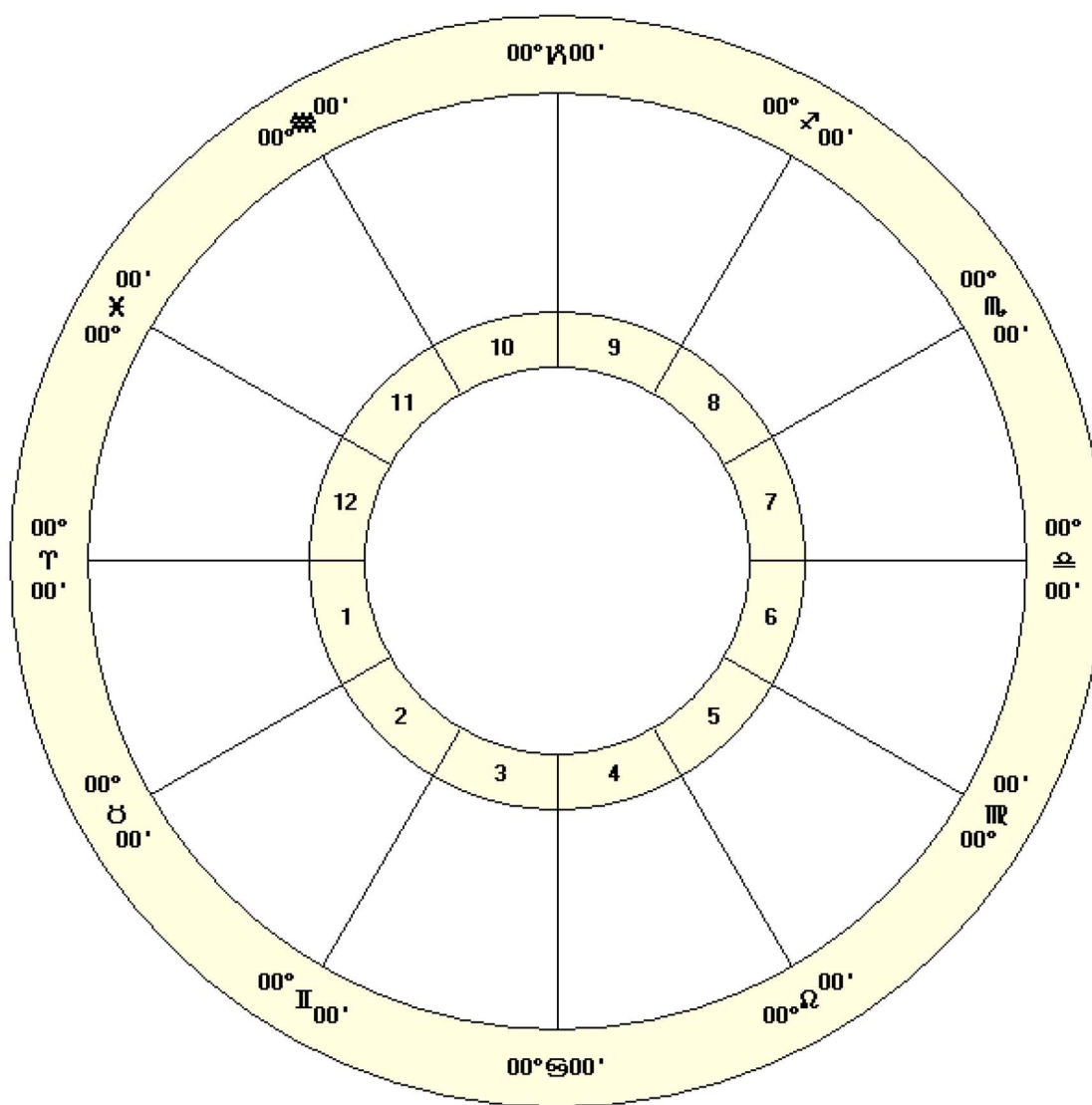
9th Harmonic Chart

Another case that should be mentioned is when the harmonic is composite, the product of two or more prime numbers such as $6 = 2 \times 3$. In this case, the 6th harmonic can be seen as a blend of the 2nd and 3rd harmonics. Hence, the sextile should be a blend of things we want to integrate into our being and times that are easy and enjoyable, and that is exactly how a good first date is. If all is going well, then there is both a pleasant feeling and an “urge to merge,” and consequently the sextile is a 60° aspect, the “first date” point on the cycle of becoming, and a blend of both the 2nd and 3rd harmonics. When we examine all the different meanings of the sextile, we find that they are all woven from common threads. The same kind of analysis can also be done with the 10th harmonic since $10 = 2 \times 5$. Hence, the 10th harmonic should combine the creative playfulness and euphoria of the quintile with the desire to integrate opposites of the opposition. It is playfulness with a purpose! If I look at my 10th harmonic, I can see several features that I can relate to. For example, in this chart Neptune is conjunct the South Node near the cusp of the 3rd house, and this corresponds to knowledge of unstructured mystical states that I bring with me in this life. Meanwhile, Saturn and Mercury are conjunct in Gemini on the cusp of the 11th house, and this represents concentration and mental focus applied to the creative endeavors of the group. Also, this conjunction is trine the Neptune/South Node conjunction, and so these planets are allies. In the 6th house in Capricorn near the cusp of the house is a conjunction between Uranus and Chiron, and this shows how I use higher transpersonal creativity to make adjustments to myself and my environment. Also, since Uranus and Chiron are in a strong relationship in my natal chart, it is not unusual to find some kind of relationship between them in my harmonic charts. All of the structure in a harmonic chart is inherited from the natal chart, and, thus, it is not uncommon for the same messages to come through though in different ways. And finally, Leo is rising (the self), and its ruler the Sun is in Sagittarius and strongly conjunct the cusp of the 5th house, and this just reiterates the playful creativity associated with this particular harmonic of mine. Also, the Sun is in a grand trine with the Ascendant and the North Node, and it is part of a grand cross with Venus, Saturn, Mercury, and Jupiter. Thus, through engagement with personal creativity, the tension of the grand cross is released through the grand trine and the integration of the oppositions of the grand cross is also facilitated through the Sun.



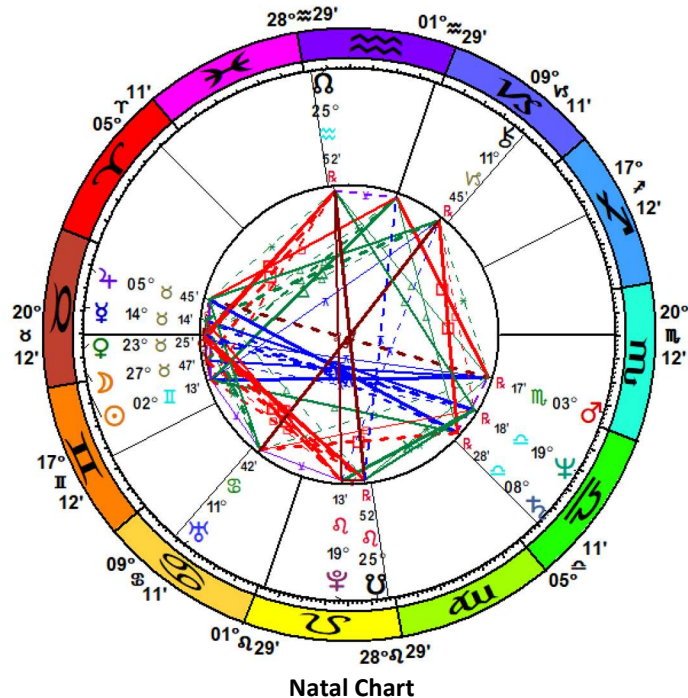
10th Harmonic Chart

The title for this chapter states that, in addition to harmonic charts, that midpoints will also be discussed, and so far we haven't said much about them. Thus, let me remedy that! The theory is that for any pair of planets, the points that are midway between them in the zodiac will embody the characteristics of both planets. Notice that I said "points," plural, and not simply "point." This is because every pair of planets will actually have two midpoints – one that is closest to the two planets and one that is 180° away. For example, if we contemplate a blank horoscope wheel, then it's easy to see that 0° Aries is the closest point that is halfway between 0° Pisces and 0° Taurus. However, 0° Libra is also midway between the two points – just on the other side of the circle! Now suppose that we have one planet at 0° Capricorn and another at 0° Cancer. Then 0° Aries and 0° Libra are equally distant from those two points, and this suggests to us that it is really the midpoint axis that is important, and, thus, astrologers consider both extremes as midpoints.



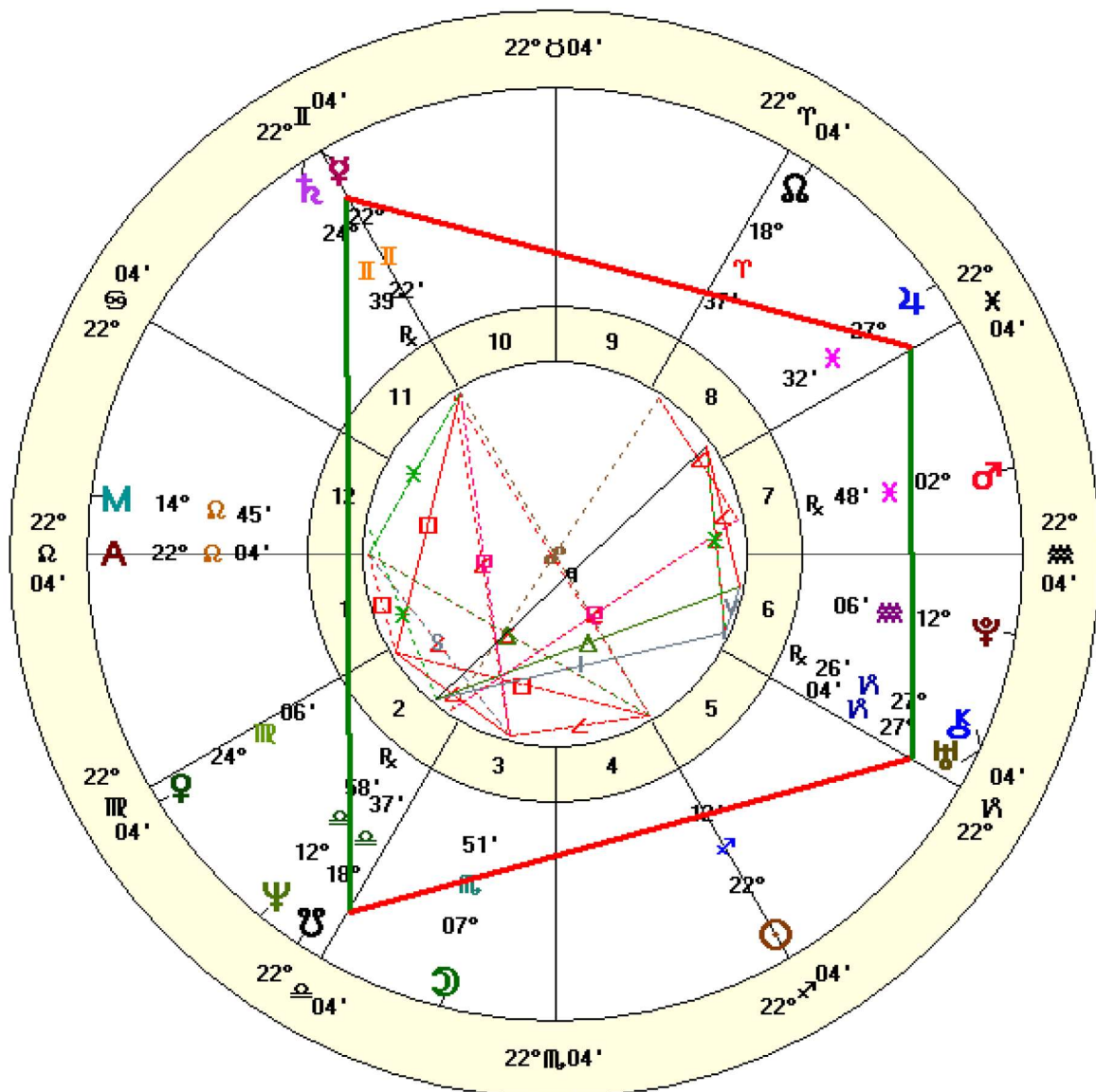
Some astrologers who use midpoints may consider only planets that are conjunct or opposite the position of the midpoint (that is, the midpoint that is closest to the two planets that create the midpoint), but other astrologers may also consider squares to the midpoint, and yet others may also take sextiles and trines to the midpoint into account. The majority, though, probably consider just conjunctions, oppositions, and squares to a given midpoint using an orb of just 1 or 2 degrees, and then the results are arranged in a diagram called a midpoint tree. For example below is a midpoint tree for my natal chart using 1° orbs, and my Mercury is conjunct the midpoint between Jupiter and Venus. Thus it is that I have always tried to cultivate kindness in my thinking. Also, the table below additionally indicates contact between Mercury and the North Node/Midheaven midpoint and with the Venus/Mars midpoint. However, these contacts are both squares involving Mercury, and so I don't necessarily interpret them the same way as a conjunction with a midpoint in the natal chart.

| Midpoint Trees: Modulus 90°00' Max Orb 2°00' | | |
|--|--|---|
| <p>Orb</p> <p>♂ ⊥ ♀ 0°02' □</p> <p>♀ ⊥ ♀ 0°56' ♂</p> | <p>Orb</p> <p>♂ ⊥ ♀ 0°59' ♂</p> <p>♂ ⊥ ♀ 0°06' □</p> <p>♂ ⊥ ♀ 0°02' ♂</p> | <p>Orb</p> <p>♂ ⊥ ♀ 1°01' ♂</p> <p>♂ ⊥ ♀ 0°08' □</p> <p>♂ ⊥ ♀ 0°02' ♂</p> |
| <p>Orb</p> <p>♂ ⊥ ♀ 1°34' ♂</p> | <p>Orb</p> <p>♂ ⊥ ♀ 1°30' □</p> <p>♂ ⊥ ♀ 0°09' □</p> <p>♂ ⊥ ♀ 0°16' ♂</p> <p>♂ ⊥ ♀ 0°17' □</p> | <p>Orb</p> <p>♂ ⊥ ♀ 0°24' □</p> <p>♂ ⊥ ♀ 0°36' □</p> |
| <p>Orb</p> <p>♂ ⊥ ♀ 0°53' □</p> <p>♂ ⊥ ♀ 0°20' ♂</p> <p>♂ ⊥ ♀ 1°17' □</p> | <p>Orb</p> <p>♂ ⊥ ♀ 1°27' ♂</p> <p>♂ ⊥ ♀ 0°23' □</p> <p>♂ ⊥ ♀ 0°13' □</p> <p>♂ ⊥ ♀ 1°48' □</p> | <p>Orb</p> <p>♂ ⊥ ♀ 1°06' ♂</p> <p>♂ ⊥ ♀ 0°10' ♂</p> <p>♂ ⊥ ♀ 1°40' ♂</p> <p>♂ ⊥ ♀ 1°41' ♂</p> <p>♂ ⊥ ♀ 1°59' □</p> |
| <p>Orb</p> <p>♂ ⊥ ♀ 1°59' □</p> <p>♂ ⊥ ♀ 0°19' ♂</p> <p>♂ ⊥ ♀ 0°18' □</p> <p>♂ ⊥ ♀ 0°11' □</p> | <p>Orb</p> <p>♂ ⊥ ♀ 0°01' ♂</p> | <p>Orb</p> <p>♂ ⊥ ♀ 1°43' □</p> <p>♂ ⊥ ♀ 1°42' ♂</p> |



Midpoints can also be computed for harmonic charts, and those astrologers who specialize in both midpoints and harmonic charts often refer to their practice as vibrational astrology these days. For example, in my 10th harmonic chart I have a configuration called an isosceles triangle – two pairs of planets square one another and then joined by a trine and a sextile. In my case, I actually have seven planets involved – Mercury, Saturn, Neptune, South Node, Uranus, Chiron, and Jupiter. Also, the beneficial aspects (trine and sextile) connecting the two squares provide release or redirection from the squares. Additionally, if all planets were at the exact same degree in their respective signs, then the midpoints between the sextile and the trine planets would coincide. As it is, they are only relatively close to one another. Nonetheless, any planet that is close to these midpoints will wind up channeling the energies of the isosceles trapezoid. Below is a list of the relevant midpoints and also my 10th harmonic chart with the isosceles trapezoid highlighted, and anything from 16 to 22 degrees or 26 to 28 degrees of Leo or Aquarius will tend to interact with the trapezoid.

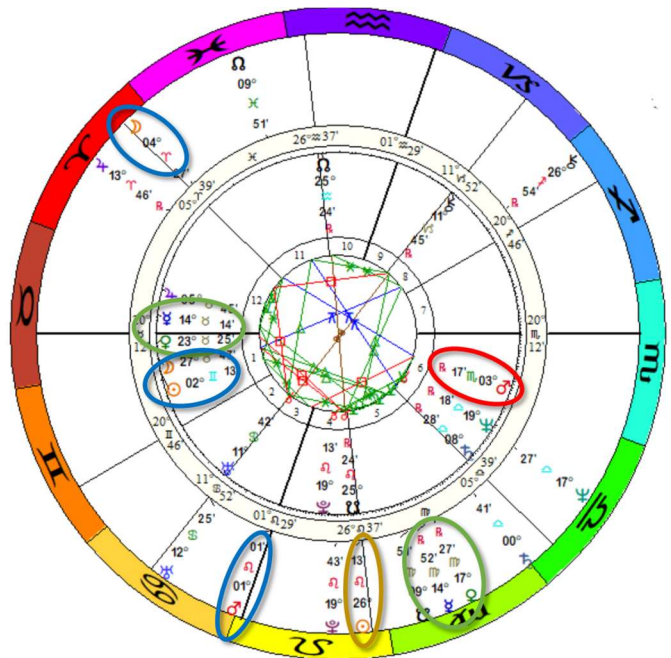
Mercury/Neptune = 17 degrees, 40 minutes, Leo
 Saturn/Neptune = 18 degrees, 49 minutes, Leo
 Mercury/South Node = 20 degrees, 30 minutes, Leo
 Saturn/South Node = 21 degrees, 39 minutes, Leo
 Jupiter/Uranus = 27 degrees, 18 minutes, Aquarius
 Jupiter/Chiron = 27 degrees, 29 minutes, Aquarius



SYNASTRY – THE ART OF CHART COMPARISON

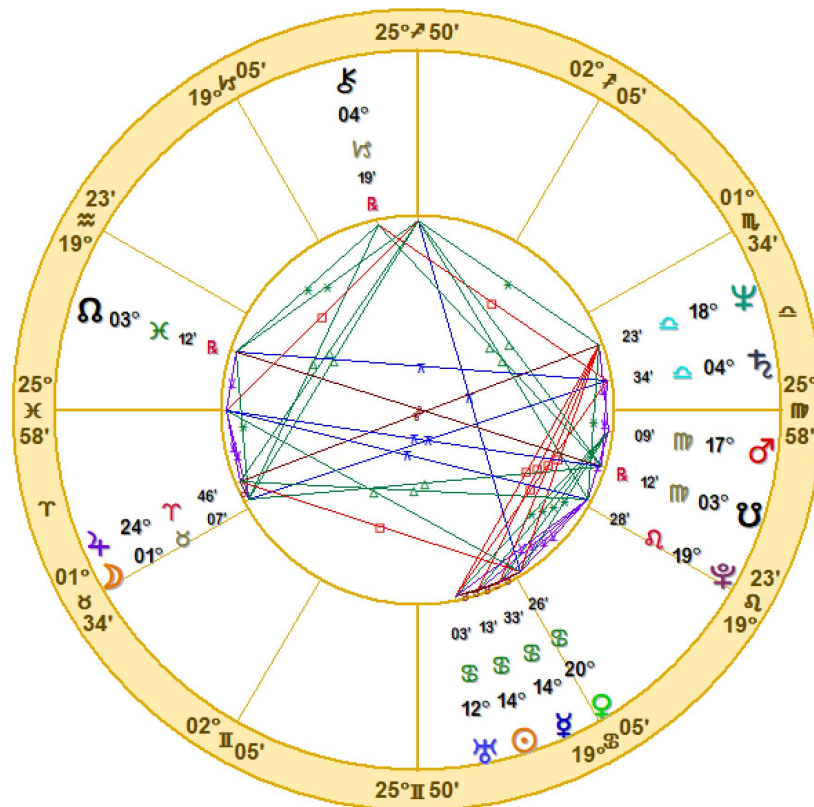
Everyone wants a loving relationship. That is just human nature. It is also the case that most people we'll get along okay with, and without too much trouble we and they can adjust our behaviors to make the harmony even greater. However, there are some people that we will experience an extraordinary harmony with (soulmates), and then there are other people with whom we always seem to say or do the wrong thing. The initial quality and character of a relationship can be seen by comparing the aspects between the personal planets in the two charts. Ideally, one would like to see many trines, sextiles, and beneficial conjunctions between the personal planets in the two charts. However, even with soulmates there will always be a few points of contention, and thus, each party must make some adjustments for the sake of peace in the home. Below is a comparison of some of the aspects between my personal planets (left side) and my wife's (top). The most prominent aspect is an almost exact trine between our Mercury's, and more than anything else my wife and I like to talk and exchange ideas. My Sun and Moon also sextile her Mars which is good since Mars is on the cusp of her 7th house of marriage. The relationship is also well supported by my Sun sextile her Moon and her Venus trine both my Mercury and Venus. The only fly in the ointment is a square from her Sun to my Sun, Moon, and Venus, and also Mars square Mars. And how does this manifest? Well, every now and then my Taurus stubbornness will run straight on into her Leo stubbornness, and we suddenly have two conflicting points of view. So how do we handle this? Well, we've both learned to recognize when this is about to happen, and we both immediately back off. Peace in the home is far more important than fighting.

| | ☉ | ☽ | ☿ | ♀ | ♂ |
|---|---------|---------|---------|---------|---------|
| ☉ | 6°01' A | 2°14' S | | | 1°12' S |
| ☽ | 1°35' S | 6°40' S | | | 3°14' A |
| ☿ | | | 0°38' A | 3°13' A | |
| ♀ | 2°48' A | | | 5°58' S | |
| ♂ | 7°04' A | | | | 2°16' A |



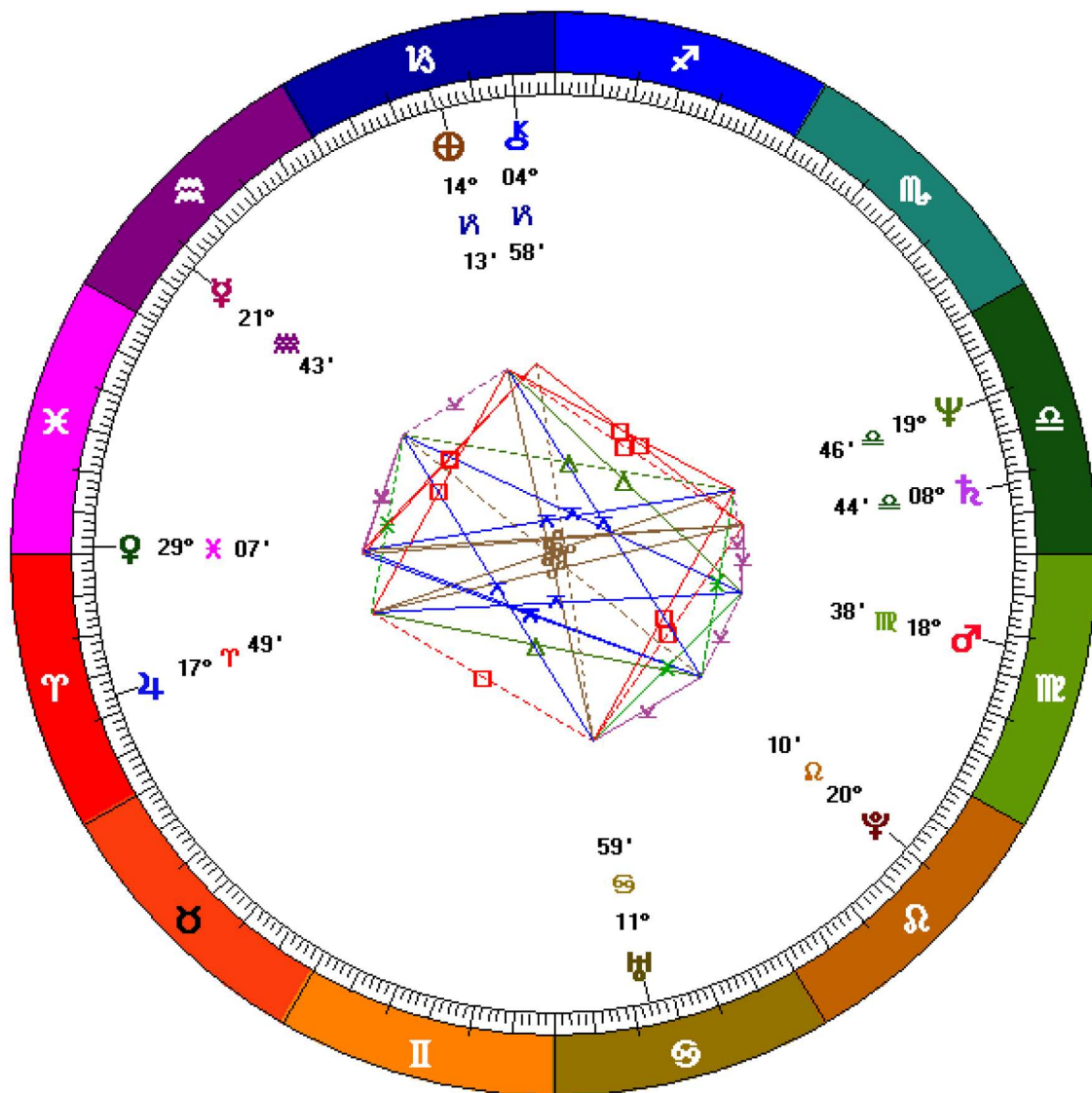
Composite Charts

Chart comparison shows how two people will react to one another as individuals. However, another very important question is how will the two people work together as a team? What will happen when the “two become one?” This is the type of question that the composite chart tries to answer, and decades of experience with it by astrologers shows that it is a reliable procedure. The logic behind a composite chart is based on the theory of astrological midpoints. To illustrate, suppose you have Uranus trine Jupiter with the Sun sextile both planets. In that case, the Sun is at the midpoint between Uranus and Jupiter, and the meaning of the Sun in this chart will blend with the meanings of the Uranus and Jupiter. In the theory of midpoints, this same sort of blending will occur anytime one planet is halfway between two others, though tight orbs of 1 or 2 degrees are usually warranted. In my own chart I can see this working out quite well. For example, I have my Mercury conjunct my Venus/Jupiter midpoint, and, consequently, developing kindness has always been very important to me. This same technique of computing midpoints is what is used to construct the composite chart. It puts a planet at the midpoint between that planet’s positions in the two natal charts, and as such it represents a compromise between the two natures for the sake of peace in the home. In the composite chart for me and my wife, Pisces is rising and Neptune is in the 7th house of marriage. As a result, there will be a strong mystical or fantasy component to our marriage. There is also a strong grand trine between Chiron, the Moon, and South Node with Chiron in the 10th house. This suggests deep past life connections (South Node) and that our relationship will spiritually elevate us both (Chiron in the 10th). Furthermore, Jupiter conjunct Moon promises a bountiful relationship. Meanwhile, with Sun, Mercury, Venus, and Uranus in the 4th house in Cancer, it should be a nurturing relationship that is quite unique (Uranus). Also, with Uranus in opposition to Chiron in the 10th, we are both on a path towards transcendence.



Geocentric Composite Chart

In addition to the usual composite chart for a relationship, one can also look at the heliocentric version of this chart. This is something that I suspect only more developed souls will relate to, but when this chart is well organized, it can reveal the truly deep aspects of a relationship. Below for me and my wife is our heliocentric composite chart. In this chart there is a lot of symmetry and organization. First, there is a grand cross created by the squares between Jupiter, Earth, Neptune, and Uranus. This pattern creates a dynamic tension that can be used for positive growth if it is channeled and released in the proper way. In our case, the tension is released by a mystic rectangle (four planets connected by trines and sextiles) between Mercury, Neptune, Pluto, and Jupiter that can channel and release the energy of the grand cross. Additionally, there is another rectangle involving Mercury, Mars, Pluto, and Venus where the planets are connected by inconjuncts (150 degrees) and semisextiles (30 degrees). These two aspects both require adjustments that need to be made, and, thus, we constantly and effortlessly adjust our relationship for the sake of peace in the home. Interestingly, this same not-too-common inconjunct-semisextile rectangle also appears above in our geocentric composite chart involving North Node, Saturn, South Node, and Ascendant. Things that matter often turn up in several ways in astrology!

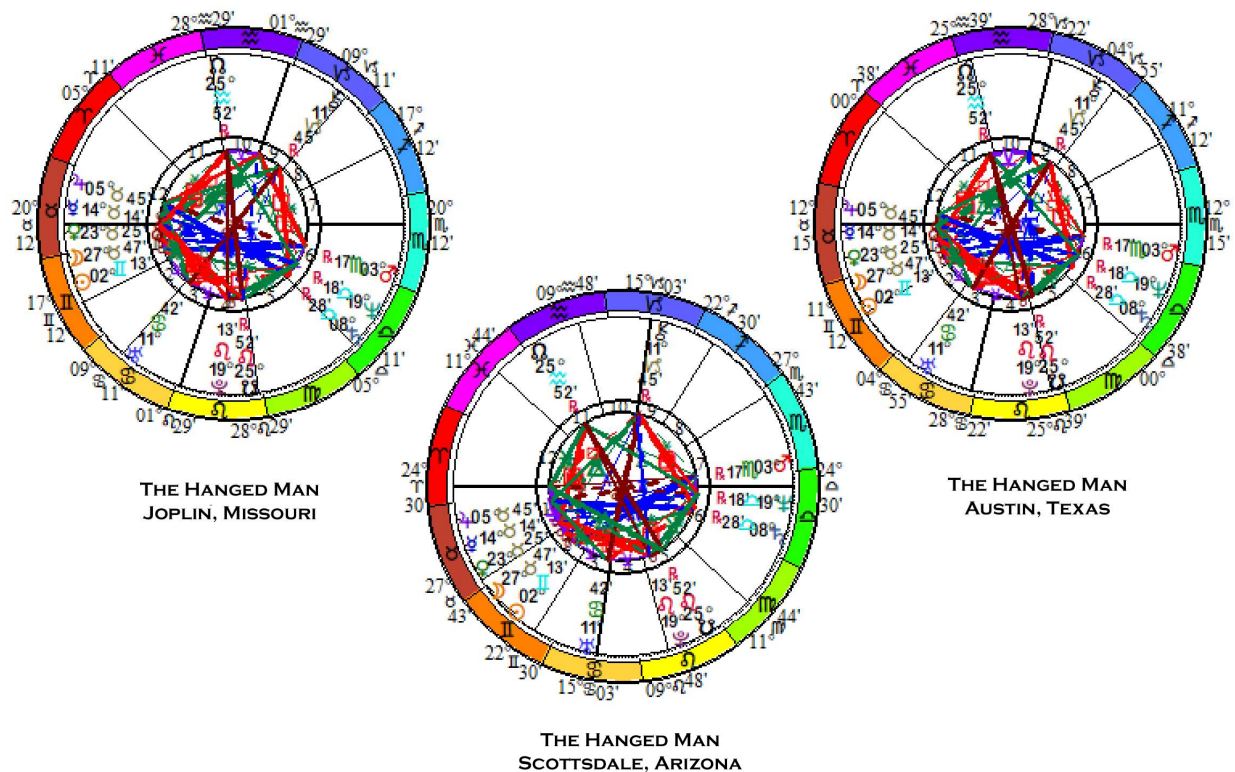


Heliocentric Composite Charts

RELOCATION CHARTS AND ASTROCARTOGRAPHY

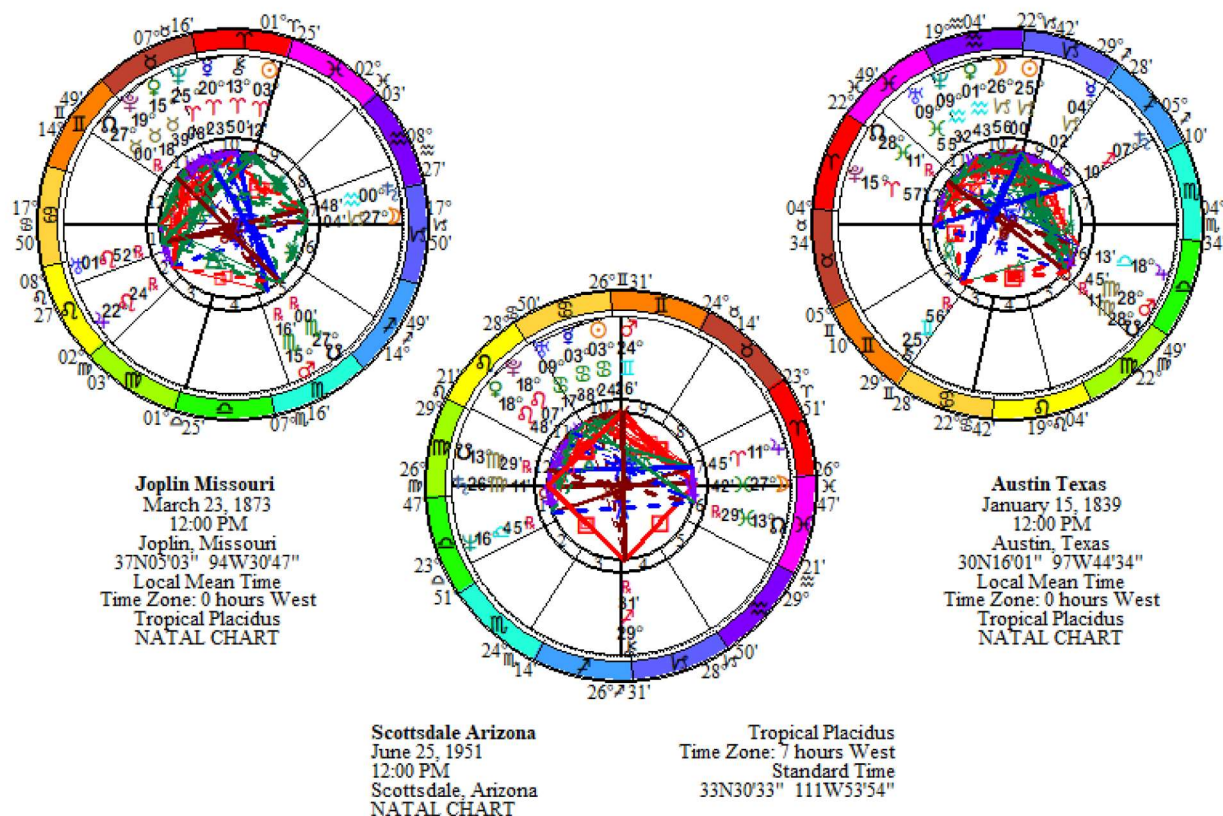
We saw previously that a solar return chart gives us some control over our astrological “destiny” by allowing us to manipulate the position of the rising sign and houses by choosing a different geographical location (And, hence, a different sign on the horizon!) for when the Sun returns to its position at birth. We can perform a similar manipulation just by moving! The theory behind relocation charts is that if we set up our natal chart for a different location, then the planets will be in the same position, but the Ascendant and house positions will have shifted, and that will affect some changes in one’s experiences and how one responds to them. If you move so far that you change time zones, then the time of birth will have to be adjusted even though it is still the same moment in time and yields the same planetary positions. For example, below is my natal chart set up for Joplin, Missouri, a relocation chart set up for Austin, Texas, where I spent most of the seventies, and a relocation chart for Scottsdale, Arizona, where I live now. (NOTE: I sometimes refer to myself as the “Hanged Man” after the tarot card of the same name of a man

hanging upside down with a rope attached to his foot because just as that hanged man sees the world from a different perspective, so do I!)



Notice that in the Joplin, Missouri, chart that I have Aquarius on the Midheaven, but in the Austin, Texas, chart I have Capricorn on the Midheaven. My career destiny changed when I moved to Austin. Also, in the Austin, Texas, chart I have Uranus making a strong sextile to my Ascendant. My time in Austin was very “enlightening,” to say the least. Several decades later, though, I moved to Scottsdale, Arizona, and in this location my Ascendant has changed from Taurus to Aries even though all of the planets are still in the same position they occupy in the Joplin chart. Hence, I became much more active and assertive in Scottsdale. Also, in the Scottsdale chart, Chiron is very close to the Midheaven. Consequently, it is Scottsdale that has firmly taken me from the personal to the impersonal and definitive transcendence.

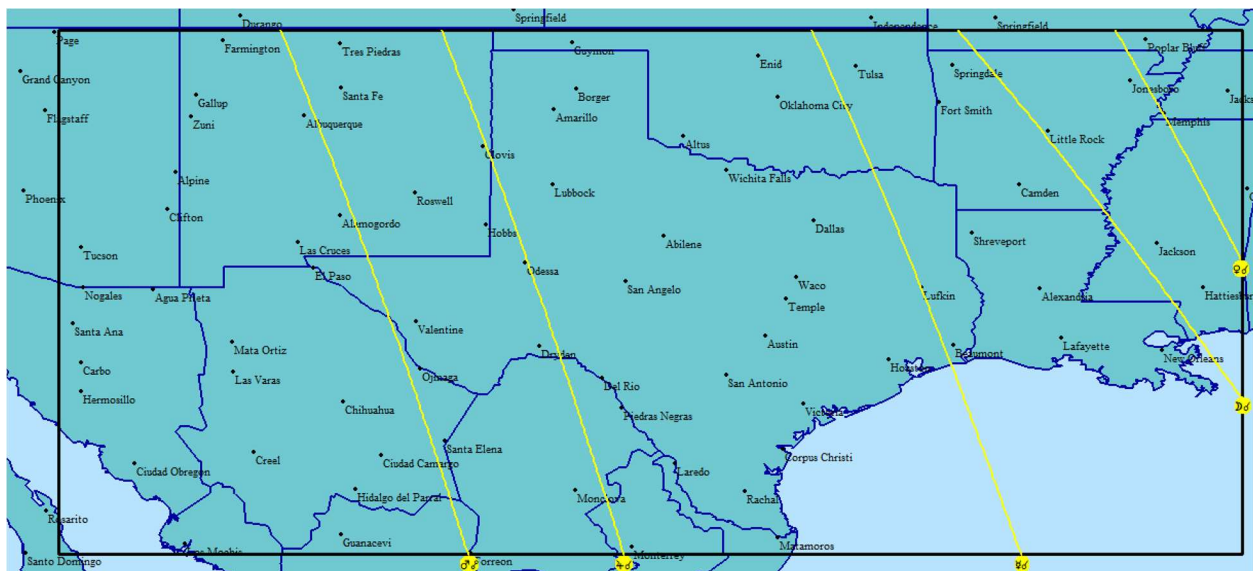
When one moves to a new place, it is like meeting a new person. So many things are different, and we adjust ourselves accordingly. The changes we experience as we move from one place to another can be due to several things, but from an astrological point of view the strongest influences are likely due to either an interaction with the horoscope set up for the time of the incorporation of that place, or it is due to the relocated chart. If the horoscope for a place is available, then these days it can usually be found without too much trouble on the Internet, and below are the birthdates and horoscopes for Joplin, Austin, and Scottsdale.



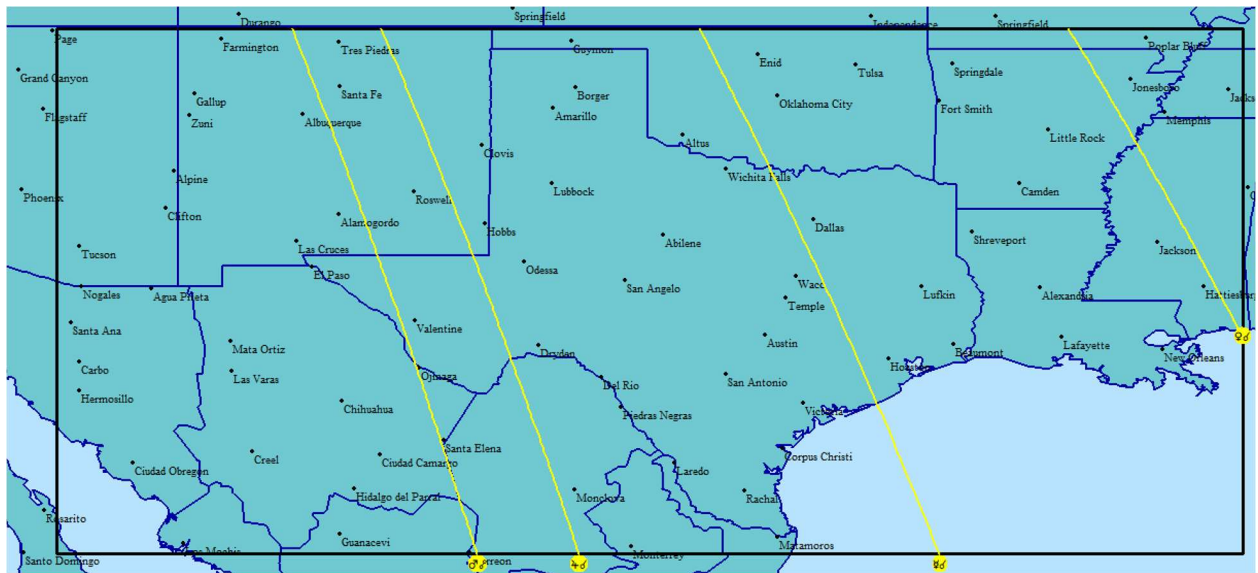
Each of these charts was calculated using 12 noon as the birthtime, and since we don't have a specific time of birth, we won't interpret the rising sign or houses. However, what is available to us is quite interesting. If I compare my birth chart to the city charts for Joplin, Austin, and Scottsdale, I find an ample number of trines and sextiles between the personal planets in my chart and the corresponding planets in these. Thus, each place has been very good to me in different ways. Also, Chiron, a planet that has played an enormous role in my spiritual advancement, is interestingly placed in each chart. For example, in the Joplin chart, Chiron is fairly close to the Sun. I suspect that many people are oblivious to the influence of Chiron, but I am not one of those. Thus, I suspect that being born in Joplin, Missouri, helped set me out on my spiritual path even though six months later we moved to San Antonio, Texas. In the Austin chart we see what many people call a "bucket pattern" with the planet Chiron as the handle. This means that Chiron will color everything about that city, and Austin is, indeed, one of the more forward thinking planets in the country. Additionally, Chiron makes a very strong trine with the Sun, further strengthening the transcendent nature of the city, and since my own birth chart also has a bucket pattern with Chiron forming the handle, it is no wonder that Austin had such an influence on my life. And finally, if we look at the Scottsdale chart, Chiron is in opposition to the Sun. This is like a Full Moon, and, hence, Scottsdale is also a very progressive place and one that is conducive to my own spiritual journey.

Related to relocation charts are astrocartography maps that were developed in the seventies by the late astrologer Jim Lewis. He had the brilliant idea of taking a 2-dimensional map of the world and overlaying it with lines that would show you where every planet would be on a chart angle. In other words, locations where a given planet would be stronger by being on the Ascendant, Descendant, Midheaven, or Nadir.

Later researchers added aspects from natal planets to both these angles and to midpoints. However, there is one technical detail that some astrologers are divided on. To explain this detail you have to first understand that while all the planets orbit the Sun and, from our point of view, the Earth, these orbital paths are not perfectly parallel. The apparent path that the Sun follows when viewed from Earth is called the Ecliptic, and the paths of the other planets all intersect this path at an angle. Normally, the way in which a planet's position is determined in a horoscope is by drawing a line from the planet's actual position to the Ecliptic and then noting that planet's apparent position on that path. That is the way in which the positions of the planets in both a birth chart and a relocation chart are found. However, in his formulation of astrocartography, Jim Lewis used the positions of the planets "in mundo." This essentially means that he used the positions as they are and as they appear in the real world, as determined from their actual position in space rather than projecting that position onto the Ecliptic plane. As a result, positions are shifted slightly from how they appear in a relocation chart. Today, computer programs can quickly generate astrocartography maps, and they often give you the option of computing positions either *in mundo* or with the usual zodiac longitude that is used for your horoscope. In order to see the difference this makes, below are two astrocartography maps where the first one is computed *in mundo* while the second one exhibits the zodiac longitude. Notice that in the first image there is a line to the east of Houston that shows where one should be if they want Mercury to be rising, but in the second image this line occurs to the west of Houston. This is the kind of difference one usually sees between *in mundo* and zodiac longitude. As to which method is more accurate, it's hard to say, and I often consider both of them when considering the effects of relocation.



In Mundo



MUNDANE ASTROLOGY

The word “mundane” is generally used these days as a reference to something which is commonplace, banal, or unimaginative. However, another meaning of the word is simply that which pertains to the world, and that is the sense in which the term is used in astrology. As such, mundane astrology aims to both understand and predict events involving politics, the stock market, weather and natural disasters, and other events that impact the world. In order to foresee such things, a mundane astrologer will examine the cycles of the slower moving planets, current transits, new and full Moon charts, solstice and equinox charts, eclipse charts, the horoscopes of cities and nations, the horoscopes of world leaders, and sometimes even the horoscopes of celebrities that have captured the world’s interest.

At the heart of mundane astrology are the cycles of the slow-moving planets. Whereas the Earth revolves around the Sun in 365 days, Mercury is the fastest moving planet completing its annual orbit in 87.97 days (0.2 years). Hence, with such speed it is no wonder that Mercury is known as the messenger of the Gods. Below for reference is a table showing the orbital periods of all the planets.

| PLANET | ORBITAL PERIOD |
|---------|------------------------|
| Mercury | 87.97 days (0.2 years) |
| Venus | 224.7 days (0.6 years) |
| Earth | 365.26 days (1 year) |
| Mars | 1.9 years |
| Jupiter | 11.9 years |
| Saturn | 29.5 years |
| Chiron | 50.71 years |
| Uranus | 84 years |
| Neptune | 164.8 yers |
| Pluto | 247.94 yeara |

As a general rule, the slower moving planets tend to have a greater impact on events because their slow movement results in an extended influence over time. Also, related to all of this are the synodic periods of the planets, the length of time between one conjunction of two given planets and the next. Below is a table showing the approximate lengths in years of the most important cycles.

| | | | | | |
|---------|--------|--------|---------|---------|---------|
| Jupiter | 20 | 13-20 | 13-14 | 12-13 | 12-14 |
| | Saturn | 64-165 | 44-46 | 35-37 | 31-38 |
| | | Chiron | 103-145 | 47-80 | 56-70 |
| | | | Uranus | 170-171 | 111-143 |
| | | | | Neptune | 494-497 |
| | | | | | Pluto |

And now here are two more tables showing the dates of the most recent conjunctions between the outer planets and the degree of the zodiac at which they occurred. Also, for those who use Sabian symbols, each position has been rounded up so that the degree shown is the one that should be consulted in any listing of the meanings of the Sabian symbols.

| | Jupiter | Saturn | Chiron | Uranus | Neptune |
|---------|--------------|----------------|----------------|--------------|-----------|
| Jupiter | | | | | |
| Saturn | 12/21/2020 | | | | |
| Chiron | 12/7/2009 | 4/12/1966 | | | |
| Uranus | 1/4/2011 | 10/18/1988 | 12/1/1898 | | |
| Neptune | 12/21/2009 | 11/13/1989 | 2/16/2010 | 10/24/1993 | |
| Pluto | 11/12/2020 | 1/12/2020 | 12/30/1999 | 6/30/1966 | 4/30/1892 |
| | | | | | |
| | Jupiter | Saturn | Chiron | Uranus | Neptune |
| Jupiter | | | | | |
| Saturn | 1 Aquarius | | | | |
| Chiron | 22 Aquarius | 24 Pisces | | | |
| Uranus | 28 Pisces | 28 Sagittarius | 5 Sagittarius | | |
| Neptune | 25 Aquarius | 11 Capricorn | 27 Aquarius | 19 Capricorn | |
| Pluto | 23 Capricorn | 23 Capricorn | 12 Sagittarius | 17 Virgo | 8 Gemini |

And finally, here are the dates and positions for the next round of conjunctions.

| | Jupiter | Saturn | Chiron | Uranus | Neptune |
|---------|-------------|-----------|------------|------------|-----------|
| Jupiter | | | | | |
| Saturn | 10/31/2040 | | | | |
| Chiron | 3/11/2023 | 6/8/2028 | | | |
| Uranus | 4/20/2024 | 6/27/2032 | 11/13/2042 | | |
| Neptune | 4/12/2022 | 6/5/2061 | 9/20/2094 | 1/16/2165 | |
| Pluto | 2/4/2033 | 6/15/2053 | 4/13/2069 | 4/24/2104 | 5/18/2385 |
| | | | | | |
| | Jupiter | Saturn | Chiron | Uranus | Neptune |
| Jupiter | | | | | |
| Saturn | 18 Libra | | | | |
| Chiron | 15 Aries | 7 Taurus | | | |
| Uranus | 22 Taurus | 28 Gemini | 18 Leo | | |
| Neptune | 24 Pisces | 21 Gemini | 5 Virgo | 6 Aquarius | |
| Pluto | 15 Aquarius | 15 Pisces | 3 Aries | 8 Taurus | 13 Gemini |

The “mother of all conjunctions” for humanity was what was effectively a triple conjunction of Uranus, Neptune, and Pluto that occurred between 577 and 574 BCE in the constellation Taurus. The energies represented by these outer three planets are each seen as transcendent and spiritual, and, thus, astrologers would expect this to be a watershed moment for humanity. And so it was. Some of the people

and events that happened around this time were (1) Lao Tzu, founder of Taoism, (2) Zoroaster, (3) the birth of Confucius, (4) the birth of Sakyamuni Gautama Buddha, (5) the golden age of Greek philosophy, (6) the writing of the Upanishads in India, and (7) the construction of the Hebrew Bible during the Babylonian exile. These are a tremendous number of new spiritual movements and currents of intellectual thought to have occurred during a relatively short span of time! It is difficult even to pinpoint which has had the most influence, though I might favor the Hebrew Bible because of its enduring impact on the world. Close seconds, though, in my mind would be the rise of Taoism and Buddhism, the Upanishads, and the emergence of Greek philosophy. The bottom line, however, is that astrological theory expected something momentous to happen at this moment, and it did. Now let's look at some conjunctions that have happened closer to the present.

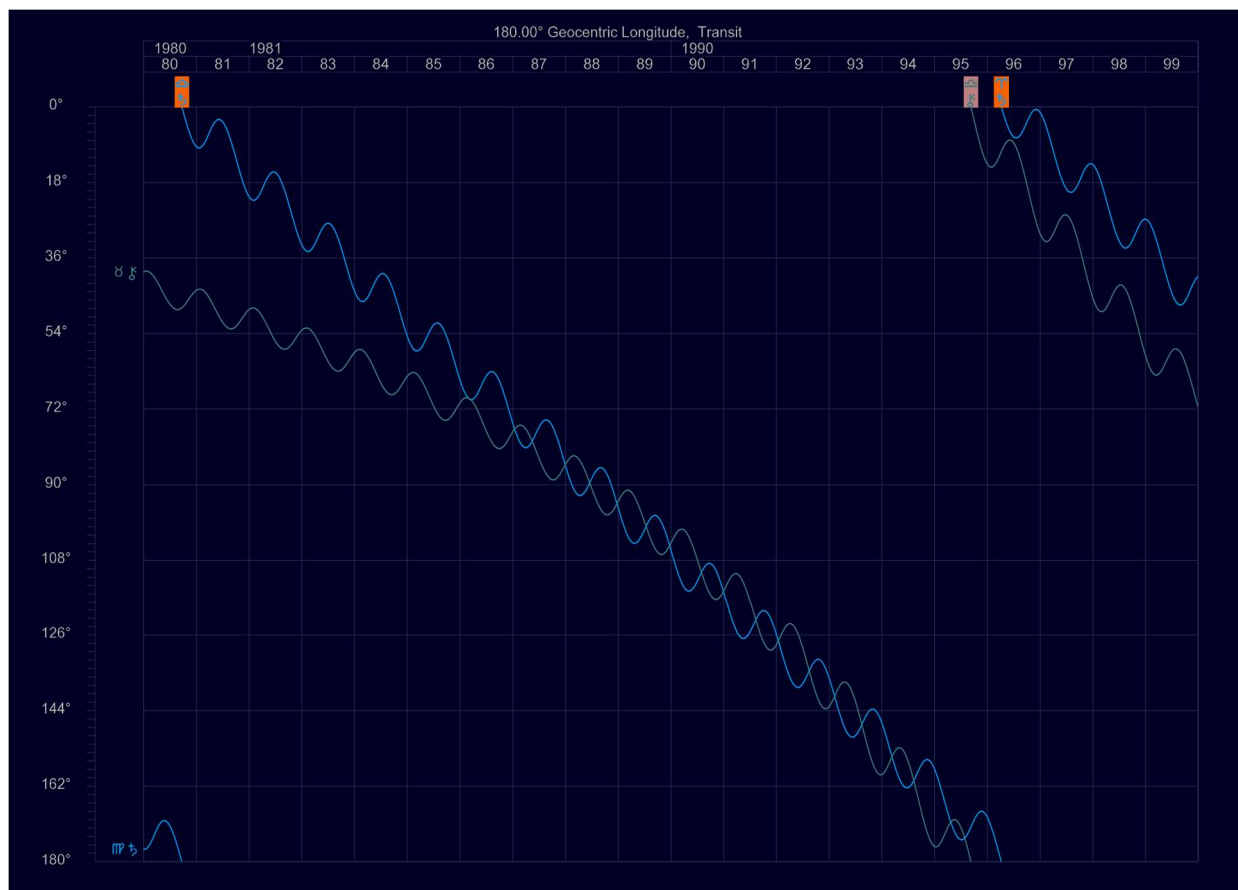
The oldest conjunctions in our list above are the Pluto/Neptune conjunction in 1892 and the Uranus/Chiron conjunction in 1898. Pluto means transformation while Neptune is inspirational and erases the boundaries between things. Consequently, I often look to art, music, and literature during such periods in order to understand the vision that is emerging. In this regard we see a flourishing of the arts at this time. This is the time of artists like Cézanne, Van Gogh, Gauguin, Monet, Toulouse-Lautrec, Matisse, Rodin, Renoir, Degas, Picasso, and the art nouveau movement. In music we heard Richard Strauss, Borodin, Tchaikovsky, Mahler, Prokofiev, Rachmaninoff, Dvorák, Sibelius, Debussy, Puccini, and Edward Elgar. Also, born in this decade or nearby were Cole Porter, Paul Hindemith, Aldous Huxley, Ernest Hemingway, Aaron Copland (1900), and ragtime (1901). Quite often when something significant is going on astrologically, we want to look not only at what happens at that moment, but also at the children born at this time since they will be actualizing the influence of that moment when they reach their prime in twenty or thirty years. Meanwhile, in literature from that time we have authors Sir Arthur Conan Doyle, Rudyard Kipling, Pearl S. Buck, George Bernard Shaw, Oscar Wilde, Tennyson, Joseph Conrad, W. B. Yeats, H. G. Wells, and Oscar Wilde. In religion, psychology, and philosophy we saw the publication of "The Golden Bough" by J. G. Frazer and *Das Kapital* by Karl Marx and "The Interpretation of Dreams" by Sigmund Freud (1900) and the peak of the spiritualism movement. We also saw politically the rise of the progressive movement, the establishment of the Nobel prize, the first peace conference at the Hague, and the Parliament of the World's Religions in 1893 in Chicago where Swami Vivekananda introduced the West to the philosophy of Vedanta.

While the Pluto/Neptune conjunction of 1892 brought about a revolution and freedom from past dictums in art and philosophy, the Uranus/Chiron conjunction of 1898 saw the beginnings of major revolutions in science. Among the seminal events of the 1890s were the discovery of x-rays by Röntgen, the start of wireless telegraphy, the patent on the internal combustion engine, the first automatic telephone switchboard, the motion picture camera, the discovery of radium by Madame Curie, and the formulation of the principles of rocket propulsion by Isiolkovski. Astrologically speaking, Uranus is associated with creativity while Chiron represents a higher vibration that takes one from the personal to the transpersonal. Thus, the 1890s saw the beginnings of the scientific breakthroughs that ushered in quantum physics and relativity in the early 1900s.

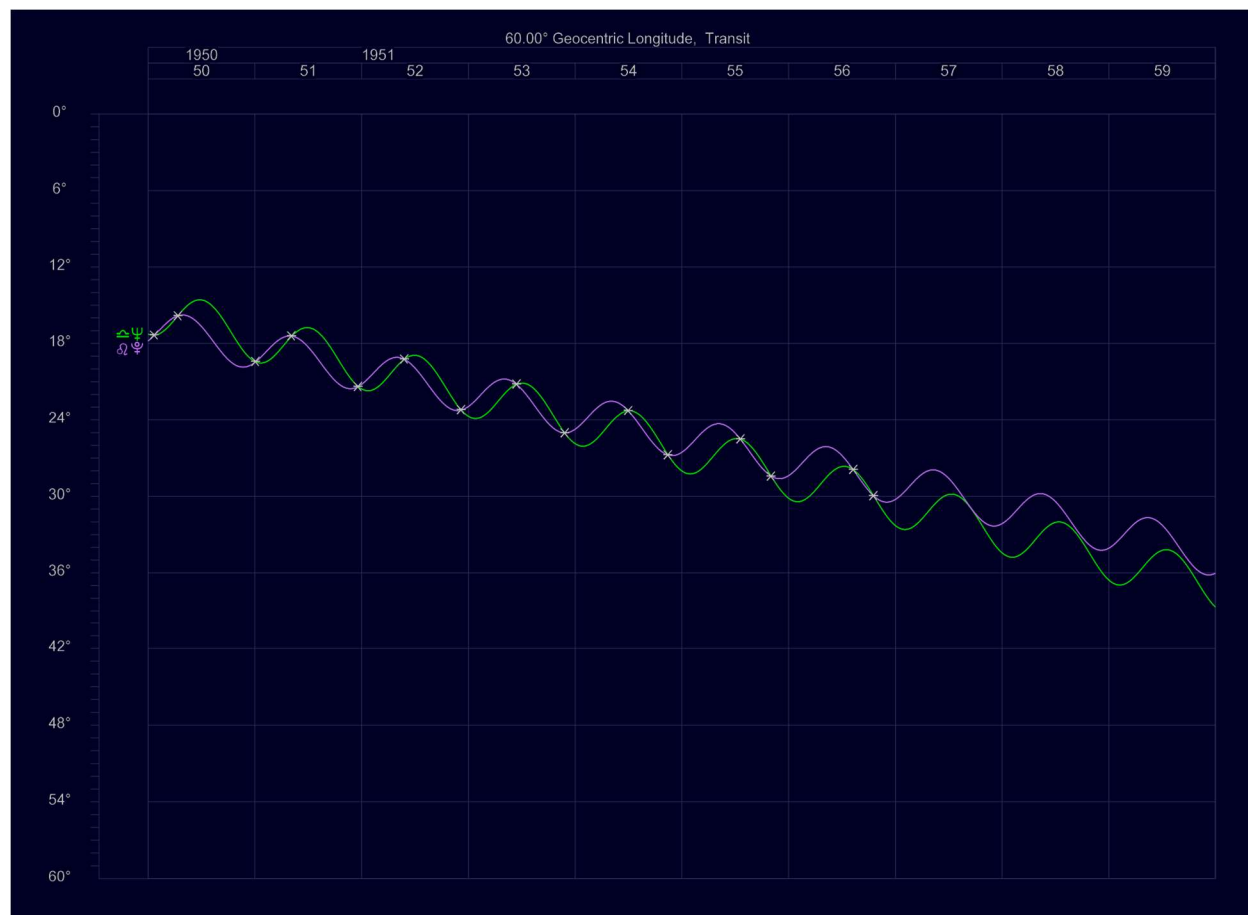
In a nutshell, the 1890s changed everything in America and the world as artistic boundaries were stretched and scientific advances propelled us forward, and surprisingly we are still in the early stages of this Neptune/Pluto cycle. We've only made it as far as the waxing sextile, and there won't be another conjunction of Neptune and Pluto until the year 2385 CE. There are several more hundreds of years to

come before this cycle reaches its completion, and while astrology still has its detractors, there is no denying the coincidence of these conjunctions with a major turning point in the history of humanity. Now let's look at what was happening in the latter half of the sixties.

I lived through the sixties, and the start of the sixties was pretty much like the end of the fifties. However, great changes were to occur in the second half of this sixties, and the Beatles were heralds to the revolution that was beginning to happen. The sixties saw the Civil Rights Movement, Medicare, protests against the war in Vietnam, environmentalism, hippies, eastern religions, and the recreational use of psychedelics. The seminal conjunctions during this time were Saturn conjunct Chiron at 24° Pisces on April 12, 1966 and Uranus conjunct Pluto at 17° Virgo on June 30, 1966. The conjunction of Saturn with Chiron suggests new spiritual disciplines emerging, and we did, indeed, see a shift toward personal spirituality, meditation, eastern thought, Carlos Castaneda, the Hare Krishna movement, and others as well as experimentation with psychedelics for spiritual enlightenment. Also, from the mid-eighties through the mid-nineties, Saturn was frequently in opposition to Chiron as can be seen from the 180° graphical ephemeris below. In fact, for the decade from 1985 to 1995, Chiron and Saturn were in opposition an amazing twenty times! The opposition is both the midpoint of the cycle and the flowering that follows the initial union, and the second half of the eighties and early nineties saw the growth of the New Age movement and earth-centered spirituality as a result of this opposition. This decade saw the “flowering” of the flower children of the sixties, and the spiritually transcendent nature of this aspect also brought in the New Wave music of the eighties and the early nineties, and, honestly, I haven't liked much of what I've heard since then.



The Saturn/Chiron conjunction that occurred in the sixties was in Pisces, and this highlighted spiritual practices that focused on transcending materialism, and the generation that was born between 1950 and 1956 was ready for this as many of us were born with Pluto exactly sextile Neptune as can be seen in the 60° graphical ephemeris below. This exact sextile created a generational urge for spiritual transformation.



The next conjunction of Saturn and Chiron will occur at 7° Taurus on June 8, 2028, and since this conjunction will occur in an earth sign, I anticipate a spirituality that focuses more on environmentalism and our spiritual connection with the planet. Meanwhile, as this new cycle begins, humanity will be assimilating the final lessons of the transcendent spirituality that was introduced in the sixties.

The second important conjunction of the sixties was the Uranus/Pluto conjunction of June 30, 1966, at 17° Virgo. Immediately prior to this was a conjunction on October 9, 1965, at 18° Virgo and another on April 4, 1966, at 17° Virgo. This combines the creativity of Uranus with the transformative power of Pluto and channels it along lines of practicality and service (Virgo). Hence, it was a decade of scientific achievement that culminated with landing a man on the moon, and throughout the sixties NASA continually touted the practical benefits that resulted from the space program as more and more discoveries made their way into our homes. However, Uranus also represents revolution and changing the existing pattern, and that occurred, too, in the latter part of the sixties.

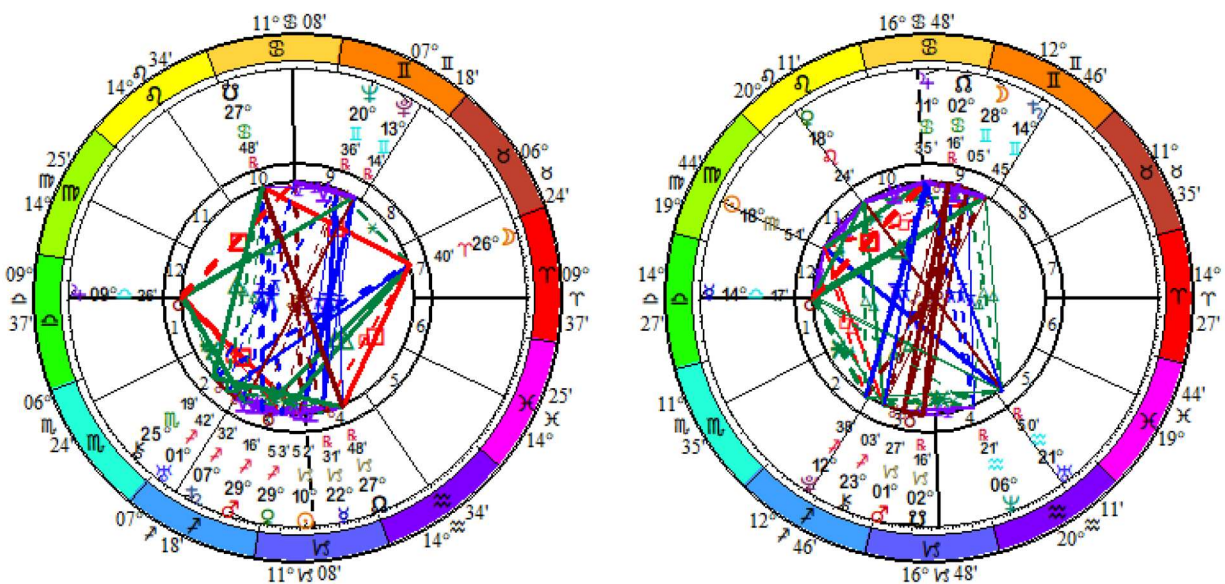
In 1925, astrologer Marc Edmund Jones met clairvoyant Elsie Wheeler in a car near her home in Balboa Park, San Diego, California, and as Mr. Jones called out each of the 360° of the zodiac, Ms. Wheeler would respond with a short statement that purportedly fit the meaning of that zodiacal degree. Whether this works or not, or whether it works part of the time but not all of the time, I don't know and I'm not even sure how one could test this scientifically. However, what I do know is that the Sabian symbols always provide quite a bit of food for thought as well as some constructive meditations. Below are some of the Sabian symbols for the conjunctions discussed above.

Pluto/Neptune – 4/30/1892 - 8° Gemini: AROUND A CLOSED DOWN FACTORY, STRIKERS WILL DEFIANTLY. A stirring of the collective, unconscious factors of being toward the repolarization of the conscious ego. Idle protest. [NOTE: The 1890s saw the beginning of a labor movement that resulted in several strikes that often devolved into violence.]

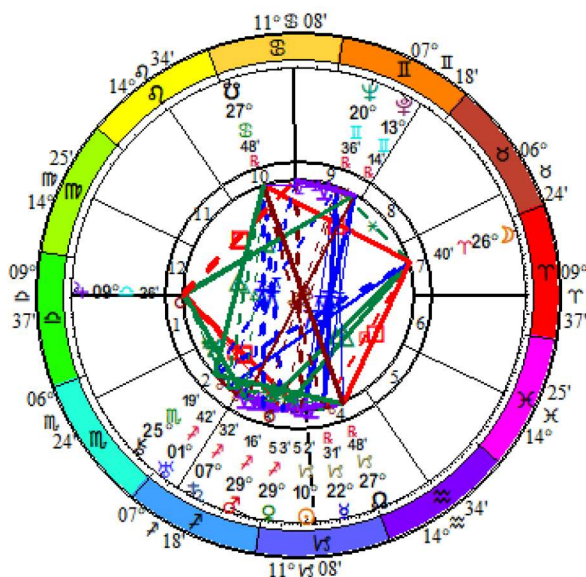
Saturn/Chiron – 4/12/1966 - 24° Pisces: IN A TINY LOST ISLAND, MEN BUILD HAPPILY THEIR OWN WORLD. Adaptability and inherent creativeness of man. Extreme surety in self-expression. Centralization of supernal forces. [NOTE: In the latter part of the sixties, the hippies and flower children created their own world, their own culture, and for some this went as far as moving into a commune.]

Saturn/Chiron – 6/8/2028 - 7° Taurus: WOMAN OF SAMARIA COMES TO DRAW WATER FROM THE WELL. The gaining of perspective by a return to ancient sources of being. Introspective approach to collective unconsciousness. [NOTE: The Sabian symbol suggests that the next Saturn/Chiron cycle of spirituality will be earth-centered, experiential, feminine, and will focus on practicality.]

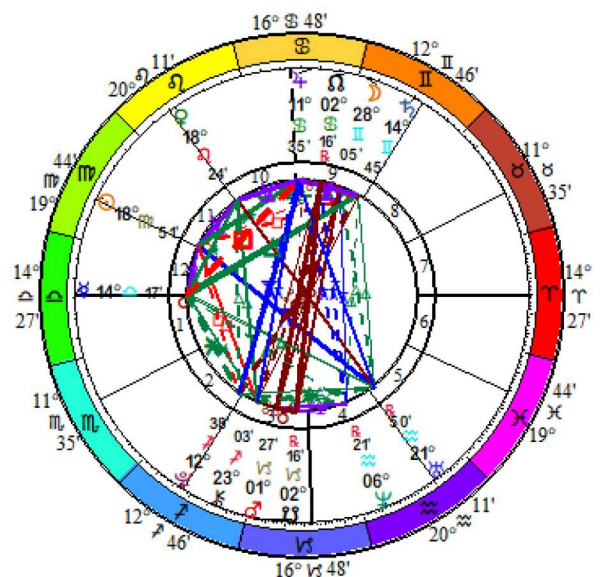
Now I want to digress for a moment from our discussion of past and future planetary conjunctions to take a look at a couple of interesting things. First, look at the two charts below and see how many similarities you can find.



When I look at the two charts, I immediately notice that they both have Libra rising and Cancer on the Midheaven. They also both have the lunar nodal axis in Cancer and Capricorn in the 10th and 4th houses, and they both have a Pluto/Saturn opposition in Gemini and Sagittarius in the 9th and 3rd houses. A difference, though, is that in the chart on the left, the South Node is in Cancer and Pluto is in Gemini while the North Node is in Capricorn and Saturn is in Sagittarius. For the chart on the right, however, these things are reversed. The North Node is in Cancer and Saturn is in Gemini while the South Node is in Capricorn and Pluto is in Sagittarius. Somehow this reversal of the signs while exhibiting the same oppositions seems to bind these two charts together even more closely. Furthermore, in each chart with Pluto (death and transformation) in opposition to Saturn (regulation, control, and structure), one might expect some sort of transformation of infrastructure to be involved. So what are these two the charts of? Well, the one on the left is the horoscope for New York City, and the one on the right is set up for the attack on the twin towers on 9/11. Below now are again the two charts with their time and place data included.



New York - all burroughs
 January 1, 1898
 12:01 AM
 New York, New York
 40N42'51" 74W00'23"
 Standard Time
 Time Zone: 5 hours West
 Tropical Placidus
 NATAL CHART

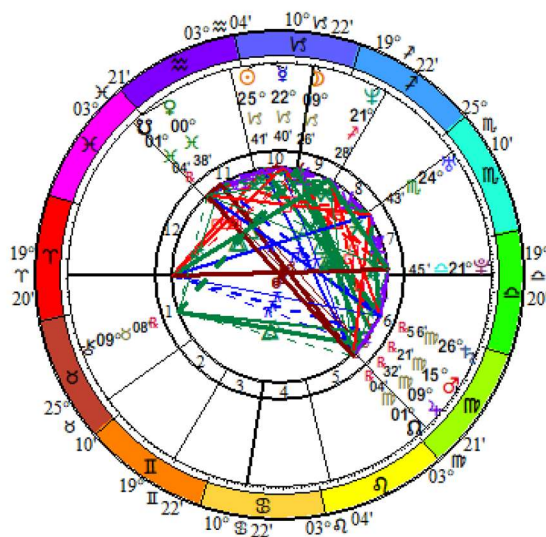


September 11 Attack
 September 11, 2001
 8:46:30 AM
 New York, New York
 40N42'51" 74W00'23"
 Daylight Saving Time
 Time Zone: 5 hours West
 Tropical Placidus
 NATAL CHART

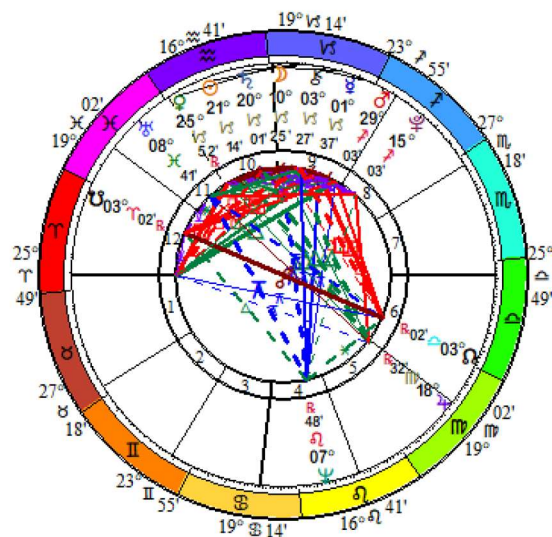
In the case of the birth chart for New York City, it is the promise of transforming (Pluto) and building (Saturn) that stands out until the city becomes essentially an international (9th house) capital for the world. But in the case of the attack on September 11, the experience was death (Pluto) through the destruction of infrastructure (Saturn) by adversaries from a foreign country (9th house). The lesson here is that when things happen, there are often connections and interconnections that we are not aware of. Furthermore, I must also confess that I suspect some of my fellow astrologers seem a little too eager to blame every bad thing that happens on whatever the current celestial configuration is. However, I doubt we can blame every unfortunate event on the stars. Hence, when there is reason to expect a particular event in a particular location and we strive to find an astrological factor, we should also be discriminating and

intelligent in the way we go about it. For example, we shouldn't try to automatically blame everything on Mercury retrograde!

Mundane astrology has a long history of looking at the horoscopes of the rulers of countries in order to figure out what their fate will be. However, rather than looking at a ruler, I want to look at a particular celebrity. In particular, the incredibly talented Lin-Manuel Miranda, and while including a non-ruler in a discussion on mundane astrology may not be proper according to some, he, nonetheless, has had an impact on several people through his art, and we can learn some important lessons with just a glance at his horoscope. Thus, again, I present to you two charts, one is of Lin-Manuel Miranda and the other is of Alexander Hamilton. Unfortunately, the birth time of Alexander Hamilton is unknown, but given his impact on the newly formed United States of America, one might expect his rising sign to be such that he would have a stellium of planets in the 10th house as depicted below. However, even if Hamilton's planets were not so tightly packed in the 10th, there is still one fact that remains. Namely, that both Hamilton and Lin-Manuel both have a stellium of planets in Capricorn. More specifically, both Hamilton and Miranda have Sun, Moon, and Mercury in Capricorn, and they both have Pluto in Sagittarius and Jupiter in Virgo. And what does this mean? Specifically, it means that Lin-Manuel Miranda knows this guy, and when he reads Hamilton's biography, he understands the man and his motivations at a deep level. Hence, it's no wonder that Lin-Manuel Miranda created such an artistic masterpiece, the Broadway show "Hamilton." Also, Lin-Manuel Miranda has 9 planetary aspects that are less than 1 degree from exact. In my experience, that is a huge number! Most people whose charts I look at generally have no more than 5 or 6 close aspects of this sort. However, the reason this is important is because in my experience the closer the aspect, the more strongly it is brought into focus, and consequently, the greater likelihood of the person doing something meaningful along the lines of that particular aspect. Of course, this isn't the only factor to consider in a horoscope, and sometimes all a person needs is just a single extremely close aspect in order to define a focus for their lives. It is the way.



Lin-Manuel Miranda
January 16, 1980
11:00 AM
Manhattan, New York
40° N 46° 73' W 59
Standard Time
Time Zone: 5 hours West
Tropical Placidus
NATAL CHART



Alexander Hamilton
January 11, 1755
12:00 PM
Charlestown, St Kitts-Nevis
17° N 08° 62' W 37
Local Mean Time
Time Zone: 0 hours West
Tropical Placidus
NATAL CHART

Now let's return to our planetary cycles and conjunctions. We'll take them on in chronological order, and I'll give a succinct interpretation followed by a list of some relevant events.

1988 – Saturn conjunct Uranus in Sagittarius

Creativity (Uranus) is solidified (Saturn) in service to the group mind (Sagittarius).
Old traditions (Saturn) and philosophies (Sagittarius) are upended (Uranus).

The US and USSR end the cold war.
Canada and the US reach a trade agreement.
The intifada begins in Israel.

1989 – Saturn conjunct Neptune in Capricorn

Spiritual energies (Neptune) are brought down to the material plane (Saturn) impacting governing structures (Capricorn).
Structures (Saturn) in government (Capricorn) are weakened (Neptune), but Saturn rules Capricorn, and authoritarian governments may retaliate.

Communism in Europe collapses.
The Iron Curtain and the Berlin Wall collapse.
China cracks down on demonstrations in Tiananmen Square.

1993 – Uranus conjunct Neptune in Capricorn

Creativity (Uranus) and ethereal energies (Neptune) change governing structures.
Chaos (Uranus) and confusion (Neptune) reign in governments.

Bill Clinton is sworn in as president.
Israeli-Palestinian peace accords are signed in Oslo, Norway.
Václav Havel is elected President of the Czech Republic.
Bosnian civil war.
Corrupt businessmen gain power in Russia.

1999 – Chiron conjunct Pluto in Sagittarius

Energies that are powerful (Pluto) and transpersonal (Chiron) will transform (Pluto) the mind of mankind.

The still fledgling Internet connects the masses (Pluto) as the global village becomes the new truth (Chiron), and access to knowledge (Sagittarius) becomes universal and education (Sagittarius) is transformed (Pluto).

2009 – Jupiter conjunct Chiron in Aquarius

Transpersonal spiritual energies (Chiron) are magnified (Jupiter) in service of humanity (Aquarius).

Barack Obama is sworn in as president, giving people a new hope.

The stimulus package saves the US and global economy, and work begins on the Affordable Care Act.

2009 – Jupiter conjunct Neptune in Aquarius

Ethereal spiritual energies (Neptune) are magnified (Jupiter) in service of humanity (Aquarius).

Again, Barack Obama is sworn in as president, giving people a new hope.

The stimulus package saves the US and global economy, and work begins on the Affordable Care Act.

2010 – Chiron conjunct Neptune in Aquarius

The transpersonal (Chiron) and the ethereal (Neptune) come together in service of humanity (Aquarius).

The Affordable Care Act is passed in the United States.

2011 – Jupiter conjunct Uranus in Pisces

Creativity and spontaneity (Uranus) is magnified (Jupiter) as old boundaries are transcended (Pisces).

Momentum to legalize marijuana builds causing states to respond positively in 2012.

2020 – Saturn conjunct Pluto in Capricorn

Traditional (Capricorn) structures (Saturn) will be transformed.

Traditional (Capricorn) structures (Saturn) will be destroyed.

The pandemic of 2020 changed everything!

2020 – Jupiter conjunct Pluto in Capricorn

Authority (Capricorn) sees its power (Pluto) magnified (Jupiter).

The rich got richer during the pandemic, and governments, for better or worse, assumed more power over the people.

2020 – Jupiter conjunct Saturn in Aquarius

A new cycle to balance growth (Jupiter) and regulation (Saturn) is begun in order to preserve society (Aquarius).

One thing that can be seen is that since 2009 we have experienced the beginnings of several major synodic cycles. Additionally, those conjunctions that have occurred in Aquarius have given us a taste of the new age that is coming. In particular, several important conjunctions in Aquarius occurred during Obama's tenure as president, and his policies may foreshadow what we can expect in the Age of Aquarius. Now let's talk about the shape of things to come! We'll look first at those aspects that will affect the entire world, and then we'll look specifically at their impact on the United States.

2021 – Saturn in Aquarius waning squares Uranus in Taurus three times

We have seen this aspect play itself out in terms of how regulations (Saturn) for the collective good (Aquarius) have caused people to revolt (Uranus) as they have conflicted with personal values (Taurus).

2021 – Saturn in Aquarius waning sextile with Chiron in Aries three times, Uranus in Taurus waning semisextile Chiron in Aries twice

The initiative that began with a conjunction of Saturn and Chiron in 1966 to anchor (Saturn) transcendent spiritual energies (Chiron) in consciousness (Pisces) is nearing its completion. With the waning cycle, some in this world will further stabilize their enlightenment and the lessons learned since the sixties.

2022 – Saturn in Aquarius waning semisextile Neptune in Pisces and close to exact waxing semisextile Pluto in Capricorn

Countries will focus on rebuilding (Saturn) for the collective good (Aquarius) as they receive inspiration from the spiritual (Neptune in Pisces) and assistance from the powerful (Pluto in Capricorn).

2023 – Saturn in Aquarius waxing semisextile Pluto in Capricorn

The powers-that-be (Pluto in Capricorn) give tacit support for regulations (Saturn) that will benefit society (Aquarius).

2024 – Pluto enters Aquarius with only a slight return to Capricorn

We begin the Age of Aquarius, but it isn't all fun and games. The serious transformation of society begins, but it will likely be out of necessity due to the problems brought on by global warming and other changes.

2025 – Uranus in Taurus waxing sextiles Neptune in Pisces, Uranus in Gemini waxing sextiles Neptune in Aries and waning sextiles Saturn in Aries, Saturn in Pisces waning semisextile Chiron in Aries

Scientific creativity (Uranus in Gemini) will inspire new initiatives (Neptune in Aries) to be realized in the material world (Saturn in Aries). Also, the Saturn/Chiron cycle that was begun in 1966 will soon come to an end as a new cycle begins in 2028.

2026/2027 – Saturn in Aries waxing sextile Pluto in Aquarius, Saturn conjunct Neptune in Aries, Uranus in Gemini waxing sextile Neptune in Aries twice, Uranus in Gemini waxing trine Pluto in Aquarius three times, Uranus in Gemini waxing sextile Neptune in Aries three times, Neptune in Aries waxing sextile Pluto in Aquarius four times

These will likely be watershed years for humanity. Saturn and Neptune in Aries signify new initiatives involving intangible inspiration and tangible building. Uranus in Gemini promises invention and scientific innovation. Pluto in Aquarius suggests the transformation of society as we struggle with climate change, dwindling resources, and the needs of the global community. Additionally, all the good aspects between these planets and a lack of difficult aspects in these years suggest that initiatives taken at this time may ultimately be almost as impactful as those surrounding the momentous triple conjunction of the outer three planets from 577 – 574 BCE. And as the Saturn/Neptune conjunction in Aries ends the cycle begun in Capricorn in 1989 and begins a new one in Aries, the balance between the spiritual and the material shifts its focus from ruling bodies and governments (Capricorn) to individuals (Aries). It may be the time of individual spirituality and the peaceful, spiritual warrior. Also, Pluto and Neptune will be sextile each other four times between 2026 and 2027 and thirteen times between 2026 and 2032! These two planets will be in Aquarius and Aries throughout, and the exact sextile portends coordination between the group changes for humanity (Pluto in Aquarius) and personal vision and spirituality (Neptune in Aires), and the children born at this time will be imprinted with this vision just as there were people born in the early fifties who helped carry this vision to a momentary fruition in the sixties and the seventies.

2028 – Saturn and Chiron conjunct in Taurus, Saturn in Taurus waning semisextile Neptune in Aries, Saturn in Taurus waxing square Pluto in Aquarius, Uranus in Gemini waxing trine Pluto in Aquarius, Chiron in Taurus waxing semisextile Neptune in Aries, Chiron in Taurus waxing square Pluto in Aquarius

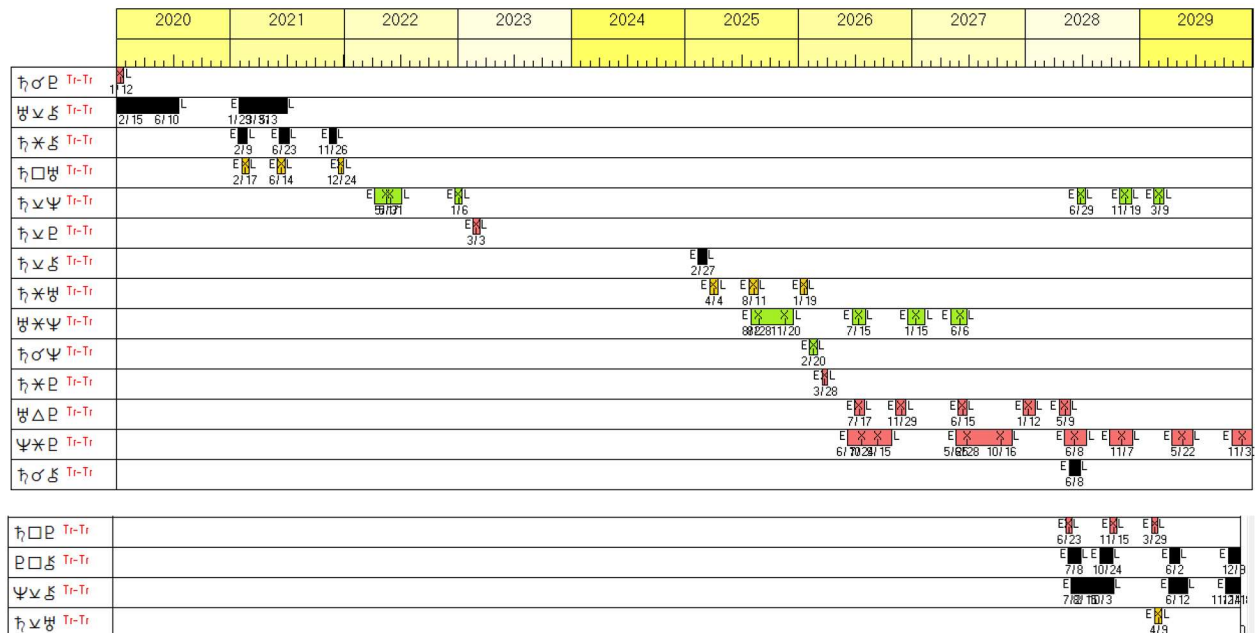
The Saturn/Chiron cycle that was begun in 1966 in Pisces comes to an end, and a new Saturn/Chiron cycle begins at 7° Taurus. The old cycle focused on achieving mystical states of consciousness (Pisces). This new cycle will find a more earth-centered spirituality that likely

focuses more on the environment, its preservation, and our connection to it. However, there may be conflict with power structures (Pluto) over what is really best for the greater good (Aquarius).

2029 – Saturn in Taurus waning semisextile Uranus in Gemini, Saturn in Taurus waxing semisextile Neptune in Aries, Saturn in Taurus waxing square Pluto in Aquarius, Chiron in Taurus waxing semisextile Neptune in Aries, Chiron in Taurus waxing square Pluto in Aquarius

Transcendence (Chiron) materialized (Saturn) in Earth (Taurus) becomes a focal point for higher energies (Uranus and Neptune), but not without conflicting with power structures (Pluto) that may have a different vision for humanity (Aquarius).

Overall, there appears to be a brighter future ahead even though people may be more focused on the difficulty of the initial growth pains rather than the promise that will unfold over time. Also, below is another visual presentation of the aspects to come that might be easier to read.



The decade from 2020 to 2030 appears to be very crucial for the future of humanity, and many challenges will have to be faced even though the stars look better from 2022 on. However, for America things appear less rosy according to the July 2, 1776, chart for the passing of the Declaration of Independence. Specifically, the Pluto return in 2022 will create tremendous pressure to transform, and challenging aspects from 2025 and 2028 could result in something akin to the Civil War of 1861.

2022 – Neptune in Pisces opposition natal Neptune in Virgo, Pluto conjunct natal Pluto (three times), Chiron in Aries waning square natal Sun, Chiron in Aries opposition natal Saturn

Transiting Neptune opposition natal Neptune drives misinformation and fanaticism in this country. Plus, natal Neptune in the 12th house of the July 2nd, 1776, Libra rising chart for the USA suggests that misinformation is our self-undoing. Transiting Pluto conjunct natal Pluto will transform America. Whether we live or die, however, is up to us and the choices we make. With Chiron opposite natal Saturn in the 1st house, there is pressure for people to realize a transcendent truth.

2023 – Chiron in Aries opposition natal Saturn

As stated above, with Chiron opposite natal Saturn in the 1st house, there is pressure for people to realize a transcendent truth.

2024 – Saturn in Pisces waning square natal Uranus in Gemini, Chiron in Aries conjunct natal Chiron in Aries

Serious concern (Saturn) about education (Uranus in 9th house). Also, a renewal of or spiritual vision (Chiron conjunct natal Chiron).

2025 – Saturn in Pisces waning square natal Mars in Gemini, Saturn in Pisces opposition natal Neptune in Virgo, Saturn in Aries waning square natal Venus in Cancer (twice), Neptune in Aries waning square natal Venus in Cancer (twice), Chiron in Aries conjunct natal Chiron in Aries, Chiron in Aries waxing square natal Moon in Capricorn and waning square natal Mercury in Cancer

The American Civil War broke out when transiting Neptune entered Aries and immediately squared Venus after first creating an opposition to natal Neptune and a square to natal Mars. All of that is now repeating, but will it lead to war? An actual war between states appears unlikely, but we are, nonetheless, already in a war between competing ideologies and narratives, and things will likely only get worse in 2025. However, with Chiron squaring the Mercury/Moon opposition in the USA chart, there will also be pressure for spiritual transcendence among Americans.

2026 – Saturn in Aries waning square natal Venus in Cancer, Saturn in Aries waning square Jupiter in Cancer, Saturn in Aries waning square natal Sun in Cancer, Saturn in Aries opposition natal Saturn in Libra (twice), Neptune in Aries waning square natal Venus in Cancer, Chiron in Aries waxing square natal Moon in Capricorn and waning square natal Mercury in Cancer, Chiron in Aries waxing square natal Pluto in Capricorn (twice)

The squares to natal Venus from Saturn create additional frustration among the people and additional pressure that could result in a civil war.

2027 – Saturn in Aries waning square natal Sun in Cancer, Saturn in Aries opposition natal Saturn in Libra, Saturn in Aries waning square natal Mercury in Cancer and waxing square natal Moon in Capricorn (twice), Saturn in Aries waxing square natal Pluto in Capricorn (twice), Uranus conjunct natal Uranus in Gemini, Neptune in Aries waning square natal Jupiter in Cancer (twice), Chiron in Aries waxing square natal Pluto in Capricorn

Life in America will feel restricted (Saturn) during this year. Misinformation (Neptune square Jupiter) will likely still play a role, but truth will speak to power (Chiron in Aries square natal Pluto in Capricorn). Also, if we are lucky, American innovation will thrive (Uranus conjunct natal Uranus in Gemini).

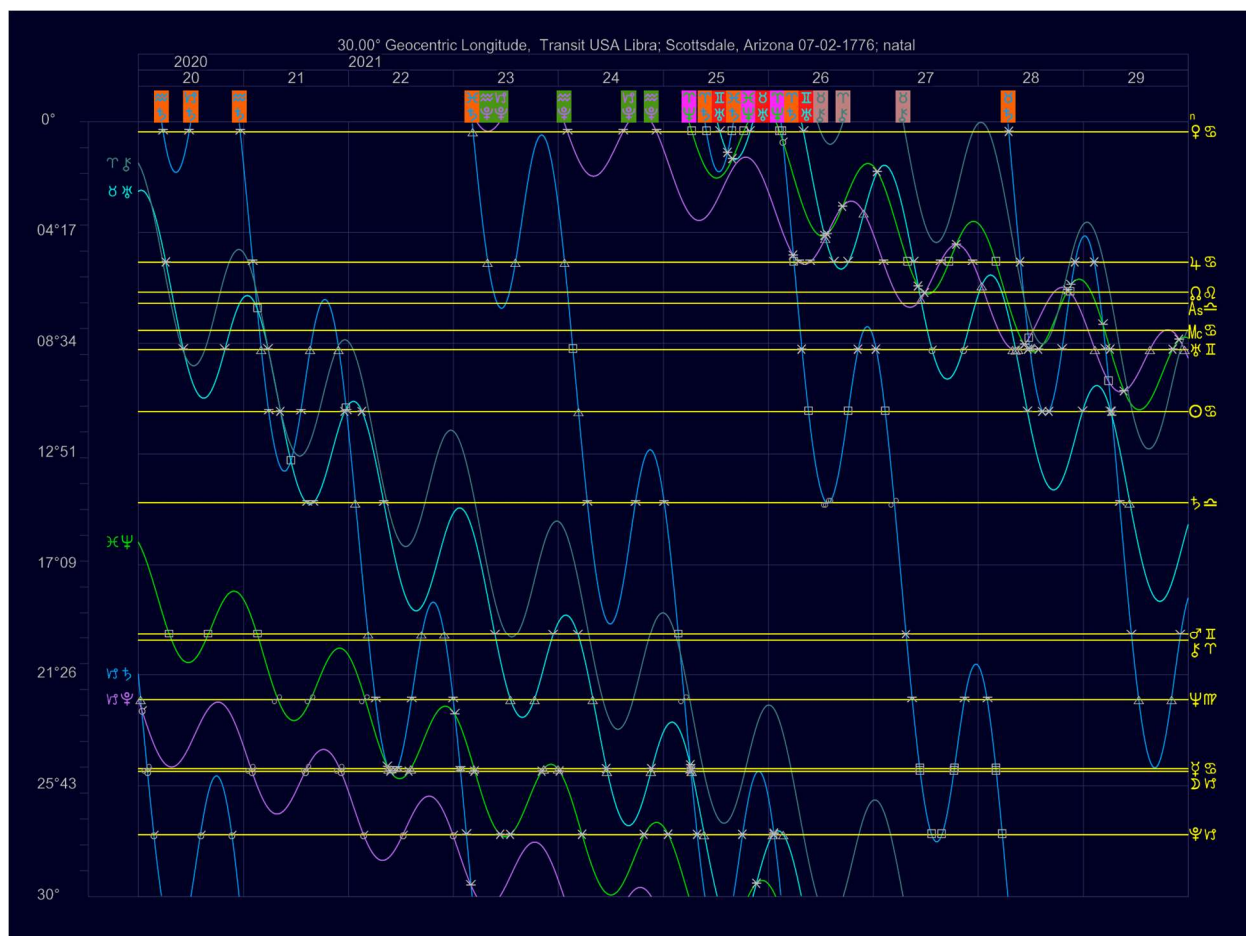
2028 – Saturn in Aries waning square natal Mercury in Cancer and waxing square natal Moon in Capricorn, Saturn in Aries waxing square natal Pluto in Capricorn, Uranus conjunct natal Uranus in Gemini, Neptune in Aries waning square natal Jupiter in Cancer

Many of the trends begun in 2027 will continue into 2028.

2029 – Saturn in Taurus waning sextile natal Jupiter in Cancer, Neptune in Aries waning sextile natal Uranus in Gemini, Pluto in Aquarius waning trine natal Uranus in Gemini, Uranus in Gemini waning trine natal Saturn in Libra, Saturn in Taurus waning trine natal Neptune in Virgo, Chiron in Taurus waning sextile natal Jupiter in Cancer, Chiron in Taurus waning sextile natal Sun in Cancer.

The calm after the storm.

And now for those who prefer reading such things via a graphical format, below is a 30° graphical ephemeris for this decade that shows how transits from Saturn, Chiron, Uranus, Neptune, and Pluto will interact with the USA, July 2, 1776, Libra rising chart.



The prospects for the world outside of the USA look more promising, but we are all, one way or another, going to have to deal with climate change and supply problems in the coming years. The rest of the world may simply address these problems better than America does. For the rest of the decade, the most serious astrological crises facing America appear to be the conjunctions of transiting Pluto with natal Pluto in 2022, and the squares to natal Venus from Saturn and Neptune in 2025 and 2026. Pluto is the planet of death and transformation, and its return to its natal position is a signal that America must re-invent itself or die. Like many older European countries, if we aren't reborn, then we will die as a country. Also, of concern is the movement of transiting Neptune into Aries with an exact square to natal Venus. This transit follows the opposition from transiting Neptune to natal Neptune and the square to natal Mars that we experienced in 2020 and 2021, and the last time we experienced such transits followed by an ingress into Aries was at the start of the Civil War. That war began on the exact day of Neptune's movement into Aries when Confederate soldiers fired upon Fort Sumter. This time, however, in 2025, Saturn will also be in Aries squaring natal Venus, and Saturn is said to be in its fall in Aries. Hence, it does not exhibit its best side when in that sign. Prior to this, though, in 2024, transiting Pluto will make a waning inconjunct to natal Venus three times. The waning inconjunct has an 8th house (death and transformation) quality to it, and inconjuncts generally require some adjustments to be made before moving on. Thus, a lot of what happens in America in 2025 will depend on what changes we make in 2024. As things stand today, I see a list of critical items before us, and the more these items are supported, the better our future will

probably be. Similarly, if we fail to act on these items, then I am uncertain how America will endure. Here's my list of things that, in opinion, need to be done to avert catastrophe, and those people and things that have largely supported misinformation and America's decline into fascism are now a threat to the immediate future:

- The Biden agenda for infrastructure and tax reform passes
- Voting rights are ensured
- Democrats retain control of the House in 2022
- Democrats retain control of the Senate in 2022
- Democrats retain control of the Presidency in 2024
- Donald Trump is held accountable for his actions and never becomes president again

Also, while things may look rosier for the those outside of America, we are all going to lose people due to climate change and non-sustainable ways of living. No matter how good the stars look, there is already a lot of pain ahead that is unavoidable, and more people are going to die regardless. This decade is a time of great change and great promise, but also great sorrow.

The last thing to reiterate is transiting Uranus conjunct natal Uranus in Gemini in 2027 and 2028. Uranus can foster both creativity and chaos by breaking up the existing pattern. However, in the USA chart the planet Uranus makes only good aspects to other planets. Thus, this transit appears more likely to trigger a positive response. Hence, rather than chaos, we may see an outpouring of American ingenuity!

In summary, it is a critical time for the world and an even more critical time for America. However, times of change are also times of opportunity, and more than ever before this is the time to dream dreams and to bring visions into manifestation. The old will pass away, but it is up to us to decide what the new will be. Dream wisely!

Quantitative

Astrology

DOES ASTROLOGY REALLY WORK?

Does astrology really work? That's a very good question! The answer depends, in part, on what we mean by "astrology" and also on what we mean by "work." If by "astrology" and "work" we mean some very simplistic version that all people born with Sun in Aries will be athletes and all people born with Sun in Gemini will be mathematicians, then even astrologers know that that doesn't happen. On the other hand, if by astrology we mean that some terrestrial events will have a significant relationship to certain celestial events, then we need look no further than the Moon's influence on ocean tides to confirm that astrological effects occur. Thus, the real question might not be does astrology work, but rather to what extent does it work? Even though there is a basic astrological theory that guides most astrologers in their work, it is also the case that astrology consists of hundreds of individual pronouncements such as "Earth and Water signs are more introverted than Fire and Air signs," or "A person with Venus in the seventh house will have a happy marriage," and each of these beliefs needs to be subjected to scientific scrutiny. And when we do so, we often discover that while there are many observable effects that conform to standard astrological theory, there are also many things that astrologers might hypothesize that simply aren't supported by the data. Such discrepancies, in my experience, are often the result of either a more simplistic application of astrological theory or an overestimation of the influence that a particular celestial event will have on terrestrial circumstances. Now, though, let's take a look at some of the evidence that is out there that supports current astrological beliefs.

The first thing we'll look at are studies on sunspot activity that support astrology. There is a long history going back to at least 1911 of astronomers noticing that planetary patterns appear to be associated with sunspot activity. In 1973, Norman Z. Alcock published a paper titled "Correlations Between Sunspots and Planetary Activity." The abstract from this paper is given below. In this study, though, the author found that when Venus, Jupiter, and the Earth are forming either conjunctions, oppositions, or squares with one another when viewed heliocentrically with the Sun at the center, then sunspots are likely to occur. Even though the point of view in this study is heliocentric rather than geocentric, what is most interesting is that the angles of 0 degrees, 90 degrees, and 180 degrees are also important aspects in astrology that are usually associated with some degree of tension. An earlier study by Bollinger found angles of 45 degrees to also be important, and in astrology an angle of 45 degrees between planets is usually viewed as a minor aspect that causes a small degree of tension. More recent studies by the Helmholtz-Zentrum Dresden-Rossendorf research institute in Germany have confirmed the relationship between the 11.2 year cycle between conjunctions of Jupiter, Venus, and the Earth with the Sun in opposition does indeed correlate in a positive way with the 11.2 year cycle of sunspots. More recently in 2018 Frank Stefani, André Giesecke, and Tom Weier published a paper titled "A Model of a Tidally Synchronized Solar Dynamo" in which they argue that while sunspots are produced by the Sun's internal activity, that activity is, nonetheless, significantly affected and modulated by the weak gravitational forces associated with certain planetary configurations. This also suggests that true astrological effects may also be driven by weak gravitational forces.

Correlations between Sunspots and Planetary Positions

The periodicity, nature, and cause of sunspots has attracted scientific attention over the years.¹ Most early theories averred that they were of planetary origin.¹ In particular, possible tidal effects were investigated not only in the past but up to the present day.² Voight, for example, showed how the combined influences of Neptune, Uranus, Saturn and Jupiter could give a close resemblance to the sunspot curve from 1749 to 1928, while Bollinger constructed a chart showing a consistent relation between the 11.19 year sunspot cycle and a similar cycle found by the 0° , 45° , 90° configurations of Jupiter-Venus-Earth for the period 1749-1955. But not all theorists assumed that gravitational forces were responsible.³ In 1951 Nelson⁴ showed that planetary configurations and sunspots were highly correlated with radio interference on earth, while Williams⁵ established a correlation between electric cable failures, sunspots, and planetary positions. Despite these findings, most current literature on solar activity assumes that the planets do not effect it, and conditions internal to the sun are primarily responsible for the solar cycle.⁶

Following the leads of these early investigators and drawing on precise cycle data compiled by Dewey,⁷ I have tested the following hypotheses:

- (a) Three planets are required to account for any given sunspot period.
- (b) Number of sunspots increases when the three planets are aligned (in conjunction or opposition) and/or in quadrature.
- (c) Any three planets are equally admissable to account for a given period. Figure 1 illustrates the five general positions which follow from these hypotheses.

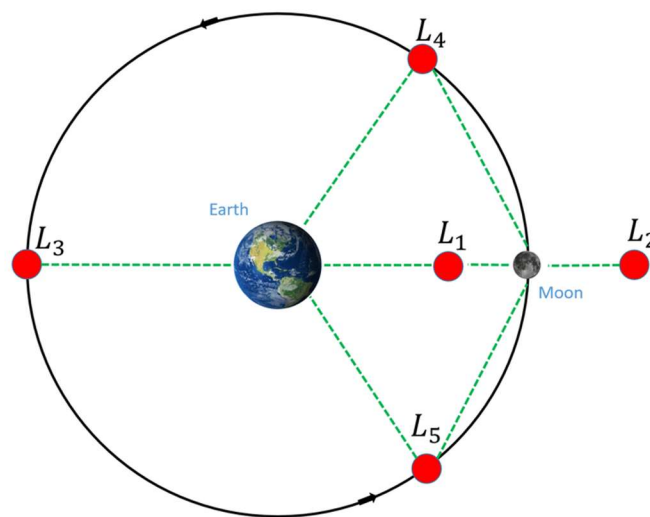
As the three planets revolve around the sun they will successively assume one or another of the five configurations. Any given sunspot period is the time taken for the three planets to travel from configuration to configuration. This condition is expressed by the following equalities:

$$P_s = P_1(n_1 + \theta) = P_2(n_2 + \theta + \frac{n_3}{4}) = P_3(n_4 + \theta + \frac{n_5}{4})$$

where p_s = sunspot period

Other studies have suggested that weak gravitational influences can also affect both biological and non-biological systems^{1 2 3}. For instance, even the Large Hadron Collider has to be periodically adjusted in response to lunisolar gravimetric tides. The evidence for lunar and solar cycles in biological organisms on Earth is overwhelming, and while some can be explained by internal genetic clocks, others cannot. Hence, it appears likely that gravity, which can't be shielded in controlled experiments, is a causal mechanism. However, how is it that such weak forces could impact so much? I suspect the answer lies within mathematics and the well-known butterfly effect. This is a metaphor that is often used these days to explain how small changes in an initial position can get magnified over time to produce a huge effect. Hence, we say that a butterfly flapping its wings in Tokyo may produce a hurricane in the Atlantic the following week. In fact, such sensitivity to initial conditions is precisely why we cannot predict the weather for more than a couple of weeks in advance. Small errors in measurement inevitably cause our mathematical models to deviate from reality as more time passes. The bottom line for us, though, is that there is evidence that weak gravitational forces may indeed be a causal mechanism that explains how planetary positions can impact human behavior.

Another support for astrological theory comes from the mathematician Joseph Lagrange (1736 – 1813). In his study of celestial mechanics, he noted that when the gravitational fields of two planets interact, there will be places where the gravitational forces are in equilibrium. If we place Planet 1 at the center with Planet 2 orbiting it, then the points of gravitational equilibrium will occur either in conjunction, opposition, or with 60 degrees of angular separation from Planet 2. These places of equilibrium are called Lagrange Points, and their positions are shown in the diagram below.

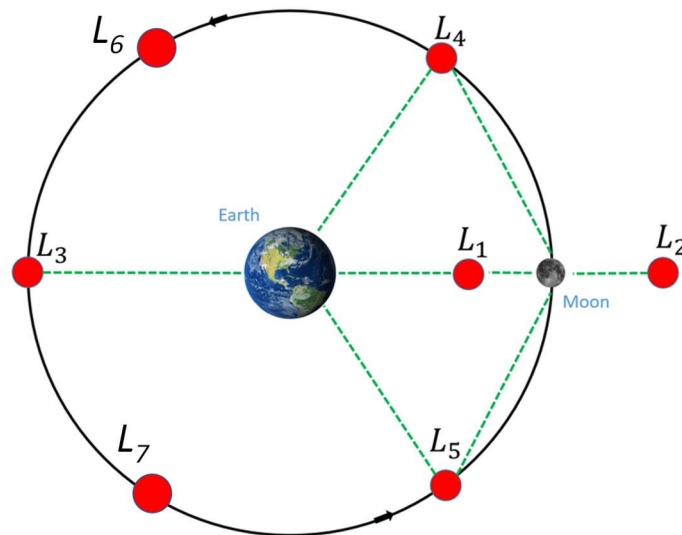


¹ David Nield, "Biological Activity on Earth Really Is Affected by The Gravity of The Sun And Moon," SCIENCEalert (6 January 2022)

² Cristiano de Mello Gallep, Daniel Robert, "Are cyclic plant and animal behaviors derived by gravimetric mechanical forces?" Journal of Experimental Biology (2 November 2021)

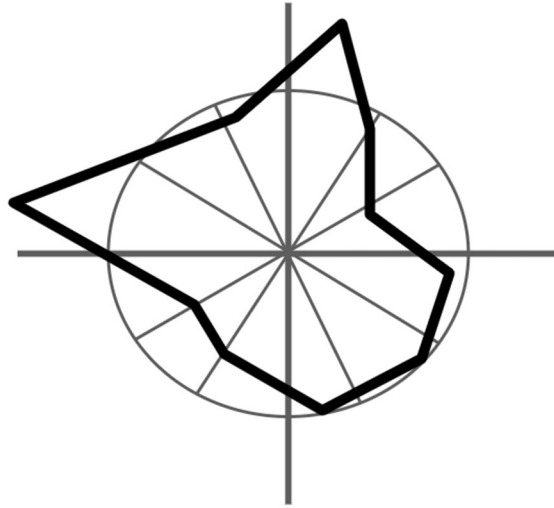
³ Christian Cajochen, Songül Altanay-Ekici, Mirjam München, Sylvia Frey, Vera Knoblauch, Anna Wirz-Justice, "Evidence that the Lunar Cycle Influences Human Sleep," Current Biology (5 August 2014)

In this diagram notice that the Earth is at the center with the Moon orbiting it, and the points L_4 and L_5 are each 60 degrees of angular separation from the Moon. Also, because the gravitational forces are neutral at these points, it is easier for matter to accumulate at these locations. However, if this matter results in another heavenly body growing at location L_4 , then this will result in new Lagrange Points L_6 and L_7 as illustrated below.



In this latter diagram notice that the angular distance from the Moon to either L_6 or L_7 is 120 degrees, and any additional Lagrange Points we might add by this method will just coincide with points that already exist within this diagram. Thus, we expect points of reduced gravitational pull at locations that are either conjunct, sextile, trine, or opposition the Moon, and what is interesting is that in astrology the aspects of sextile and trine represent an absence of tension while the conjunction and opposition are usually seen as in between when it comes to tension/relaxation. Nonetheless, astronomy seems to confirm that squares are tense while sextiles and trines aren't, and conjunctions and oppositions illustrate both – relaxation at Lagrange Points and tension at aspects that promote sunspots. Standard astrological theory is supported (but not fully confirmed!) by these findings.

In the 1950s, Michel Gauquelin, a French statistician and psychologist, decided to use statistics to put astrology to the test. Most of the things that astrologers might predict did not hold up to the scrutiny of statistical analysis, but a few items turned out to be quite significant. The best known of these is what is now known as the Mars effect, the tendency for the planet Mars to be either rising or overhead in the birth charts of famous athletes.



In follow-up studies to Gauquelin's work, some have confirmed his results while others haven't. Often the problem seems to be that protocols used in the original study may not have been employed in the follow-up studies. For example, the Mars effect appears only in the horoscopes of accomplished athletes, but determining who is accomplished and who isn't can be very subjective. Additionally, some statisticians have found fault with some of Gauquelin's statistical procedures, but after reviewing their complaints, I found fault not with Gauquelin's statistics, but with theirs. The bottom line is one which often appears in astrological research. Namely, that there does indeed appear to be a true astrology that is in line with standard astrological theory, and yet at the same time many influences that contemporary astrologers accept are not nearly as important as they think. Good statistical research in astrology usually does not negate astrology, but it does suggest that astrology operates a little differently than many of us think and it urges us to modify and update our current theories.

Another statistical support for astrology comes from a study done by psychologist Hans Eysenck in the late seventies. He administered his Eysenck Personality Inventory to hundreds of people and calculated that people born with their Sun in a Fire or Air sign are significantly more extroverted, and people born with their Sun in an Earth or Water sign are significantly more introverted. As with the Gauquelin studies, follow-up studies have sometimes confirmed and other times failed to confirm Eysenck's original findings, and as I'll explain later on, the lack of consistency in these results may be more a failure of statistics than a failure of astrology.

There are several challenges to using statistics to validate astrology, and I'll try to list some of them here.

1. To validate astrology statistically a lot of data is needed. Fortunately, there exists a free, online database called Astrodatabank that contains tens of thousands of horoscopes. Unfortunately, this database still contains some gaps. For example, since 1960 only one person in the database has been classified as having Parkinson's, and surely there are more than that. However, this makes it very difficult to do astrological research on Parkinson's disease from 1960 on.
2. In standard astrological theory (SAT) a single influence such as Mars square Moon can manifest itself in many different ways, and a single event such as receiving some great honor can have multiple causes. This makes it more difficult, but not impossible, to identify all the connections

statistically.

3. It is quite possible that astrological effects may be real, but weak. Specifically, too weak to produce a predicted effect 100% of the time, but strong enough to, nonetheless, be real and ultimately detectable. Also, results from astrophysics that we saw earlier suggest that astrological effects may be the result of weak gravitational forces interacting with and modifying internal systems. From a statistical point of view this presents some unique challenges. Also, assuming that astrology works in a subtle manner, there may be many similar, non-astrological effects in the real world that are important, but difficult to detect with statistics. Thus, it is quite possible that new methods will need to be developed in statistics in order to be able to more easily detect effects due to astrology or other areas of subtle influence.
4. Critics complain that astrology only works part of the time, and when it works that it's due to chance. Actually, the same criticisms could be made of statistics. A hallmark of science is that a scientific experiment should produce the same result each time. For instance, the flow of electricity turns on a functioning lightbulb 100% of the time, not just 90% of the time. And that is the way most things in science work. Gravity attracts 100% of the time, and universal laws are universally followed. In contrast to the rest of science, though, stand experiments whose outcomes can only be expressed in terms of probability. For example, smoking tobacco is a cause of lung cancer that doesn't always cause lung cancer. A relatively small fraction of smokers will experience lung cancer, but that is far less than an outcome occurring 100% of the time as occurs in most scientific experiments. Also, smokers are about thirty times more likely to contract lung cancer than non-smokers, so don't smoke! Additionally, keep this in mind. The person who eats an orange will immediately know far more about an orange than what any strictly statistical study might tell us. The bottom line is that statistics has its limitations and while I have found, using statistics, some significant results that conform to standard astrological theory, it is also probably true that statistics needs to develop some new methods that are better suited to exploring effects that are real, but only weak to moderate in strength.
5. Statistics has typically taken what we might call a binary approach to data analysis. In other words, results are either statistically significant or they are not. Results are usually reported as p-values (probability values) that indicate the likelihood of the results being due to chance, and if the p-value is 0.05 or less, then the conclusion is usually that the results of the experiment were not due to chance. However, what if a p-value is equal to 0.05001? Some researchers might claim that the results are edging toward significance while others might suggest that maybe they are trying to run away from that conclusion. However, the real question is how does something suddenly go from being insignificant to significant? Some statisticians (including me) claim it doesn't and that we should develop a non-binary approach to statistical tests. In other words, rather than firmly asserting that something is significant or not, perhaps we should recognize that statistics never proves anything conclusively, and that all we can really do is try to assess the degree to which our premise is supported or not supported by the data. For example, if a statistical test produces a p-value of 10% (which also means that the probability of the result being due to chance is 10%), then I consider that result as suggestive that my premise is true. If the p-value is 0.05 (5%) or less, then I consider that result meaningful. If it is less than 0.01 (1%),

then I consider the result as very meaningful and supporting my premise, and if the p-value is less than 0.001 (0.1%), then I consider it very, very meaningful. Again, the bottom line is that a non-binary approach to statistics could result in more realistic models of reality.

So does astrology work? At this point we don't really know for sure. It often seems to work, but we could be fooling ourselves. I and others have found some astrological premises that are well supported by traditional statistics, but by and large most premises within standard astrological theory have not been fully tested. Thus, we currently do have some solid statistical evidence for astrological effects, but more work remains to be done, and one of the difficulties is that these days most astrologers are not statisticians, and most statisticians are not astrologers. Today, however, we need both. We need more people like Gerolamo Cardano (1501-1576) who was not only a famous astrologer during the Renaissance, but also a world class mathematician who developed a formula for solving cubic equations. And the pursuit of astrological proof could also produce a renaissance in how statistical analysis is done.

Even if astrology doesn't work, I still maintain that it is very valuable for at least a couple of reasons. First, I claim that even if astrology doesn't work, then it is still extremely valuable as a sophisticated theory of personality. Standard astrological theory incorporates many pieces of traditional psychology and more. For example, Freud postulated the pleasure principle as the drive to reduce tension. This is exactly how most astrologers describe Venus! However, astrology recognizes other drives that modern psychology may have missed. For example, astrology also says that we have a complementary "activity principle" which causes us to increase our level of tension and activity, and the proof of its existence is the fact that we actually get out of the bed every morning. Additionally, I claim that astrology works even if it doesn't work. For example, if I say that the stars declare you to be an intelligent person, then you will examine yourself for ways in which you are intelligent. Likewise, if I say you are kind, then you will recall all the kindnesses you have committed and that trait will be reinforced. Hence, even if astrology doesn't work, it can still result in us understanding ourselves much better than we might otherwise.

Again, astrology may or may not work, even though I currently feel like the data supports the premise that at least some version of astrology is valid. I could be wrong about that, but as discussed above, that doesn't mean that astrology is not valuable. It can be a very useful tool for self-reflection by asking questions such as these below:

SUN -Who am I? What are my strengths? Weaknesses? What do I want to accomplish in life?

MOON – How would I describe my personality? Am I feeling oriented or thinking oriented? Am I extroverted or introverted? What do I like about my personality and what do I want to change?

MERCURY – What is the state of my mind? Do I feel alert and ready to think? Or is something making my thinking less than optimal? Also, do I prefer things that are abstract or do I only prefer what is concrete?

VENUS – What do I like to do for fun? To relax and renew myself? And what does it mean to view the world from a non-verbal, right-brain perspective?

MARS – What physical activities do I like? Do I control my anger or does it control me?

JUPITER – What areas do I want to grow in?

SATURN – How disciplined am I? What do I enjoy focusing and concentrating on? Are there areas of my life that need more discipline from me?

Uranus – What areas of life am I creative in? How do I like to express my creativity?

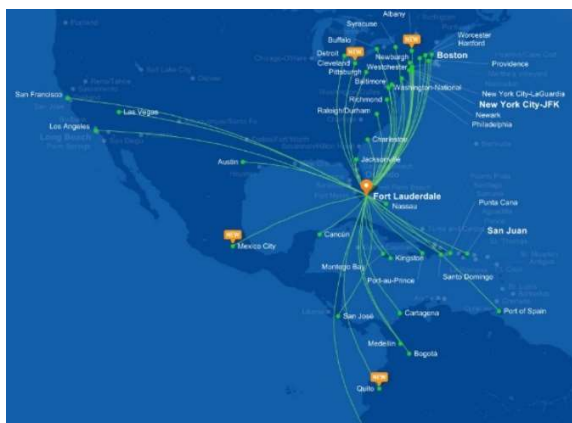
Neptune – What inspires me? Music? Poetry? Mathematics? How do I express my higher artistic sensitivities and aspirations?

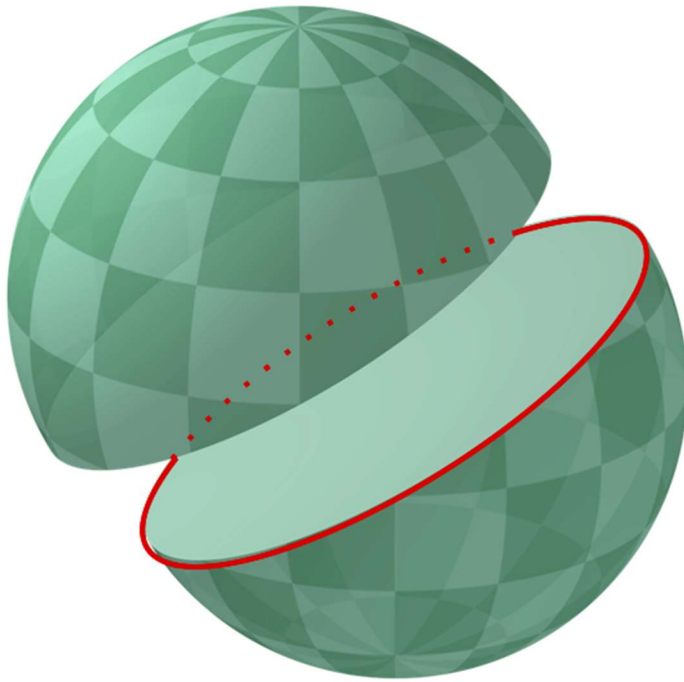
Pluto – What do I want to transform in my life?

THE CELESTIALS

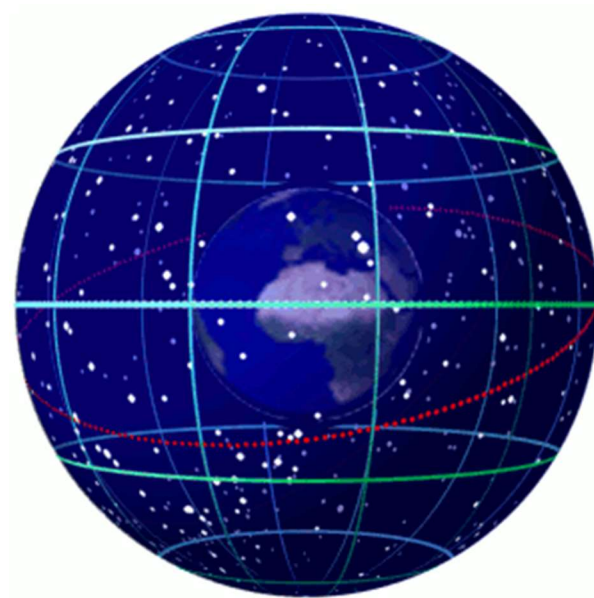
In the old days, long before even I was born, a person had to know a lot about mathematics in order to construct a horoscope. And it wasn't always the simplest of maths. A working knowledge of spherical trigonometry was needed at the very least. However, today all the calculations are done at the flick of a touch to a computer screen, and as a result something's lost and something's gained. What's gained is the ability to do incredible numbers of charts and studies without being hampered or slowed down by the need to do tedious calculations all on one's own. However, what's lost is a larger understanding of what's actually being done and why. Consequently, I'm on my own quest to better understand and even add to the mathematics of astrology. Here, however, I will try to give a more conceptual explanation of the fundamentals in order to help people once again have a sense of the celestial mechanics behind the magic!

If one wants to begin a discussion on astrology, then there is perhaps no better way to begin than by going outside at night and looking at the sky. One will certainly notice that some of the lights in the heavens are brighter than others, but by and large all sense of distance is lost. To most observers all the stars will appear as mere pinpricks of light attached to some distant, black surface. In particular, the image of a bowl will arise in the minds of most people, and if we imagine that bowl extending below the horizon, then it becomes a sphere, and it is the image of this *celestial sphere* containing the stars and the planets that we want to have firmly fixed in our minds as we move forward. Now imagine that instead of looking upward and outward to the sky that we are looking down on a spherical globe. Then notice that because the surface of the sphere is curved, any line drawn from one point to another will also be curved. Furthermore, any circle on that sphere whose center coincides with the center of the sphere is called a *great circle*, and it's a mathematical truth that the shortest distance between any two points on a sphere is going to be along a great circle connecting those two points. This is easy to see when looking at a globe in 3-dimensions, but it is harder to see when you squish that image down to just 2-dimensions. And this is why when you look on a map or a computer screen for the shortest route for flying between two airports, that shortest route is always a curved line. When we look at the image in 2-dimensions, it can be hard to believe that that is the shortest distance, but if you view it in 3-dimensions, then you can easily see that the plane is just flying along the great circle that connects those two points.



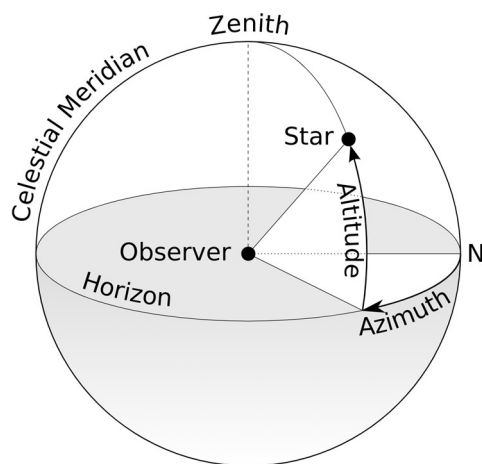


A great circle divides a sphere into two equal hemispheres



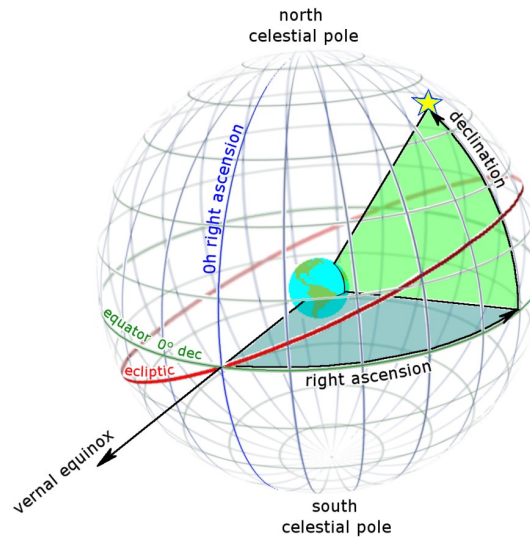
The Celestial Sphere

Once we have established the celestial sphere as a way of organizing some of our perceptions of the greater universe, the next step is to set up a mechanism for measuring the position of each heavenly body on this sphere. There are several ways to go about this, but one that has a lot of natural appeal is the *horizontal coordinate system*. In this coordinate system, our starting point is the circular horizon that surrounds us every time we step outside. To locate a heavenly body in this system, we start at the North Pole and proceed around the horizon clockwise from North to East while measuring our angular journey around the wheel. We continue until we are above or below the object in question, and then we measure the angle by which we need to ascend or descend in order to reach that object. The first measurement that we take along the horizon is called the *azimuth*, and the second measurement that tells us how far to go above or below the horizon is called the *altitude*, and with these two measurements we can locate any point on the celestial sphere.



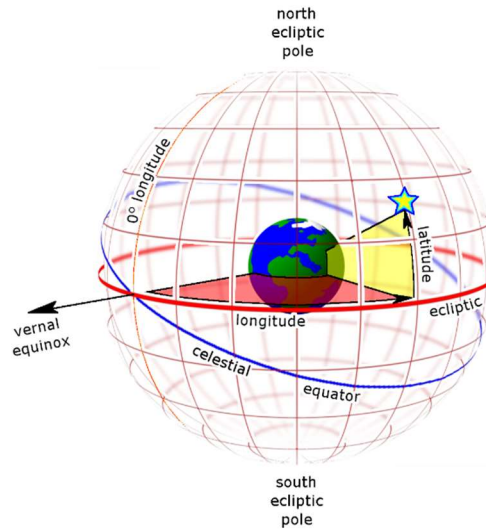
As intuitive as the above approach may seem, it has one serious drawback. Namely, that the coordinates given to the heavenly body by this method will be different when viewed from different locations on planet Earth. Thus, other methods for determining a star's location are needed.

Another method for determining location on the celestial sphere is the *equatorial coordinate system*. In this system, the Earth's equator is projected onto the celestial sphere to define what we call the *celestial equator*. We now proceed pretty much as we did with the horizontal coordinate system. In other words, we measure an angle along the celestial equator followed by a measure of how far we need to go above or below the celestial equator in order to arrive at our object. The angular measure along the celestial equator is called *right ascension*, and the angular measure up or down from the celestial equator is called the object's *declination*. Right ascension can be measured in either degrees or hours, and since the earth rotates about 1 degree every 4 minutes, we can use the proportion $\frac{4 \text{ minutes}}{1 \text{ degree}} \times \frac{1 \text{ hour}}{60 \text{ minutes}}$ to help us convert our measurement units from degrees to hours or vice-versa. Also, we begin our measurement along the celestial equator at the *vernal equinox* (the first point of Aries), and then we move in a counterclockwise direction along the celestial equator.



Unlike the horizontal coordinate system where everyone uses a different horizon to determine coordinates, in the equatorial coordinate system everyone uses the same celestial equator and celestial sphere to determine locations. Also, there are some additional details of this system that one should be aware of. In particular, while the planets will appear to move across the sky during the day, this apparent motion is due mostly to the rotation of the earth on its axis and not due to the actual movement of the planets. For example, the Sun advances about a degree per day in the zodiac, and most planets move even more slowly. Only the Moon moves appreciably faster at about 13 degrees per day. Hence, almost all of the motion that we observe when we see a planet move across the sky is due solely to the Earth's rotation, and, consequently, this motion occurs parallel to the Earth's equator (and, hence, also parallel to the celestial equator). While the equatorial coordinate system produces results that everyone can agree upon regardless of their geographic location, a defect might be that it directly takes into account only the rotation of the Earth on its axis and not so much its rotation about the Sun. Hence, information about the latter might also be something that our coordinate system should incorporate, and to do that we will now move from the equatorial coordinate system to the *ecliptic coordinate system*.

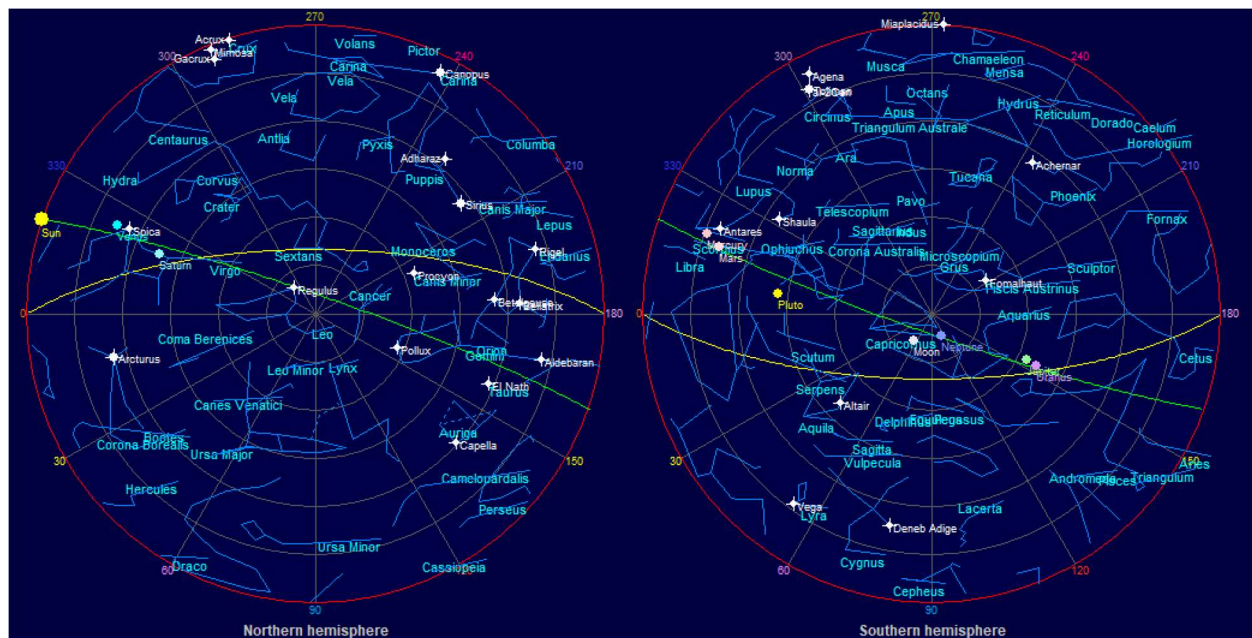
The path that the planet Earth travels around the Sun is called the *ecliptic*. However, from the point of view of where we stand, it is the Sun that appears to be moving while we stand still, and so the ecliptic is also the apparent path of the Sun's yearly orbit. Since the Earth's axis is tilted with respect to its orbit around the Sun, the plane of the Earth's equator (and, hence, the celestial equator) and the plane of the ecliptic currently intersect at an angle of about 23.5° . The starting point for Aries (the vernal equinox) is defined as one of the points of intersection of the ecliptic with the celestial equator on the celestial sphere, and we measure an object's zodiacal longitude by proceeding counterclockwise on the ecliptic from 0° Aries until we are directly above or below our celestial object. Next, we move in a direction on the celestial sphere perpendicular to the ecliptic until we reach our object, and we call the measure of this angular motion the object's latitude. And that's how we find a star's or a planet's position in the zodiac! Also, it should be emphasized that zodiacal longitude is always measured along the ecliptic. Hence, to get any planet's position in the zodiac, we have to first project its location onto the ecliptic.



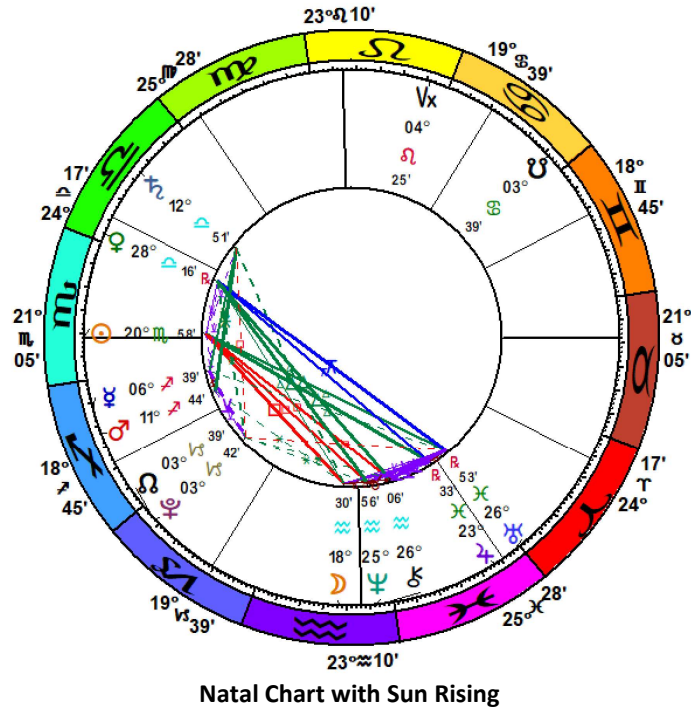
The celestial equator is defined by the Earth's equator, and the Earth's equator is defined by the North/South axis that it rotates around. Move this axis to a different location, and you also move the equator. Thus, since, the vernal equinox, the first point of Aries, is defined as a point of intersection between the celestial equator and the ecliptic (the other point of intersection is the fall or autumnal equinox, and it occurs at 0° Libra), our measurement of position along the ecliptic incorporates information from both the daily rotational cycle of the Earth and the annual rotation of the Earth around the Sun. Now I have a conjecture to make. **Premise: Just as particles in quantum physics become part of a single system when they interact (quantum entanglement), so do cycles become part of a larger system when they interact.** The mechanism behind their interaction may not necessarily be known, but what matters more is whether this premise corresponds to what we observe in reality, and many astrologers would probably respond with a resounding, "Yes!" Thus it is that where the cycle of the Moon's orbit around the Earth crosses the ecliptic cycle, we call these points the Moon's Nodes and they are considered points of concentrated energy. Likewise, when the planets Jupiter and Saturn are conjunct in the sky, this unites the individual cycles of these two planets to make something even greater. And throughout our lives we are constantly experiencing the interactions and blending of various cycles, and with each interaction both we and these cycles become something greater⁴.

Below now is a sky map set up for a particular time and geographic location. This is another way of looking at the information contained in a horoscope, and we want to understand as much of this sky map as we possibly can.

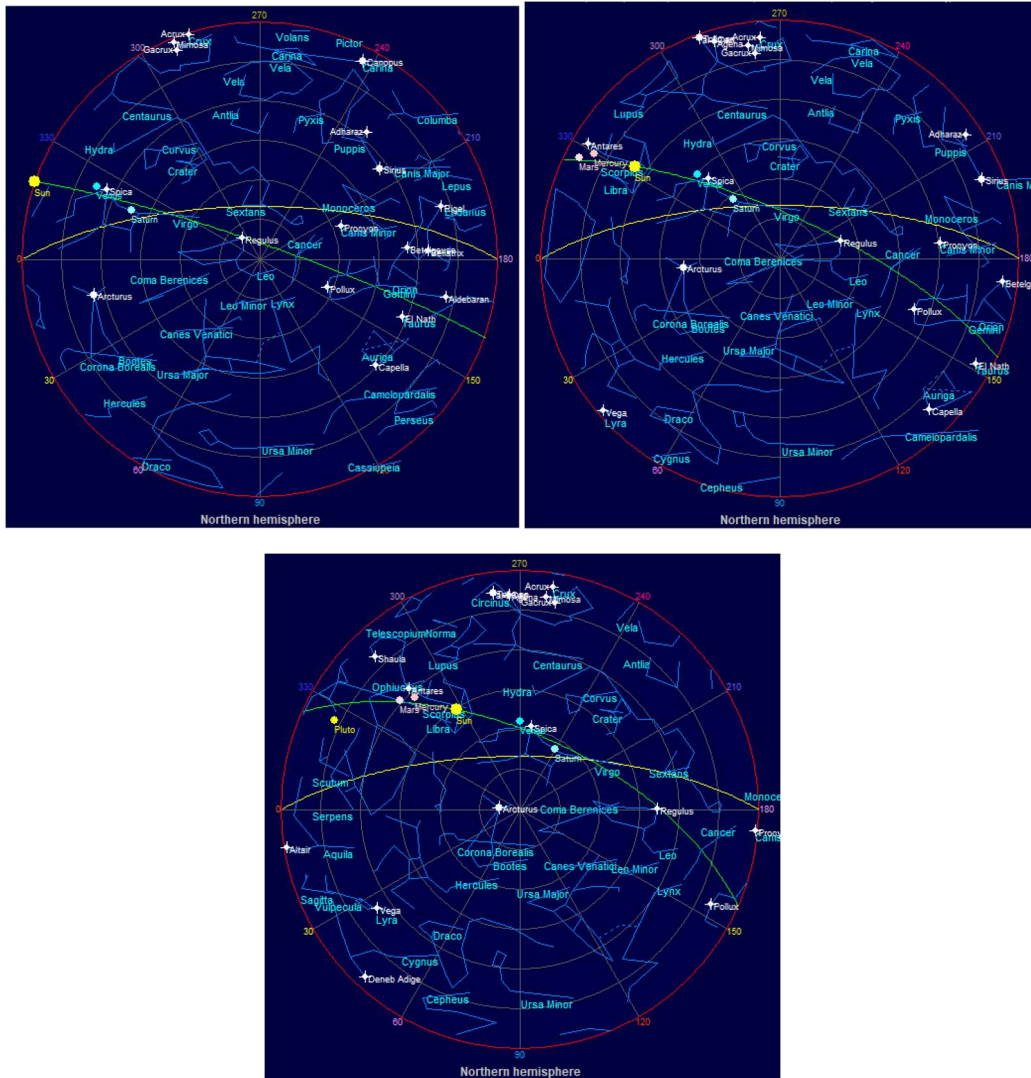
⁴ A mathematical analogy might be when we combine a cycle with just two elements with a cycle of three elements to create a cycle with $2 \times 3 = 6$ elements, and in mathematics this construction is often called the direct product of the integers modulo 2 with the integers modulo 3, denoted by $\mathbb{Z}_2 \times \mathbb{Z}_3 = \mathbb{Z}_6$.



This sky map is a 2-dimensional representation of the celestial sphere, and imagine that you are standing right at the center of either of the two hemispheres shown in this map. The image on the left represents the sky above you at this moment, and the image on the right is what the sky below your feet looks like. Both images are surrounded by a red circle that represents the horizon. As we move in the images above from the red horizon circle inward to where we are standing in the center, we will cross a series of faint concentric circles. These circles represent angles of elevation or depression on the celestial sphere, and they are set at 15° increments. Hence, our movement straight across from the horizon to where we are standing also has a correspondence to an ascension (or descension!) along the celestial sphere in increments of 15° . Furthermore, if we imagine pointing straight out towards the sky from the center of the Northern hemisphere diagram on the left, then we will be pointing to the highest point above us on the celestial sphere, a point called the *zenith*. However, there is more to this story than you can imagine. For example, notice the green curve in our sky maps for both the Northern and Southern hemispheres. That green line represents the ecliptic as the intersection of the ecliptic plane with the celestial sphere at the moment of time for which the horoscope is erected, and this intersection with the celestial sphere is going to be a great circle with center placed at the center of the Earth. At the left in the diagram above for the Northern hemisphere one can see a yellow dot where the ecliptic meets the horizon. That dot represents the position of the Sun in this particular diagram, and it means that in the horoscope below we see the Sun conjunct the Ascendant because the Sun was rising over the horizon right at this moment. However, even though the zenith is the highest point on the celestial sphere in our sky map above, it is not where the Sun will experience its highest elevation that day and, additionally, the point above on the ecliptic that is 90° from the Ascendant for this birth moment (known as the *nonagesimal point*) is also not the highest point the Sun will reach, and we will now begin to explain why.



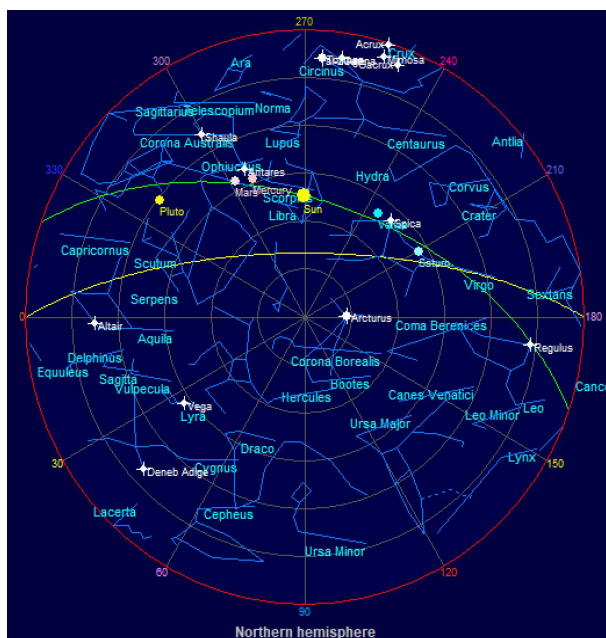
Recall that a great circle on the celestial sphere is any circle on the sphere that has its center coinciding with the center of the sphere. Out of an infinite number of great circles that one could draw, only a handful will be important to us. One of these great circles is represented by the horizon (The **red line**. And if need be, we shift the plane our horizon lies in up or down so that the center of the horizon circle will coincide with the center of the celestial sphere.). Another of these great circles is represented by the intersection of the ecliptic plane with the celestial sphere, and the **green line** in our sky map represents this great circle when flattened to just two dimensions. And finally, the **yellow line** in our sky map represents a third great circle, the celestial equator. Now one reason that the nonagesimal point we mentioned above is not going to be the highest point that the Sun reaches in the sky is because as time passes and the Earth moves through the heavens, the path of the ecliptic changes! And, hence, the position of the nonagesimal point, the highest point on the path of the ecliptic, changes from moment to moment. Below we show three different sky maps where the time has been advanced by an hour in each one, and notice how the ecliptic (green line) moves with each time change.

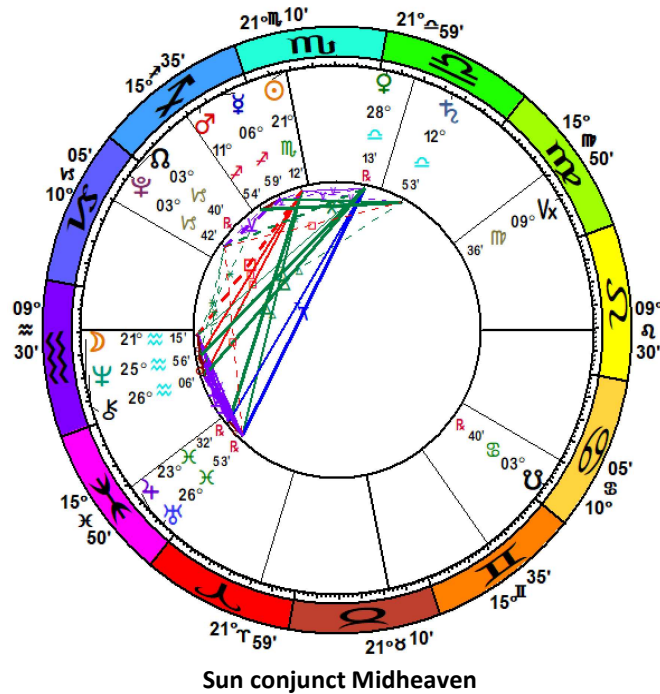


We can see from the above diagrams how the ecliptic moves at every moment, and, hence, the nonagesimal point also changes location at every instant. However, it will always be halfway between the two points where the ecliptic is currently touching the horizon. Hence, the nonagesimal point doesn't represent the Sun's highest position for that day in part because with every instant after the entity's birth, that ecliptic path and nonagesimal point are changing. Now let's look at the first of the three sky maps above for the Northern hemisphere and the path of the ecliptic represented by the green line. Based on the horoscope above, that green line should touch the horizon on the left side at about 21° Scorpio and on the right side at 21° Taurus. Midway in between those two points is the point on the ecliptic that is called the nonagesimal point because it is 90° away from each of our points of intersection of the ecliptic with the horizon, and the zodiac location for this point is 21° Leo. By observing the level curves (concentric circles) in our sky map, we can see that this halfway nonagesimal point is also not always even the highest point on our ecliptic at any given moment. Additionally, it is also not the absolute zenith from our perspective. The zenith point, what appears to us as the highest point in the sky, is that point on the

celestial sphere in a direction that goes off the page and straight above us from the center point of our Northern Hemisphere.

You may have noticed a few features in the star maps above that don't change over time. One of these features is the path of the celestial equator which is represented by the yellow curve in our star map. This curve, which is a projection onto the Earth of a great circle on the celestial sphere, always touches the horizon at the East and West points, and its highest elevation is halfway in between. It doesn't change because as the Earth rotates and moves through space, its equator (and, hence, the celestial equator) stays fixed relative to the Earth, and, thus, there is no change to the celestial equator over time, unlike the constant movement we see with the ecliptic. If we now draw a line directly from the East point of the horizon (on the left side in the star maps rather than the right side) to the West point, then we can consider that line as a 2-dimensional representation of another great circle that we call the *prime vertical*. The prime vertical passes through the East point, zenith, and West point of the celestial sphere, and its center is at the center of that sphere. Similarly, the vertical line that connects North (bottom of the sky map) with South (top of the sky map) is a 2-dimensional projection onto Earth of yet another great circle called the *meridian*. Now recall that earlier we said that the daily motion of each of the planets is going to be parallel to the equator and, hence, parallel to the celestial equator, and if we look at our star map, then we can see that the celestial equator has its highest elevation where it crosses the meridian. Hence, this is also going to be where the Sun has its highest elevation of the day since its perceived daily motion is on a path parallel to the celestial equator. Also, the point of intersection of the ecliptic with the meridian at any point in time is known as the *Midheaven*, and when the Sun is at its highest point in the sky, it will also be conjunct the Midheaven. Furthermore, if we advance the time in our sky map to place the Sun on the meridian, then in the corresponding horoscope diagram we'll see the Sun conjunct the Midheaven (and conjunct the cusp of the 10th house in a horoscope) at about 21° Scorpio. We can also see from the diagram below that the Midheaven is usually different from both the zenith, the nonagesimal point, and the highest point on the celestial equator.



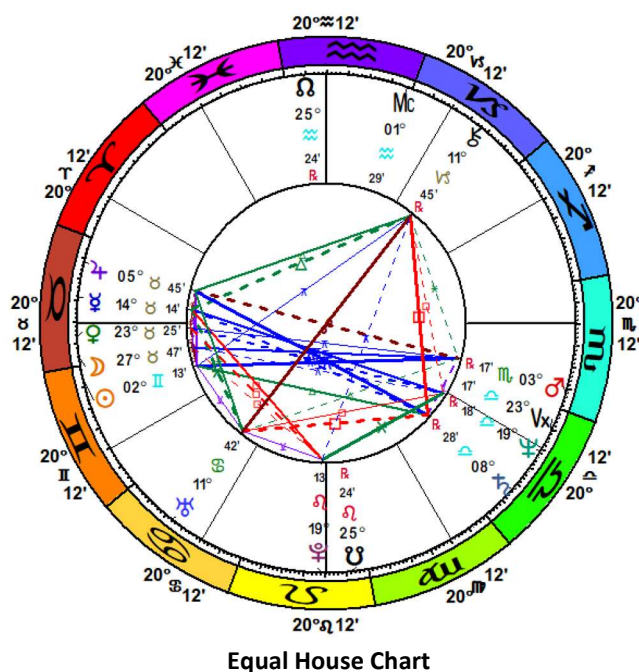


Now let's summarize what we've done and what we know up to this point. We've looked at 5 great circles on the celestial sphere, and these circles have corresponded to the horizon, the ecliptic, the celestial equator, the prime vertical, and the meridian. Of these great circles, it's the path of the ecliptic that jumps all over the place from moment to moment. In contrast, the position in the sky map of the equator/celestial equator is always the same throughout the day as are the prime vertical and the meridian, and even though the sky is always moving, and the horizon, likewise, is always in the same location with respect to where we are standing. Also, there are several important points and more than one high point to consider in our star map. First, there are the absolute East and West points on the left and right of our diagram, and there are the absolute North and South points as well as the zenith point which is directly above our head. The prime vertical is the great circle that passes through the East, zenith, and West points while the meridian is the great circle that passes through the South, zenith, and North points. The point on the left side where the ecliptic touches the horizon at birth is the Ascendant, and the point on the right side where the ecliptic touches the horizon at birth is the Descendant. These two points are always 180° apart, and halfway between them on the ecliptic path at birth is the nonagesimal point, and it always makes a 90° degree angle with both the Ascendant and the Descendant. Also, this angle is the origin of the term "nonagesimal" whose beginning syllables mean "ninety." The zenith point is the highest point on the celestial sphere from our perspective, but it is usually different from the nonagesimal point, and the Sun reaches its own highest point in the sky when and where it crosses the meridian. Interestingly, the Sun will have just about the same zodiacal longitude when it is at the Midheaven as it will at the Ascendant for that day because the Sun, in actuality, hardly moves at all throughout the day. Almost all the daily motion we perceive is due to the rotation of the Earth and not actual movement of the Sun along the ecliptic.

The zodiacal longitude of a star or planet is always based upon its position on the ecliptic, and even if we calculate its position with regard to the celestial equator, conversion from coordinates along the celestial equator to the coordinates along the ecliptic is fortunately relatively simple math. Likewise, we usually

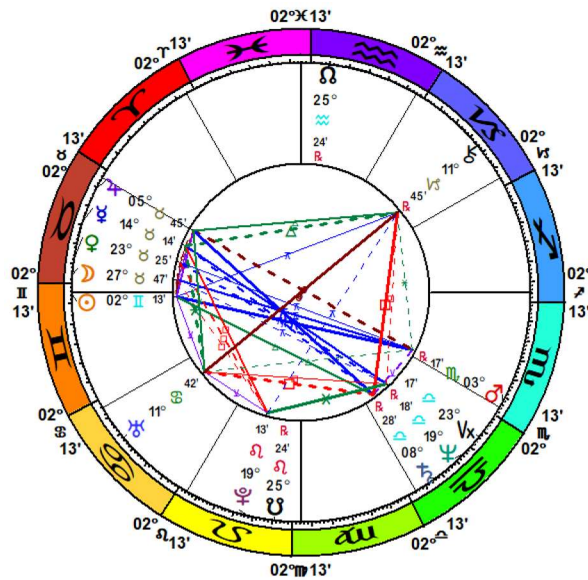
compute positions with respect to the Earth being at the center of things (geocentric longitude), but if we want to place the Sun at the center (heliocentric longitude), then the mathematics for that is also fairly straightforward. So now we understand how the Ascendant and Descendant are found, and we can see why the point that is halfway between Ascendant and Descendant and on the ecliptic at birth is usually not the same as the Midheaven, the point where the ecliptic crosses the meridian. Now let's see if we can figure out where the house cusps that are in between rising and setting, culmination and the very bottom of a horoscope, should be placed.

As we asserted in our essay on "The Cycle of Becoming," rather than thinking of the zodiac as being tied to the physical constellations in space, one should think of the signs of the zodiac as corresponding to personality types that facilitate the twelve fundamental stages of any cycle. However, in that analysis each sign occupied $\frac{1}{12}$ or 30° of the zodiac, and we rather expect our houses to do the same. Thus, in the ideal setup for an ideal cycle, the cycles would begin with Aries, each house would occupy 30°, and every 30° mark would represent one of the aspects defined via integer multiples of this measure. Hence, in order to make our horoscope as ideal and as meaningful as possible, we would like to find 30° houses somewhere, and we would also like to involve as many cycles as possible based upon our assumption that things are more meaningful when interacting cycles are involved. One way in which people have long forced a horoscope to contain houses that are each of length 30° is to simply ignore the Midheaven, the highest point on the ecliptic at birth, and just start with the Ascendant and go 30° for each house. This can create a chart like the one below, but the big problem is that we know from experience that the Midheaven is important, and yet it's being left out. Below is a typical "equal house" chart of this sort.

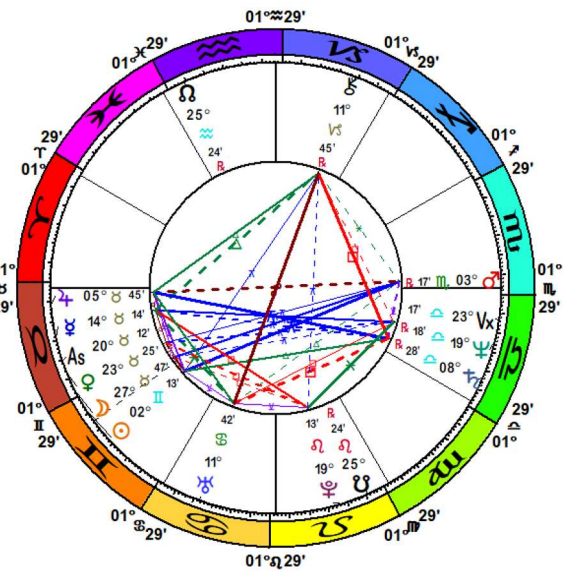


As you can see, the Ascendant is at 20° 12' Aries, and this same degree position is repeated all the way around the chart giving each house 30° of longitude. Other ways to achieve a similar result are to begin the chart with the Sun on the Ascendant and then use 30° for each house, or you can just as easily start

with the Midheaven as some people do, but in that case the Midheaven is included while the true Ascendant corresponding to the ecliptic's intersection with the celestial equator is not. Nonetheless, much of the structure of the original horoscope is retained and the houses are all 30° in length.

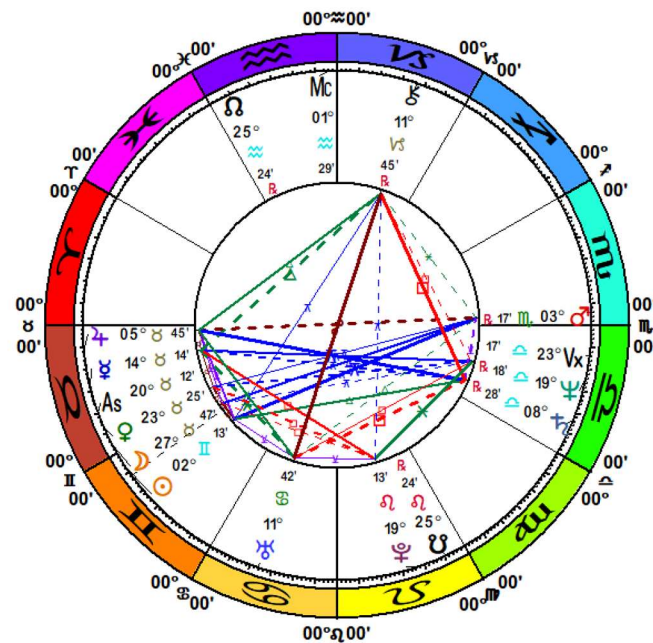


Equal Houses from Sun



Equal Houses from Midheaven

Yet another way to generate a horoscope with equal length houses is to simply make each sign correspond to an entire house, and there is some logic behind this. In particular, Vedic astrologers consider two planets to be conjunct just by virtue of being in the same sign, and I can't disagree with this. Just by being in the same sign there is a connection between the two drives represented by those planets, and a whole sign horoscope like the one below perhaps brings this relationship into focus better than any other.



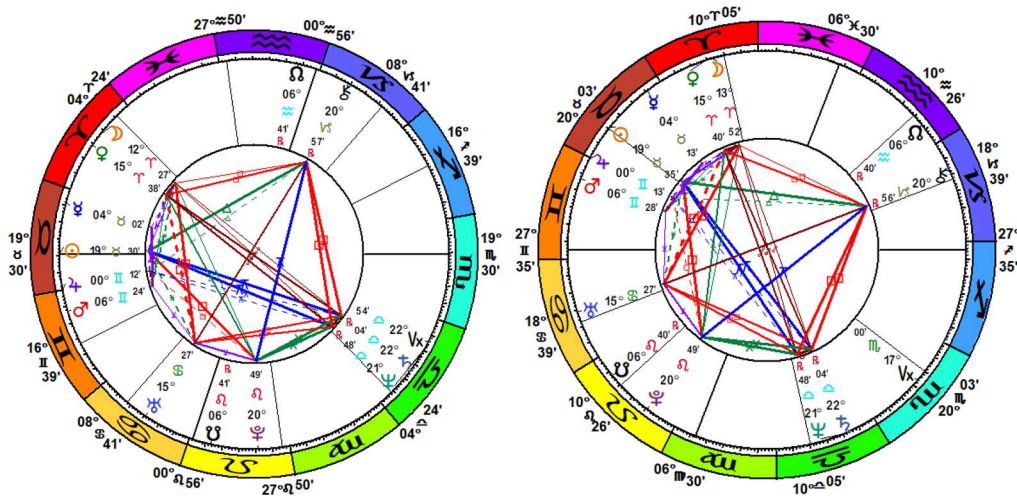
Whole Sign Houses

As a general rule, I believe that every mathematical relationship that exists behind a chart is important. Every relationship that exists in the mathematics will find its realization somewhere in reality. Nonetheless, I also believe that some relationships are still more important than others. Consequently, while I find each of the charts above useful, I also want a chart that includes the Ascendant and Midheaven as defined by points on the ecliptic, I want a chart that represents an interaction between two or more different cycles, and I want 30° houses to appear at least somewhere in the process. Thus, let's look at some other attempts to define the house cusps.

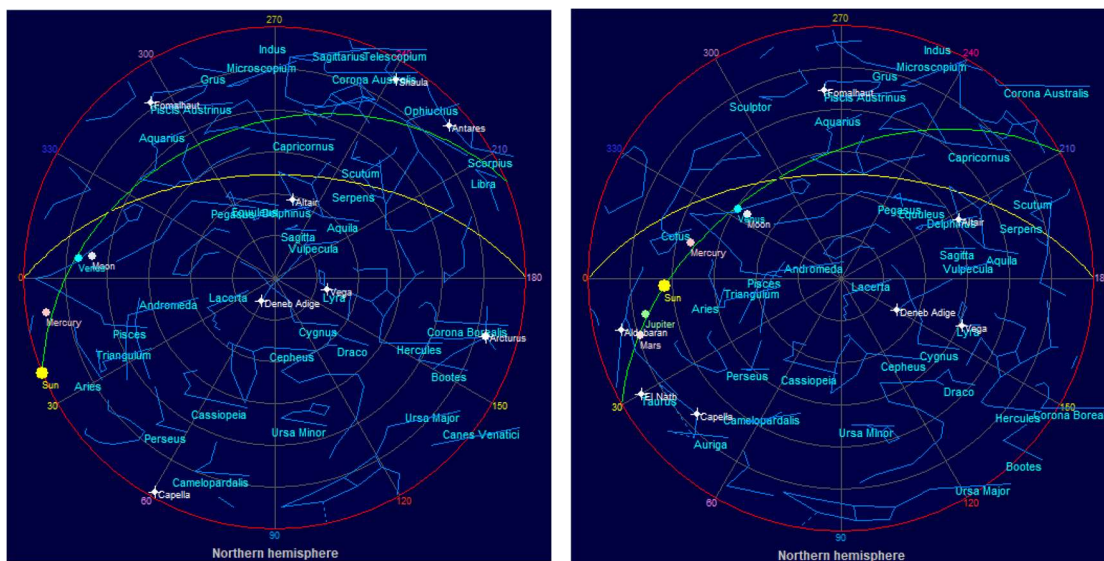
One of the older methods that is also one of the easiest ones is Porphyry houses. Porphyry of Tyre was a neoplatonic philosopher who lived from 234 CE to 205 CE. However, the house technique that bears his name actually goes back a little further to a Hellenistic astrologer named Vettius Valens (120 CE – 175 CE). His technique is actually very simple, and given that Valens was a professional astrologer before the age of technology, it was also probably a time saver. In a nutshell, Valens would first find the Ascendant as the point where the ecliptic crosses the horizon, and he would find the Midheaven as the place where the ecliptic, at the birth moment, crosses the meridian. This establishes starting points for houses 1 and 10 as well as their opposites 7 and 4. To find the cusps of houses 11 and 12 (and, hence, also their opposites of 5 and 6), Valens would simply take the distance in degrees from the 10th house to the 1st, and he would divide that distance into thirds. Thus, one-third of the way from the 10th house to Ascendant gives the starting point for the 11th house, and another third added to that gives the starting point for the 12th house. And, of course, this also gives the starting points for houses 5 and 6 since they are 180° away from the 11th and 12th houses, respectively. Now we just need to find the cusps of the 8th and 9th houses which, in turn, will determine the cusps of the 2nd and 3rd houses. So we will take this time the distance from the 10th house to the Descendant, and we will divide that angular distance by three. Hence, we go one third of that distance from the 10th house to the 7th house, and that gives us the cusp of the 9th house. Go another third and you will arrive at the starting point for the 8th house, and once we have found this, we are done. All the house cusps are determined fairly easily by using this method devised by Vettius Valens and popularized by Porphyry. However, while some astrologers will swear by this method, it's not my favorite. In particular, it primarily utilizes the ecliptic to determine the house positions, and while some may see this as a feature, I see it as a fault. It does utilize the ecliptic and the traditional Ascendant and Midheaven, but it doesn't appear to incorporate interactions with any other cycles, and that makes it less meaningful to me. Nonetheless, like all techniques that exist in astrology, they are probably still around because some have found them very useful. Hence, while it is not my preferred house system, I won't deny that it has value, and the reality is that some people make this house system work quite well for them. I'm just not one of those.

What is undoubtedly the most popular house system these days in astrology is Placidus. This method of house division was popularized by an Olivetan monk and professor of mathematics named Placidus de Titus (1603 CE – 1668 CE). In his system he also incorporates the *diurnal arc* which we will define as the path that the Sun takes from sunrise (its Ascendant) until eventual sunset (its Descendant). Additionally, we call the path the Sun takes from the Ascendant to the Midheaven (or from the Midheaven to the Descendant) a *semi-diurnal arc*. Furthermore, we can think of this not simply as a path traversed through space, but also a path through time. Thus, we start with the degree of the Ascendant at birth, and to simplify our explanation let's assume that the Sun is conjunct the Ascendant. Now we look at the time that it takes the Sun to go from the Ascendant to the Midheaven, and we divide this time into thirds. Then we set our house cusps so that in the first third of this time interval the Sun will travel from the

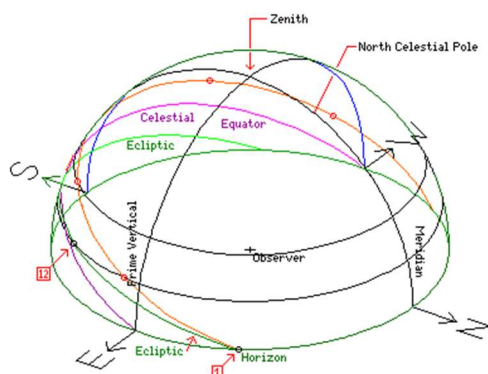
Ascendant to the cusp of the 12th house, and during the next third of this time interval the Sun will travel from the cusp of the 12th house to the cusp of the 11th house, and then in the final third the Sun travels from the cusp of the 11th house to the Midheaven. As an example, consider the two charts below. In the first chart the Sun is conjunct the Ascendant, and about 7 hours later it will be conjunct the Midheaven. If we divide this time interval by 3, then we get about 2 hours, 20 minutes. And now if we compute a second chart that is 2 hours, 20 minutes, after the first chart, then sure enough the Sun is on the cusp of the 12th house.



I should point out that in the second chart our Sun is not on the 12th house cusp down to exact minute, and this is because the time it takes for the Sun to reach the Midheaven is slightly off from seven hours. Hence, there is a little round-off error involved because of our approximation. Nonetheless, the theory is sound – find $\frac{1}{3}$ of the time that it takes the Sun to travel from the Ascendant to the Midheaven, and that will give you the amount of time that the Sun spends in each of the 12th, 11th, and 10th houses. Specifically, our Sun has, indeed, traveled through the 12th house in 2 hours, 20 minutes, but its zodiacal longitude is now 19° 08' 35' and not the 4° 24' that we have on the cusp of the 12th house in our first chart. So how do we go from this logically appealing method of time division to finding the actual house cusps? Well, to explain, let me remind you that the ecliptic, like the planets, moves over time just as the planets do. Thus, below are sky maps that show the position of the ecliptic when the Sun is on the Ascendant, and its position 2 hours, 20 minutes, later. In other words, these are the sky maps for the two horoscopes above.

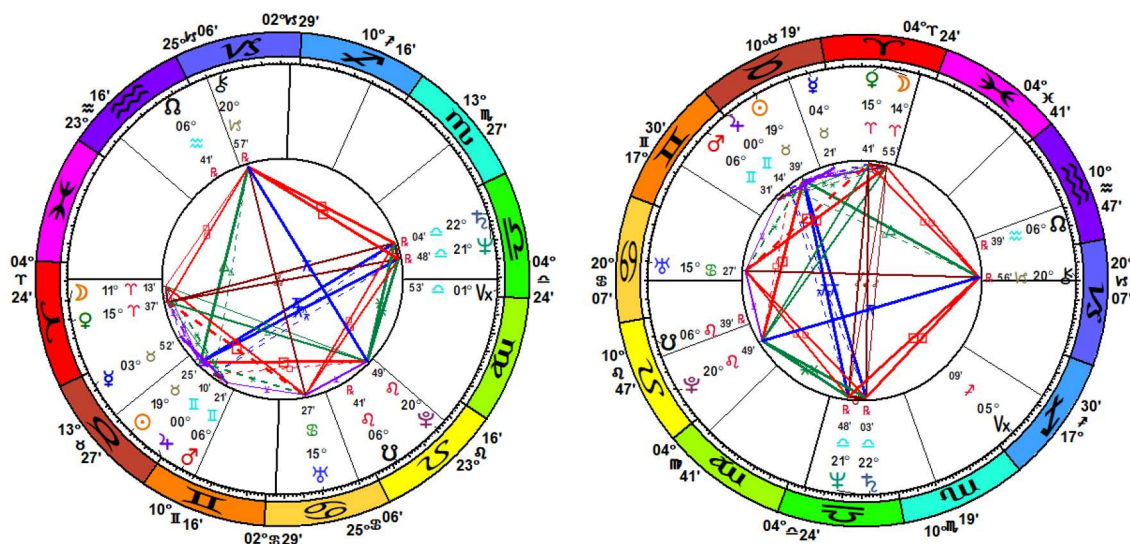


Notice, though, that the ecliptic has moved slightly over this 2 hour, 20 minute, period, and when we say that at the end of this time interval that the Sun is at $19^{\circ} \ 35'$, that is its position on the ecliptic that we see 2 hours, 20 minutes, after the time used in our first chart. To get the actual cusp of the 12th house at the time associated with our first sky map, think of noting the Sun's position in the sky in the second sky map without taking notice of its coordinates. All we are doing is noticing that the Sun is elevated a little above the horizon. To now get the zodiacal longitude for that position, all we have to do is to "project" the Sun (as it is in the sky 2 hours, 20 minutes, later) onto the ecliptic that we had originally when the Sun was conjunct the Ascendant, and this projection determines the cusp of the 12th house. It sounds simple, but in practice it is a bit more complicated, and remember that there is more than one logical way to project a location from one curve onto another. Some explain the method by saying that once we have the position of the Sun in the sky 2 hours, 20 minutes, later, we simply have to draw a parallel of latitude through this position to our original ecliptic plane, and this position on the original ecliptic will show us the longitude of the 12th house.



Another way to find this, though, can involve a certain amount of trial and error. In other words, (1) pick a time prior to the time used to construct the original horoscope above, (2) Find the amount of time it takes this new Ascendant to arrive at the Midheaven, (3) divide this time interval by three and add it to this new birth time, (4) and then check to see if the new birth time plus this $\frac{1}{3}$ increment is equal to your

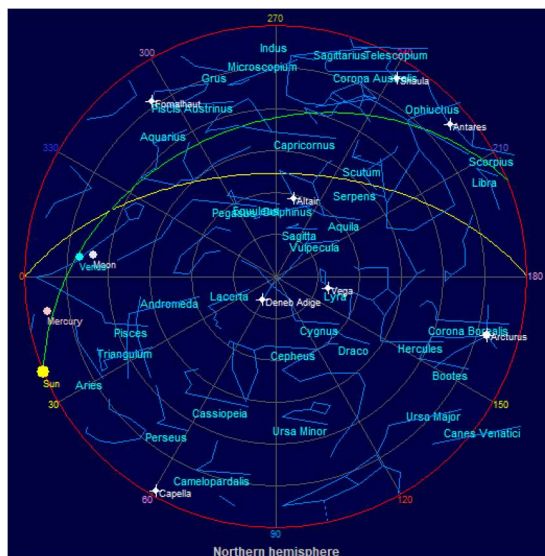
original birth time. If it is, then the Ascendant on your 2nd chart should be the cusp of the 12th house in your original chart. In other words, our original chart has 19° 30' rising. Now find by trial-and-error a second chart with an earlier birth time such that if we add to the birth time of our second chart a third of the time that it takes the Ascendant of the second chart to move to the Midheaven, and if this calculation results in our original chart with 19° 30' rising, then the Ascendant on the second chart is going to be the 12th house cusp in the first chart. Of course, since my computer program has already told me that the Placidus cusp of the 12th house should be 4° 24' Aries, we can eliminate the trial-and-error and simply confirm that this is correct. Thus, below are charts showing first 4° 24' rising, and then another showing 4° 24' on the Midheaven, and the time interval is about 6 hours, 4 minutes.



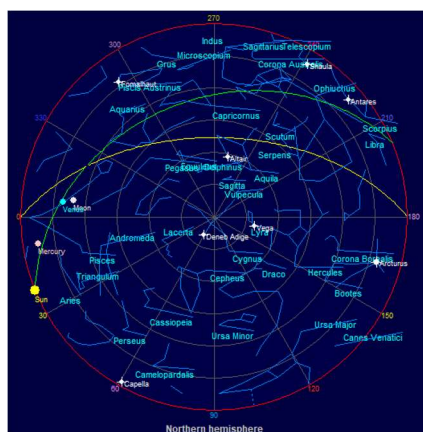
If we take a third of this time and round-off for convenience, then we get about 2 hours, 1 minute. Now if we add this time increment to the time of the first chart that has 4° 24' rising, then we will get our original chart that has 19° 30' rising and 4° 24' on the cusp of the 12th house. We can now repeat the same procedure with different time intervals in order to determine the remaining house cusps. Also, remember that while in practice this may be rather complicated, conceptually it's very easy. We are simply dividing a time interval into thirds, and then we use those thirds to help us find corresponding longitudes on our original ecliptic. Conceptually it's simple and rather elegant. It combines a cycle in space (the ecliptic) with a cycle in time (the diurnal or semi-diurnal arc) in order to determine the house cusps. In practice, though, it's much messier.

Another method of house division that deserves mention is the method of Campanus. Campanus of Navara was an Italian mathematician, astrologer, astronomer, and physician who lived from 1220 CE to 1296 CE, and in his system of house division he divides the prime vertical (the great circle that passes through East, zenith, and West) into segments of 30° each and then uses great circles that pass through these divisions and the North and South points in order to determine where each point gets projected onto the ecliptic. In our star map below for the Northern hemisphere, the prime vertical appears in 2-dimensions as just a line connecting East and West. Since this line represents only the northern half of the prime vertical, subdivide this into six equal parts, and then great circles that pass through these points as well as North and South will show us where to project them onto the ecliptic. The good news is that this

method uses primarily two cycles, the ecliptic and the prime vertical, and it includes a subdivision into equal segments of 30° which then get distorted in length when projected onto the ecliptic. However, this method of house division often produces some house cusps that are quite different from most of the other methods, and that make it somewhat suspect.



As mentioned above, the most widely use house system is Placidus, but for a variety of reasons I prefer another house division method known as Regiomontanus. Johannes Müller von Königsberg (1435 CE – 1476 CE) was a German mathematician, astronomer, and astrologer who was better known by the Latinized name of Regiomontanus, and his method of house division is the one that I currently use. In his method he begins by dividing the celestial equator into twelve segments of 30° each and then uses great circles that pass through North, South, and the points found on the celestial equator to project these locations onto the ecliptic. Thus, in the sky map below for the Northern hemisphere, instead of subdividing the horizontal line from East to West (the prime vertical), subdivide instead the celestial equator (the yellow curve) into six equal 30° segments, and then use great circles to project these positions onto the ecliptic.



There are several things I like about this method. First of all, it uses two very important great circles, the ecliptic and the celestial equator. The former connects our method with the annual path of the Sun in the sky, and the latter connects it with the daily motion that is parallel to the equator, and this also relates it to the diurnal arc that Placidus uses. Thus, I'm not surprised that the results are very close to what the Placidus method produces. Nonetheless, those planets in my own chart that I feel are strongest wind up being found slightly closer to the cusps of Regiomontanus than to those of Placidus, and so that is another reason why I prefer it. Additionally, the method of Regiomontanus incorporates the location of the Ascendant and the Midheaven, and that's always a plus. Also, notice that the subdivision of the celestial equator into equal segments of 30° each, which is so desired for the houses, then gets distorted when projected onto the ecliptic. Nonetheless, in spite of the distortion, it is true that houses of equal length are built into the calculation, and I consider that very, very important.

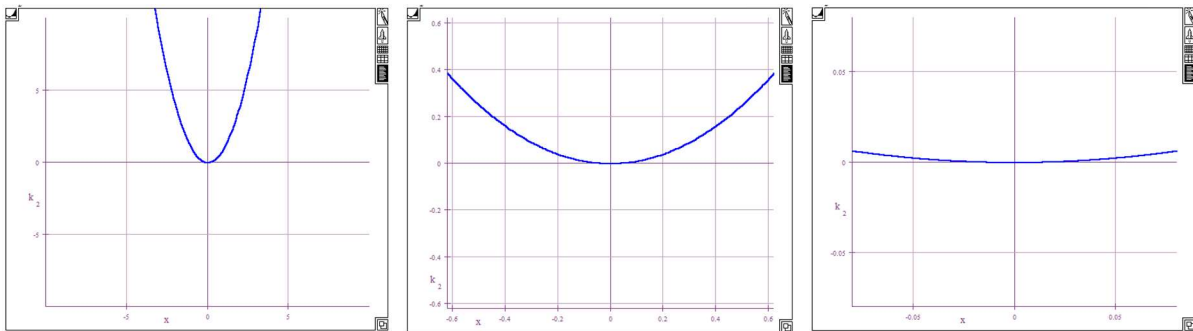
In practice, I may start with Regiomontanus, and then also look at other systems like whole house, equal house, 0° Aries rising, Sun rising, or the degree of the Midheaven rising, and in my opinion, all of these are legitimate. **I liken the different house systems, as well as many other astrological techniques, to photographs of a person taken from different points of view. All of them are legitimate, but some, nonetheless, will be more suited for your purposes than others,** and that's how I consider the different house systems. Also, there are other house systems available besides the one's we've discussed, but all of them in some way will be based upon subdivisions of one great circle or another. Below is a chart showing the results of a variety of different house systems when applied to my own horoscope, and you can see that most of the techniques produce similar results.

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|---------|---------|----------|---------|---------|-----------|-----------|-----------|---------|---------|---------|---------|---------|
| Campan: | 20 8 12 | 25 II 22 | 15 8 14 | 1 4 29 | 21 4 25 | 26 III 46 | 20 III 12 | 25 4 22 | 15 4 14 | 1 4 29 | 21 4 25 | 26 4 46 |
| Equal: | 20 8 12 | 20 II 12 | 20 8 12 | 20 4 12 | 20 III 12 | 20 4 12 | 20 III 12 | 20 4 12 | 20 4 12 | 20 4 12 | 20 4 12 | 20 4 12 |
| Koch: | 20 8 12 | 18 II 07 | 10 8 55 | 1 4 29 | 5 III 02 | 14 4 28 | 20 III 12 | 18 4 07 | 10 4 55 | 1 4 29 | 5 4 02 | 14 4 28 |
| Merid: | 6 8 02 | 5 II 37 | 3 8 25 | 1 4 29 | 1 III 42 | 4 4 03 | 6 III 02 | 5 4 37 | 3 4 25 | 1 4 29 | 1 4 42 | 4 4 03 |
| Morin: | 1 8 29 | 1 II 42 | 4 8 03 | 6 4 02 | 5 III 37 | 3 4 25 | 1 III 29 | 1 4 42 | 4 4 03 | 6 4 02 | 5 4 37 | 3 4 25 |
| Placid: | 20 8 12 | 17 II 12 | 9 8 11 | 1 4 29 | 28 4 29 | 5 4 11 | 20 III 12 | 17 4 12 | 9 4 11 | 1 4 29 | 28 4 29 | 5 4 11 |
| Porph: | 20 8 12 | 13 II 58 | 7 8 43 | 1 4 29 | 7 III 43 | 13 4 58 | 20 III 12 | 13 4 58 | 7 4 43 | 1 4 29 | 7 4 43 | 13 4 58 |
| Regio: | 20 8 12 | 20 II 46 | 11 8 52 | 1 4 29 | 26 4 37 | 5 4 39 | 20 III 12 | 20 4 46 | 11 4 52 | 1 4 29 | 26 4 37 | 5 4 39 |
| Topo: | 20 8 12 | 17 II 05 | 9 8 06 | 1 4 29 | 28 4 29 | 5 4 11 | 20 III 12 | 17 4 05 | 9 4 06 | 1 4 29 | 28 4 29 | 5 4 11 |

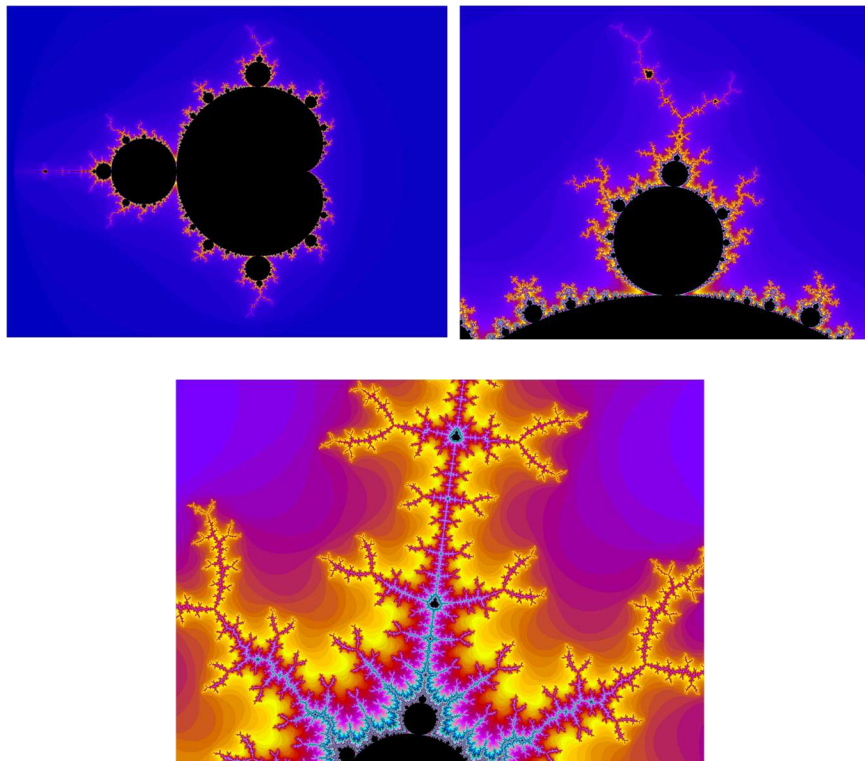
Therefore, which house system is actually the best? Well, that's simple. Whichever one works best for you! For me that appears to be Regiomontanus, but for other astrologers it might be Placidus, Porphyry, Campanus, or even equal houses as determined by the Ascendant. The bottom line is that they are all based on legitimate logic, but you will likely resonate more with the interpretations of some over others, and that is what you must focus on. **You must find yourself within the horoscope, and only then will the horoscope be a reliable map for your journey through life!**

ASTROLOGY AND FRACTALS

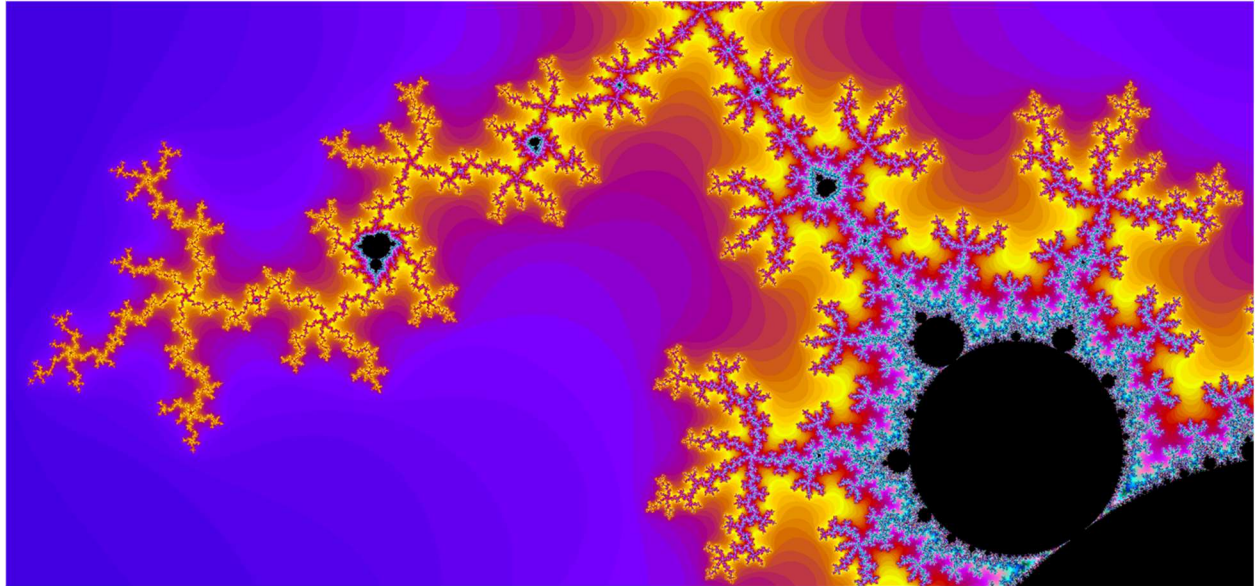
In the latter part of the 1970s, mathematician Benoit Mandelbrot introduced the concept of a fractal curve, and two of the prominent properties that these kinds of curves have are *infinite detail* and *self-similarity*. By infinite detail, we mean that as we zoom in on the curve, more and more twists and turns reveal themselves. This is not what happens with the sorts of smooth curves that mathematics routinely focuses on. For example, if we zoom in on the parabola below at the point (0,0), then as we magnify that image, everything just flattens out into a straight line. Above all, we don't find more detail, more intriguing twists and turns, at the deeper levels of magnification.



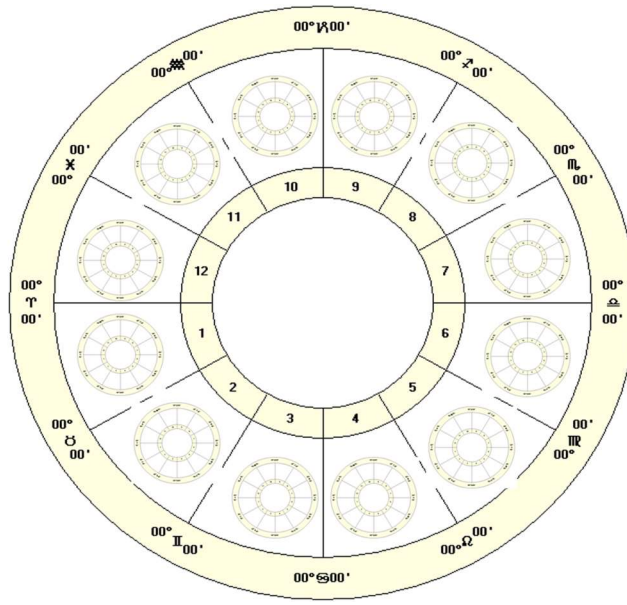
In contrast to this is the Mandelbrot Set, arguably the world's most famous fractal that was discovered by Benoit Mandelbrot in 1979. This set is also an image that reveals more and more detail at each level of magnification as you can see in the images below.



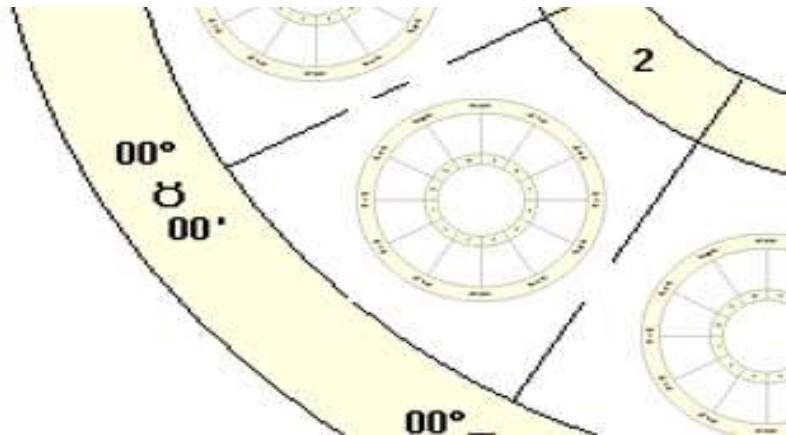
Additionally, you might notice in the last image that you can begin to see replicas of the Mandelbrot Set coming into view as we increase the magnification. This tendency for patterns to repeat themselves at various levels of magnification is called self-similarity, and it is quite common in fractal images.



Fractals arise naturally within astrology because we have cycles within cycles, and, thus, the cycle is the fundamental pattern that gets repeated at all levels in astrology. For example, within the cycle of the 360° zodiac we have twelve smaller 30° cycles corresponding to the twelve signs, and at the end of every 30° , we begin a new cycle with a new astrological sign. Also, recall from our discussion in the chapter on *The Cycle of Becoming* on how every cycle defines a zodiac as a way of delineating twelve modes of expression that facilitate the expression of the twelve stages of our cycle. Hence, within each horoscope we can imagine twelve smaller horoscopes, and now our astrological wheel begins to look very fractal.



If we magnify one section of this wheel such as, for example, the 2nd house that has 0° ♂ on the cusp, then the meaning of the chart wheel that I've placed inside that house is that the cycle from 0° to 30° that comprises Taurus has its own zodiac going from Aries to Pisces superimposed over it.

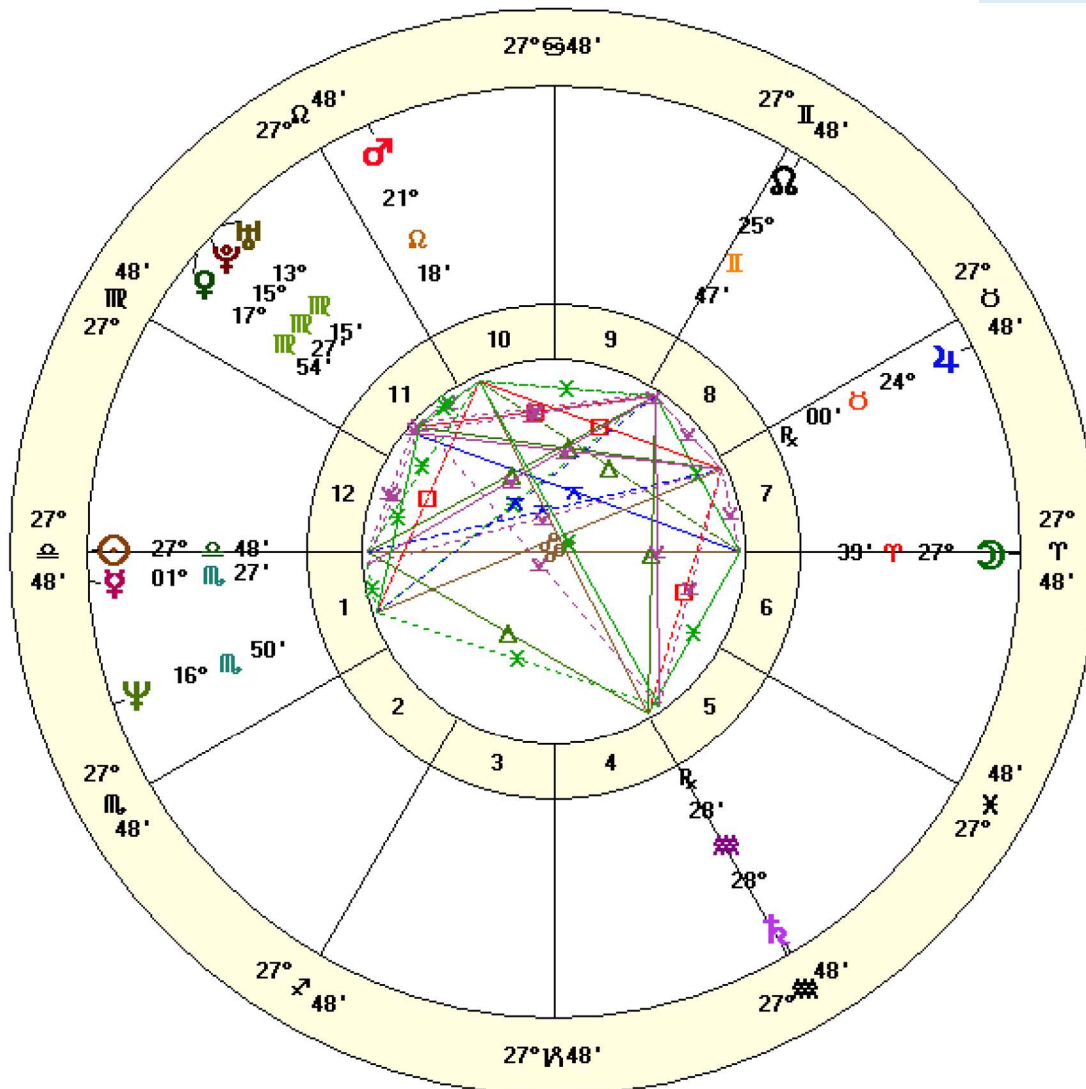


Mathematically, this means that we are dividing the 30° of Taurus into twelve segments of 2.5° each with first segment from 0° up to but not including 2.5° designated by Aries, the next segment from 2.5° up to but not including 5° corresponding to Taurus, and so on. We could carry this even further by subdividing our interval of 2.5° into another twelve segments of equal length with Aries again corresponding to the first segment, Taurus to the second, Gemini to the third, and so on. In this way we can refine the meaning of each point in the zodiac. For example, 3° Aries should primarily reflect the characteristics of Aries, but it should also have some characteristics of Taurus since 3° falls within the second segment that goes from 2.5° up to but not including 5°. Likewise, when we further divide 2.5° into twelve segments, then 3° Aries falls in the third or Gemini segment in this subdivision. Thus, we can further refine our analysis and say that 3° Aries has characteristics that are a blend of Aries, Taurus, and Gemini. Additionally, this procedure results in a fractal-like structure that includes the zodiac at all levels of magnification.

In Vedic astrology in India this type of procedure has long been done to add additional meaning to a horoscope. Every sign is routinely subdivided into twelve parts of 2.5° that are called *dwadasamsas* or simply *dwad* for short. Thus, the first dwad of Aries corresponds to Aries, the second dwad to Taurus, and the last dwad corresponds to Pisces, the last sign in the zodiac. However, upon entering Taurus the first dwad in Vedic astrology corresponds not to Aries, but to Taurus. Similarly, the last dwad is not Pisces, but Aries, and then we enter Gemini where the first dwad corresponds to Gemini and the last dwad to Taurus. So what are we to make of this procedure? On the one hand, the transition from the last dwad of Aries (Pisces) to the first dwad of Taurus (Taurus) seems rather abrupt since it appears that we have skipped over Aries and gone directly into Taurus, but I would argue that such is not the case. That is, when we get to the last dwad of Aries, I claim that Aries is still present because the whole sign is Aries! In other words, every dwad of Aries will have an Aries influence, and so the last dwad of Aries is actually a combination of Pisces and Aries which then leads perfectly into the next sign and dwad of Taurus. Similarly, the last dwad of Taurus has the nature of both Aries and Taurus, and that leads directly to the next sign and dwad of Gemini.

It is actually quite common to begin new cycles with the sign that the planet of interest is in. Thus, if we want to create a horoscope for President Kamala Harris that has her Sun on the Ascendant, then since she was born with her Sun at $27^\circ \text{♈ } 48'$, it is, perhaps, more customary to begin our chart with this part of the zodiac on the Ascendant rather than depicting this cycle for the Sun as starting at 0° Aries. In summary, when speaking of cycles generically, I usually impose upon that cycle a zodiac that begins at Aries. However, if I am dealing with a specific cycle that starts somewhere else in the zodiac, then I might begin the cycle with that specific location. And we routinely do that with other things in astrology, too, such as the Jupiter/Saturn conjunction at 0° Aquarius in December of 2020. All Western astrologers undoubtedly interpret this twenty year cycle as beginning in Aquarius and not Aries. However, whether we start a cycle at Aries or at some other sign really depends upon what works best. In my case I have my Moon in the last dwad of Taurus. If I start my Taurus zodiac at Aries, then the last dwad is Pisces. However, if I start my Taurus zodiac at Taurus, then the last dwad is Aries. Hence, the question is does my Moon feel more like Taurus/Pisces or Taurus/Aries? In my case, I seem to resonate better to those subdivisions that always begin with Aries rather than the current sign. Thus, with my Moon in the last 2.5° of Taurus, I feel myself more as a Taurus/Pisces blend than as a Taurus/Aries which the traditional Vedic *dwadasamas* method would use. However, others may resonate differently to each of these possibilities. Also, the fractal nature of horoscopes that such subdivisions lead us to shows us that the horoscope literally contains an infinite amount of information. Additionally, as a result of self-similarity, this information will repeat itself in infinite ways, and that helps to explain why several different techniques will often point to the same conclusion when analyzed by a competent astrologer. And finally, following the horoscope with Sun set at the Ascendant below is a table of the sign subdivisions that I use that always begins with Aries for the first subdivision.

| INTERVAL | SIGN |
|---|-------------|
| $0^{\circ} \leq \theta < 2.5^{\circ}$ | Aries |
| $2.5^{\circ} \leq \theta < 5^{\circ}$ | Taurus |
| $5^{\circ} \leq \theta < 7.5^{\circ}$ | Gemini |
| $7.5^{\circ} \leq \theta < 10^{\circ}$ | Cancer |
| $10^{\circ} \leq \theta < 12.5^{\circ}$ | Leo |
| $12.5^{\circ} \leq \theta < 15^{\circ}$ | Virgo |
| $15^{\circ} \leq \theta < 17.5^{\circ}$ | Libra |
| $17.5^{\circ} \leq \theta < 20^{\circ}$ | Scorpio |
| $20^{\circ} \leq \theta < 22.5^{\circ}$ | Sagittarius |
| $22.5^{\circ} \leq \theta < 25^{\circ}$ | Capricorn |
| $25^{\circ} \leq \theta < 27.5^{\circ}$ | Aquarius |
| $27.5^{\circ} \leq \theta < 30^{\circ}$ | Pisces |



Using this scheme and a little mathematics, we can easily determine things such as what point in the zodiac is the most Aries or the most Taurus and so on. For example, the sign of Taurus starts at 30° , but we can insert another zodiac within Taurus, and the starting point of Taurus in this zodiac will add to the Taurus nature of our initial encounter. Also, to reach this second Taurus point, we have to add on $\frac{30^\circ}{12} = 2.5^\circ$ to our original 30° .

$$30^\circ + 2.5^\circ = 32.5^\circ$$

If we now want to take this one step further, then the next zodiac will contain segments of length $\frac{2.5^\circ}{12} = 0.208\bar{3}^\circ$. Hence, our position at this point is,

$$30^\circ + 2.5^\circ + 0.208\bar{3}^\circ = 32.708\bar{3}^\circ$$

Now the question is, if I continue this forever, then can we find out what the resulting infinite sum will be? Fortunately, if we analyze things properly, the answer is yes! Thus, let's review what is happening in the above sum. We first found the position of Taurus by dividing 360° by 12 and choosing the second interval in that subdivision. Next we divided our 30° by 12 to get 2.5° , and we added that on. And finally, we divided 2.5° by 12 to get $0.208\bar{3}^\circ$, and we added that on. Clearly, the next term to add on should be $0.208\bar{3}^\circ$ divided by 12! Also, we can rewrite the sum above as,

$$\begin{aligned} \frac{1}{12} \times 360^\circ + \frac{1}{12} \times \frac{1}{12} \times 360^\circ + \frac{1}{12} \times \frac{1}{12} \times \frac{1}{12} \times 360^\circ \\ = \left(\frac{1}{12}\right) \times 360^\circ + \left(\frac{1}{12}\right)^2 \times 360^\circ + \left(\frac{1}{12}\right)^3 \times 360^\circ = 32.708\bar{3}^\circ \end{aligned}$$

We can extrapolate from this to conclude that the sum of the first n terms of a sum that can go on to infinity should be,

$$\left(\frac{1}{12}\right) \times 360^\circ + \left(\frac{1}{12}\right)^2 \times 360^\circ + \left(\frac{1}{12}\right)^3 \times 360^\circ + \dots + \left(\frac{1}{12}\right)^n \times 360^\circ = S_n$$

Now we just need to see if we can reduce this to an easy-to-use formula. To accomplish that, let's multiply both sides of the above equation by $\frac{1}{12}$ to get,

$$\left(\frac{1}{12}\right)^2 \times 360^\circ + \left(\frac{1}{12}\right)^3 \times 360^\circ + \left(\frac{1}{12}\right)^4 \times 360^\circ + \dots + \left(\frac{1}{12}\right)^n \times 360^\circ + \left(\frac{1}{12}\right)^{n+1} \times 360^\circ = \frac{1}{12} \times S_n$$

And now we just need to do a little subtraction.

$$S_n - \frac{1}{12} \times S_n$$

$$\begin{aligned}
&= \left[\left(\frac{1}{12} \right) \times 360^\circ + \left(\frac{1}{12} \right)^2 \times 360^\circ + \left(\frac{1}{12} \right)^3 \times 360^\circ + \cdots + \left(\frac{1}{12} \right)^n \times 360^\circ \right] \\
&\quad - \left[\left(\frac{1}{12} \right)^2 \times 360^\circ + \left(\frac{1}{12} \right)^3 \times 360^\circ + \left(\frac{1}{12} \right)^4 \times 360^\circ + \cdots + \left(\frac{1}{12} \right)^n \times 360^\circ \right. \\
&\quad \left. + \left(\frac{1}{12} \right)^{n+1} \times 360^\circ \right] \\
&= \left(\frac{1}{12} \right) \times 360^\circ - \left(\frac{1}{12} \right)^{n+1} \times 360^\circ
\end{aligned}$$

Hence,

$$S_n - \frac{1}{12} \times S_n = S_n \times \left(1 - \frac{1}{12} \right) = \left(\frac{1}{12} \right) \times 360^\circ - \left(\frac{1}{12} \right)^{n+1} \times 360^\circ$$

$$\text{Implies that } S_n = \frac{\left(\frac{1}{12} \right) \times 360^\circ - \left(\frac{1}{12} \right)^{n+1} \times 360^\circ}{1 - \frac{1}{12}}.$$

Notice that as n increases the value of $\left(\frac{1}{12} \right)^{n+1} \times 360^\circ$ gets closer and closer to 0 and becomes negligible. Hence, if we represent the corresponding infinite sum by S , then we have,

$$S = \left(\frac{1}{12} \right) \times 360^\circ + \left(\frac{1}{12} \right)^2 \times 360^\circ + \left(\frac{1}{12} \right)^3 \times 360^\circ + \cdots = 360^\circ \times \frac{\frac{1}{12}}{1 - \frac{1}{12}} = 360^\circ \times \frac{1}{11} = 32.\overline{72}^\circ = 2.\overline{72}^\circ \text{ } \text{\textcircled{A}}$$

Thus, $2.\overline{72}^\circ \text{ } \text{\textcircled{A}}$ is the point in the zodiac that is “most” Taurus. To now find the point that is most Gemini, we can modify the above formula by noting that the start of Gemini is two twelfths of the way around the zodiac. Hence, the position of the most Gemini point is,

$$S = 2 \left(\frac{1}{12} \right) (360^\circ) + 2 \left(\frac{1}{12} \right)^2 (360^\circ) + 2 \left(\frac{1}{12} \right)^3 (360^\circ) + \cdots = 2 \times 360^\circ \times \frac{\frac{1}{12}}{1 - \frac{1}{12}} = 360^\circ \times \frac{2}{11} = 65.\overline{45}^\circ = 5.\overline{45}^\circ \text{ } \text{\textcircled{B}}$$

You might at this point begin to see a pattern emerging. In particular, the start of every sign in the zodiac is going to be equal to some fraction over 12 times 360° . For example, Aries begins at $\frac{0}{12} \times 360^\circ$, Taurus begins at $\frac{1}{12} \times 360^\circ$, Gemini begins at $\frac{2}{12} \times 360^\circ$, Cancer begins at $\frac{3}{12} \times 360^\circ$, and so on. Thus, if we let n equal the number of 30° segments that the start of our sign is from 0° Aries, then the degree of the zodiac that, in a sense, most embodies that sign is given by the formula $360^\circ \times \frac{n}{11}$. And using this formula we can now create a table like the one below that shows the zodiac point that represents, in theory, the quintessential essence of each sign.

| SIGN | VALUE FOR n | $(360)(n/11)$ | THE "ESSENCE" POINT |
|-------------|---------------|---------------|---------------------|
| Aries | 0 | 0 | 0 Aries |
| Taurus | 1 | 32.72 | 2 Taurus 44 |
| Gemini | 2 | 65.45 | 5 Gemini 27 |
| Cancer | 3 | 98.18 | 8 Cancer 11 |
| Leo | 4 | 130.90 | 10 Leo 55 |
| Virgo | 5 | 163.63 | 13 Virgo 38 |
| Libra | 6 | 196.36 | 16 Libra 22 |
| Scorpio | 7 | 229.09 | 19 Scorpio 5 |
| Sagittarius | 8 | 261.81 | 21 Sagittarius 49 |
| Capricorn | 9 | 294.54 | 24 Capricorn 33 |
| Aquarius | 10 | 327.27 | 27 Aquarius 16 |
| Pisces | 11 | 360 | 0 Aries |

An intriguing consequence of the above is that the point which is most Pisces is exactly the same as the point that is the most Aries, and this underscores that the end of a cycle always coincides with the beginning. The end is in the beginning, and the beginning is in the end. Also, if we had pursued the above scheme using the traditional *dwadasamsas* of Vedic astrology where each fractal zodiac begins with the sign that one starts with, then the 0° point of each sign winds up being the place where the nature of that sign is felt most strongly.

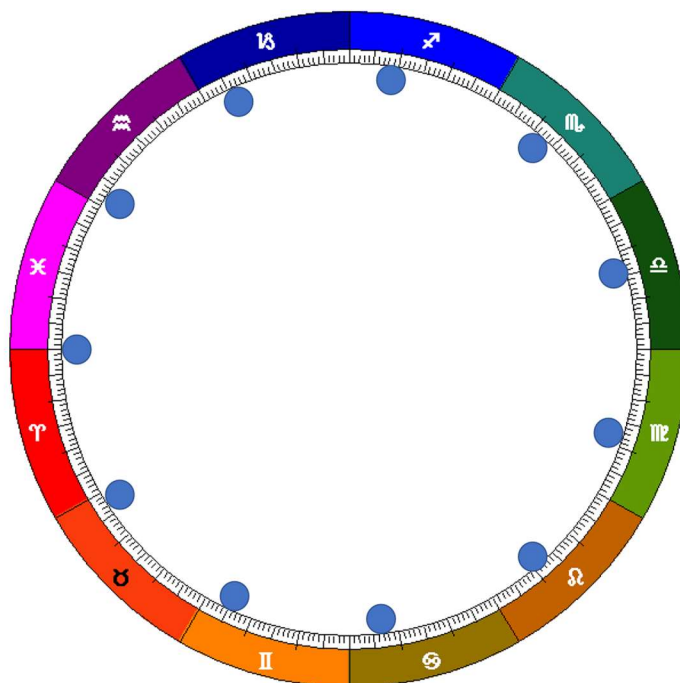
| SIGN | THE "ESSENCE" POINT USING TRADITIONAL DWADASAMAS |
|-------------|--|
| Aries | 0 Aries |
| Taurus | 0 Taurus |
| Gemini | 0 Gemini |
| Cancer | 0 Cancer |
| Leo | 0 Leo |
| Virgo | 0 Virgo |
| Libra | 0 Libra |
| Scorpio | 0 Scorpio |
| Sagittarius | 0 Sagittarius |
| Capricorn | 0 Capricorn |
| Aquarius | 0 Aquarius |
| Pisces | 0 Aries |

Now let's dive deeper using our first scheme above where each fractal zodiac begins with Aries. In this case our "essence" points are always of the form $360^\circ \times \frac{n}{11}$ where n varies from 0 to 11. An important thing to now realize is that each angle that we compute by this formula will also be an 11th harmonic angle. Hence, if we calculate the 11th harmonic chart, then any planet falling on an "essence" point in our original chart will appear at 0° Aries in our 11th harmonic chart. This happens because for every possible value for n , $360^\circ \times \frac{n}{11} \times 11 = 360^\circ \times n$ is a natural number multiple of 360° that is equivalent to 0° Aries when we do our clock arithmetic modulo 360°.

Now I want to show you something that is truly amazing to me. Namely, in addition to our 11th harmonic angles all being equivalent to 0 degrees Aries in the 11th harmonic chart, they are also fixed points in the 12th harmonic chart. In other words each of the essence points in the table below will occupy exactly the same position in the 12th harmonic chart! We'll look at this both geometrically and algebraically.

| | | | |
|-------------|----|--------|-------------------|
| Aries | 0 | 0 | 0 Aries |
| Taurus | 1 | 32.72 | 2 Taurus 44 |
| Gemini | 2 | 65.45 | 5 Gemini 27 |
| Cancer | 3 | 98.18 | 8 Cancer 11 |
| Leo | 4 | 130.90 | 10 Cancer 55 |
| Virgo | 5 | 163.63 | 13 Virgo 38 |
| Libra | 6 | 196.36 | 16 Libra 22 |
| Scorpio | 7 | 229.09 | 19 Scorpio 5 |
| Sagittarius | 8 | 261.81 | 21 Sagittarius 49 |
| Capricorn | 9 | 294.54 | 24 Capricorn 33 |
| Aquarius | 10 | 327.27 | 27 Aquarius 16 |
| Pisces | 11 | 360 | 0 Aries |

Recall that the quick and easy way to find the 12th harmonic position of any point in our chart is to simply multiply the value of that position as measured from 0° Aries by 12 and then express the result modulo 360° (i.e. clock arithmetic). Thus, if we start geometrically with our first segment which is about 32.72 degrees from the beginning of Aries and if we add on to it 11 more such segments in order to give us a total of 12 from 0° Aries, then you can see using the diagram below that we'll wind up right back where we started, thus showing that the 12th harmonic of 2° Taurus 44' is again 2° Taurus 44'. Furthermore, if we start with the next point which is at about 65.45 degrees from 0° Aries and then add 11 more identical segments to it, then we once more will arrive right back where we started.



As appealing as the geometry is, let's also look at this algebraically. Hence, expressed algebraically our first 11th harmonic angle is at $360^\circ \times \frac{1}{11} = 32.\overline{72}^\circ$. If we multiply this by 12, then we get $360^\circ \times \frac{1}{11} \times 12 = 360^\circ \times \frac{12}{11}$. However, since we are doing clock arithmetic, we start over when we get to $360^\circ \times \frac{11}{11}$, and thus, $360^\circ \times \frac{12}{11}$ is equivalent to $360^\circ \times \frac{1}{11} = 32.\overline{72}^\circ = 2^\circ \text{ Taurus } 44'$. Likewise, for any angle of the form

$360^\circ \times \frac{n}{11}$, if we multiply this by 12, then we get $360^\circ \times \frac{12}{11} = 360^\circ \times \left(\frac{11}{11} + \frac{n}{11}\right)$ which in our clock arithmetic modulo 360° is equivalent to $360^\circ \times \frac{n}{11}$, the exact point that we started with! Hence, the 11th harmonic points in our original chart will be fixed points in the 12th harmonic chart. Similarly, if your harmonic is a natural number power of 12 such as 12^2 , then we get $360^\circ \times \frac{n}{11} \times 12 \times 12$. Multiplying by the first 12 gives us back via clock arithmetic the angle $360^\circ \times \frac{n}{11}$ and then multiplying by the second 12 produces the same result. Consequently, these 11th harmonic angles are fixed points in any harmonic chart corresponding to 12^n where n is a natural number.

Now let's see what happens if we use a natural number harmonic which is not a power of 12, for example the 3rd harmonic. Then, once again, we can find the 3rd harmonic position of each of our 11th harmonic angles by multiplying by 3 and then simplifying modulo 360° , and when we do this, we get the following results.

| 11th HARMONIC ANGLE | ANGLE TIMES 3 | RESULT MODULO 360 |
|---------------------|----------------|-------------------|
| $(360)(0/11)$ | $(360)(0/11)$ | $(360)(0/11)$ |
| $(360)(1/11)$ | $(360)(3/11)$ | $(360)(3/11)$ |
| $(360)(2/11)$ | $(360)(6/11)$ | $(360)(6/11)$ |
| $(360)(3/11)$ | $(360)(9/11)$ | $(360)(9/11)$ |
| $(360)(4/11)$ | $(360)(12/11)$ | $(360)(1/11)$ |
| $(360)(5/11)$ | $(360)(15/11)$ | $(360)(4/11)$ |
| $(360)(6/11)$ | $(360)(18/11)$ | $(360)(7/11)$ |
| $(360)(7/11)$ | $(360)(21/11)$ | $(360)(10/11)$ |
| $(360)(8/11)$ | $(360)(24/11)$ | $(360)(2/11)$ |
| $(360)(9/11)$ | $(360)(27/11)$ | $(360)(5/11)$ |
| $(360)(10/11)$ | $(360)(30/11)$ | $(360)(8/11)$ |
| $(360)(11/11)$ | $(360)(33/11)$ | $(360)(11/11)$ |

From this chart we can see that in the 3rd harmonic our 11th harmonic angles don't wind up just anywhere. Instead, they always arrive at other 11th harmonic angles, thus producing what is merely a permutation of our original list of 11th harmonic angles! What all of this shows is that harmonic charts in astrology have incredible mathematical structure, and we know from experience that mathematical structure always translates into meaningful applications over time. Hence, every bit of structure we uncover is incredibly exciting to me. Furthermore, everything we've done so far can be applied to all natural number harmonics. In other words, just as the 11th harmonic points are all equivalent to zero in the 11th harmonic chart and are fixed points in the 12th harmonic chart, so will n^{th} harmonic points be equivalent to zero in the n harmonic chart and fixed points in the $n + 1$ harmonic chart. Furthermore, if m and n are natural numbers and if we want to consider the m^{th} harmonic chart of n^{th} harmonic angles, then there appear to be three possibilities with each one easy to verify:

1. If n is a factor of m , then each of the n^{th} harmonic angles is equivalent to 0° in an m^{th} harmonic chart.
2. If m is equal to a natural number power of $n + 1$, then each of the n^{th} harmonic angles is an unchanged fixed point when the original chart is transformed into the m^{th} harmonic chart.

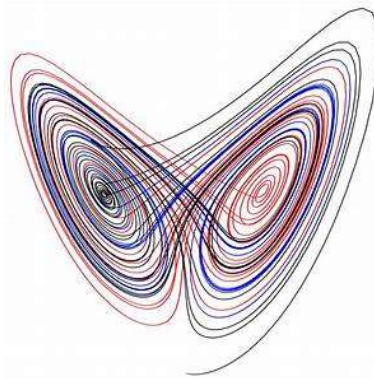
3. If m is not a power of $n + 1$ and if n is not a factor of m , then the m^{th} harmonic chart will produce a permutation of the n^{th} harmonic angles.
4. In all cases for natural numbers m and n , the m^{th} harmonic will map each n^{th} harmonic angle onto an n^{th} harmonic angle, and sometimes it will be the same angle, sometimes 0° , and sometimes a permutation of our original list of n^{th} harmonic angles.

Again, this is incredible mathematical structure that we are uncovering, and in particular, we see that for any natural number n , the n^{th} harmonic angles have a special connection with the n^{th} harmonic chart and the $n + 1$ harmonic charts, and most m^{th} harmonic charts will produce a permutation of these angles with, at the very least, n^{th} harmonic angles always getting mapped onto n^{th} harmonic angles. Thus, as I've said above, when we produce harmonic charts, things don't move about just willy nilly. Instead, 2^{nd} harmonic angles always get mapped onto 2^{nd} harmonic angles, and so forth for higher natural number harmonic angles. In a sense, everything always stays within the family, and this shows structure that is preserved even as we go on to higher harmonics! Furthermore, even though the original context is astrological, this has implications far beyond astrology because ultimately we are just looking at cycles within cycles and transformations of cycles, and these results apply, *mutatis mutandis*, to any situation involving cycles.

There are some other aspects of harmonic astrology that we can also examine mathematically. For example, if two planets are in a certain aspect with one another in the natal chart, then what will happen to this aspect in a harmonic chart? To understand what occurs, let's take a simple example. Thus, suppose that we have two planets exactly square one another and that the first planet is θ_1 degrees from 0° Aries and the second planet is θ_2 degrees from 0° Aries, and $\theta_2 > \theta_1$ so that $\theta_2 - \theta_1 = 90^\circ$. An angle of 90° is a 4^{th} harmonic angle, and we know that the 4^{th} harmonic angles as measured from 0° Aries are fixed points in the 5^{th} harmonic chart, and it would be very convenient if all 4^{th} harmonic angles of separation are also preserved. Fortunately, this appears to be the case. Recall that we can find the position of each planet in the 5^{th} harmonic chart by multiplying each planetary position by 5 and then expressing the result modulo 360° . Hence, the angle of separation in the 5^{th} harmonic chart is $5\theta_2 - 5\theta_1 = 5(\theta_2 - \theta_1) = 5 \times 90^\circ = 450^\circ (\text{modulo } 360^\circ) = 90^\circ$. Thus, the angle of separation remains unchanged, and our analysis suggests, in general, that if two planets are separated by an n^{th} harmonic aspect, then transforming the birth chart into a m^{th} harmonic chart for some natural number m will once again map the n^{th} harmonic aspect onto some other n^{th} harmonic angle. Consequently, the 5^{th} harmonic of an angle of separation of 120° is $5 \times 120^\circ = 600^\circ (\text{modulo } 360^\circ) = 240^\circ$ which is just another 3^{rd} harmonic angle. Likewise, we expect that the 3^{rd} harmonic of this angle will be equivalent to 0° , and sure enough $3 \times 120^\circ = 360^\circ (\text{modulo } 360^\circ) = 0^\circ$. In other words, our earlier rules for finding angles in harmonic charts seem to apply to angles of separation also.

Now let's look at another scenario – harmonics that are associated with angles of separation that are not related to natural number harmonics. As an example, I'll consider the angular distance between Mercury and Uranus in my natal chart. In theory, the angle of separation between two planets could be either a rational number or an irrational number, but in either case it can always be approximated by a rational number. Plus, when we write down a planet's position in terms of exact degrees and minutes, we are always giving it a rational number value. Thus, I'll assume 100% accuracy when I express the separation between my Mercury and Uranus as exactly $57^\circ 28' = \left(57 + \frac{28}{60}\right)^\circ = \left(57 + \frac{7}{15}\right)^\circ = \frac{862}{15}^\circ$. To find the harmonic related to this level of angular separation, we have to divide this value into 360° . Thus, the

harmonic is $\frac{360^\circ}{(\frac{862}{15})^\circ} = \frac{5400}{862}$, and if we multiply our original angle by this harmonic, then we can easily see that the product is $\frac{862}{15}^\circ \times \frac{5400}{862} = 360^\circ$, and if we multiply this angle by our harmonic plus one, then $\frac{862}{15}^\circ \times (\frac{5400}{862} + 1) = \frac{862}{15}^\circ \times \frac{6262}{862} = \frac{862}{15}^\circ \times \frac{3131}{431} = 417\frac{7}{15}^\circ$ which is equivalent, modulo 360° , to $57\frac{7}{15}^\circ = 57^\circ 28'$. Furthermore, if we multiply our angle by 5400, one of the numerators above, then we get $\frac{862}{15}^\circ \times 5400 = 310,320^\circ = 862 \times 360^\circ$ which is equivalent to 0° , modulo 360° . In other words, whenever the angle of separation is a rational number, then there will always be a natural number that we can multiply that angle by that will give us a result that is equivalent to 0° , modulo 360° , and that number is equal to 360 times the denominator of our rational number. However, if our angle of separation is irrational, then this will never happen since an irrational number times a natural number will also be irrational and, hence, never equivalent to 0° , modulo 360° . However, it is quite possible that, in cases like this, that “strange attractors” may emerge. These are images or patterns, such as the *Lorentz attractor* below where no path is repeated and yet over time a definite image appears.



THE JOYS AND SORROWS OF STATISTICS

At its best, statistics is a wonderful light that can bring great clarity to whatever it shines its light upon. But at its worst, statistics is just a sophisticated lie, and a major determinant in the outcome is the quality of the data. To paraphrase a past Secretary of Defense, we often do statistics not with the data we want, but with the data we have, and if that data is biased or otherwise unclear, then our results will be correspondingly compromised. However, bad data is not the only problem facing modern statistics. Below are a few additional problems, in my opinion.

- An overreliance on binary interpretations has distorted our understanding

What everyone wants when they do statistics is to be able to declare something “statistically significant,” but there are problems with the usual binary approach. For example, many a researcher has lamented that their result was so, so very close to the cutoff point for significance that it just doesn’t seem right to deem it irrelevant. And I agree that this is a problem. Furthermore, sometimes there is more than one test available in a given situation, and quite often one test will indicate significance while the other doesn’t! What is one supposed to do? Some, including me, would like to chuck the whole system and focus more on trying to assess the strength of the relationship and the degree to which results are replicated when conditions are similar. This would be a recognition that reality more often than not consists of conditions that wax and wane rather than turning on and off like a switch. By recognizing that reality is generally nonbinary and by placing more emphasis on replication of results, many of the problems of modern statistics can likely be avoided. Furthermore, in some disciplines, such as the association of genetic markers with various characteristics, traditional statistical hypotheses testing is not possible, and instead results are obtained by comparing extreme cases with a control group in order to sense the effects of certain genes.

- An overemphasis on positive results has skewed our understanding in several disciplines

Typically, journals and tenure committees only seem to care about a result if it is statistically significant. However, negative results can also be quite important. For instance, it can be just as important to know that one substance causes no harm as it is to know that another can be significantly harmful. We need to know the big picture and not just a narrow point of view!

- Misuse of the Bonferroni Correction has hindered research in many disciplines

When one increases the number of statistical tests that one is doing, one also increases the likelihood of getting a statistically significant result purely by chance. To prevent this kind of error, it is common to require more stringent criteria for significance in order to avoid spurious results. However, by avoiding one kind of error, this correction makes another type of error more likely. In particular, the Bonferroni Correction increases the likelihood that you will accept something that is false while, nonetheless, making it less likely that you will reject something that is true. But it makes no sense to exacerbate one problem in order to fix another! Thus, I believe that the Bonferroni Correction should be rejected along with the current binary form of

hypothesis testing. Instead, one should focus more on the strength of the relationship between the variables, the tendency toward significance, and whether the results can be reliably replicated because if there is no replication, then who cares? Furthermore, since the Bonferroni Correction is typically applied when one is doing several statistical tests, this discourages comprehensive exploration during a single study since no researcher wants to see their significant result vanish as a result of making the criteria for significance more stringent. Again, we often need a comprehensive understanding of the whole rather than just piecemeal results regarding the parts, and modern statistics has not served us well in that regard.

- Important results need to be replicated and confirmed by agencies with no inherent bias

It is not uncommon for statistical studies to be conducted by those who have the greatest stake in the outcome. For example, much of the research into the efficacy of pharmaceutical drugs is done by the pharmaceutical companies themselves! Their interest in their own products is understandable, but all results need to be replicated and confirmed by outside agencies before they are accepted. Too many results are “one hit wonders” that other researchers have been unable to replicate, and yet the mythology of their claims often persists.

- There has been a flagrant misuse of tests showing that a correlation is significantly different from zero

When assessing something like the coefficient of linear correlation between two variables it is important, of course, to know that it is unlikely that the correlation is zero, but knowing that the correlation is not zero does not mean that the correlation is important. Quite often what one wants is to determine that a particular variable has predictive power with regard to another variable, and in this case it is not enough to know that a correlation is probably different from zero. One also has to know that the strength of the correlation is such that it can be used as a reliable predictor. However, in the quest for the sort of relevance that our society places on statistical significance, all too often a very weak correlation is elevated in importance simply because a test has shown that this correlation is significantly different from zero, and this has led to many a bad decision. In fact, the only time I would consider something like this important is when our goal is to simply show that a certain effect is likely real albeit weak. In such an instance it should also be noted that the predictive power of the variable is weak even if the effect is real. That is how things should be done, in my opinion, but that is also not how things are often done.

These are some of the problems that I believe exist with modern statistics and some of the adjustments that I feel need to be made. However, there are also adjustments that the astrological community should make in order to successfully become an evidence-based discipline, and I'll enumerate a few of these now.

- It should be understood that many astrological effects probably have a strength that ranges from weak to moderate

If an astrological effect were strong, then it would produce the same result every single time. However, since it usually doesn't, this suggests that most astrological impulses are far from strong. Otherwise, there would be no ability to exert free will. However, astrologers have long recognized that the stars impel, but they do not compel. In other words, astrologers have long observed that astrological impulses are weak enough that the outcome is never 100% certain. Hence, what some researchers are now finding out is that certain outcomes are often more strongly related to a conglomeration of astrological influences rather than just a single influence. Consequently, it will often be more fruitful to ask what combinations of factors may yield a particular result rather than focusing on just a single factor. Hence, greater use needs to be made of techniques such as factor analysis, multiple regression, discriminant analysis and other statistical procedures that are designed to focus on the association of multiple variables rather than always supposing that a single cause always results in a single effect.

- In astrology, a single effect can be the result of multiple causes, and a single cause can have multiple effects

I believe that one of the difficulties in statistically validating astrology is due to the fact that a single astrological influence can manifest in several different ways, and a specific outcome could be the result of many different possible causes. For example, success as a mathematician could be the result of a strong mind (Mars conjunct Mercury) or a focused mind (Saturn conjunct Mercury) or a creative mind (Uranus conjunct Mercury) or other astrological conditions. Similarly, while an aspect like Uranus sextile Mercury can give you the creativity desired for mathematical research, the creativity indicated by this aspect can just as easily find expression in other fields including astrology. Thus, the fact that a single cause can result in any of a variety of effects or that a single effect could be the result of any of a variety of causes makes statistical verification of astrology all the more challenging. And when you couple this with the acknowledgement that most astrological effects probably range in strength from weak to moderate, it is no wonder that statistical verification of astrology has been difficult. Nonetheless, many, including myself, have found effects here and there which hold up under replication. Thus, it is not true to say that there is no statistical verification of astrology. Instead, there exist particular challenges, such as those stated above, that have to be addressed when doing astrological research. Additionally, the scientific community has to assess these results without the bias that it has presented in the past. Many researchers in other fields have automatically assumed that any results obtained that support astrology must be in error, and so they have focused on trying to explain where in the methodology the error has occurred rather than contemplating the veracity of the results and whether they can be replicated.

- Astrology needs large and complete databases

Lots of data is needed in order to determine what works and what doesn't work in astrology, and fortunately much has been done to meet this requirement. Huge data bases not only exist within some popular astrological programs like Sirius and Solar Fire, but also at Astrodatbank which can be accessed online for free. However, these databases can also include some serious gaps. For example, I was doing some exploratory research on Parkinson's recently, and I wanted

to demonstrate that a certain significant result was present regardless of the time interval that I drew my sample from. However, this was thwarted when I realized that only one person in the database had been flagged as having Parkinson's in the interval from 1960 until now, and such gaps in the data can render statistics ineffective. Thus, efforts to expand and complete these databases need to be accelerated if we wish to provide statistical verification.

- More astrological researchers need to use control groups in their research

Astrological research has accomplished much over the centuries solely through reliance on exhaustive case studies. Additionally, whether astrologers realize it or not, we are all engaged in astrological research every time we look at our chart or the charts of others. This is because we all make our own observations regarding the frequency with which certain things happen in response to celestial conditions, and these observations have resulted in a phenomenal body of knowledge. However, what is sometimes crucially missing is a control group. That is, a group of people who are not related to the effect we are trying to study and who can be used to verify that our result will tend to not be present when the cause we are studying is also not present. For example, while doing some exploratory research, it appeared to me that athletes were indeed more likely to be born with Mars conjunct Sun rather than Mars in opposition to the Sun. However, when I assembled a set of non-athletes to use as a control group, I found that they, too, were more likely to have Mars conjunct Sun rather than Mars opposite Sun, and subsequent inquiry revealed that Mars, in general, conjuncts the Sun much more frequently than it opposes it. Thus, by using a control group I was able to realize that my initial result of frequently finding Mars conjunct Sun in the charts of athletes was not that unusual after all. The bottom line is that all astrological studies need a control group to compare results with. Otherwise, while we will still catch a lot of things that work in astrology, we will also collect a lot of false results, too.

- Astrology needs a well defined set of protocols to follow for research

One of the reasons that statistics has been so successful when applied to medical research is due to the fact that set procedures have been established for most studies involving statistical analysis and experimental design. Similar protocols need to be established for astrological research that take into account the particular conditions under which astrology operates. Specifically, that a single cause can have multiple effects, a single effect can be due to multiple causes, and effects are often the result of multiple interactions rather than a single factor. Thus, statistical procedures need to take all of these issues into consideration, and they need to focus more on replication than traditional significance.

- All astrology certification programs need to include basic competency in statistical procedures

Not all astrologers need to be statisticians, but these days they all need to be conversant with the basics of statistics. Fortunately, I believe that there are some certification programs that are addressing this need, and that is what is necessary in order for a more evidence-based astrology

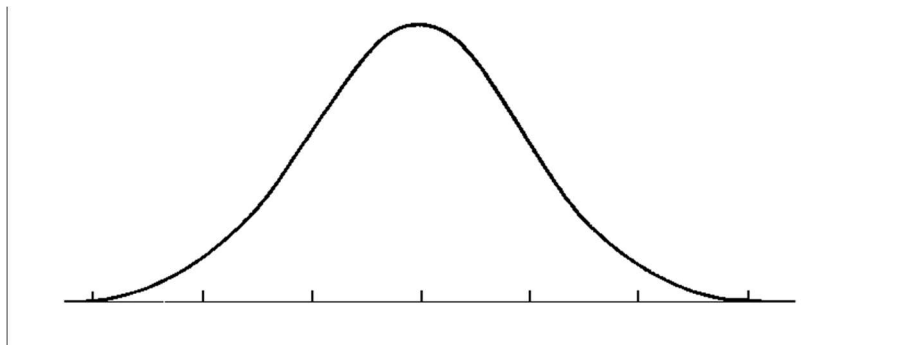
to emerge.

In conclusion, I believe that we are currently on the verge of a new golden age of astrology that will include far more mathematical modeling, determination of causal mechanisms, and statistical verification than ever before. The future of astrology, in that regard, looks very bright. However, right now there are not nearly enough people in the field with that have the mathematical and statistical knowledge to do this. Nonetheless, if astrology is going to continue to advance, then this is what is required. Furthermore, when good data analysis has been done to help develop a reliable, evidence-based astrology, it has often been found that astrological theory is broadly supported, but not always in the ways expected. General principles are confirmed, but the emphasis is often different from what we imagined. Nevertheless, this is the power of good data analysis, to both advance and support our theories at the same time. This is the way.

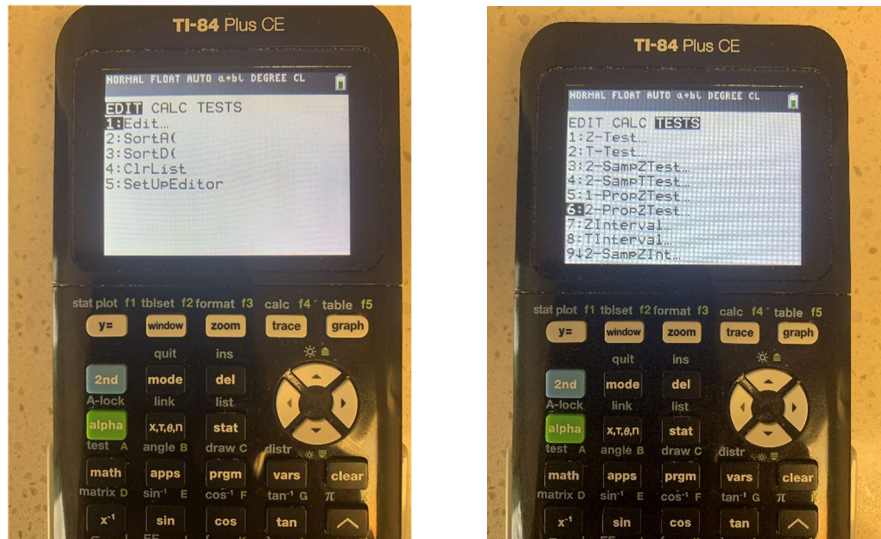
HOW TO DO STATISTICAL ANALYSIS WITH ASTRODATABANK

Astrodatbank is a large, free collection of horoscopes that contains over 40,000 charts, and it can be used to help one test astrological claims. Here's how we can do this. First, though, I might say that all astrologers use statistics whether they realize it or not. What I mean when I say this is that all astrologers tend to test the various propositions of astrology by looking to see if they manifest in either their own chart or in those of others, and if a suggested interpretation occurs more frequently than expected, it is then accepted as something one can rely on. Hence, the act of observing the frequency with which certain terrestrial events occur while some celestial event is also happening is at its heart a statistical determination. The astrologer is determining whether some astrological dictum is valid by observing how frequently certain events occur in response to their astrological environment. But how can we validate these observations using statistics? That's what we will address next.

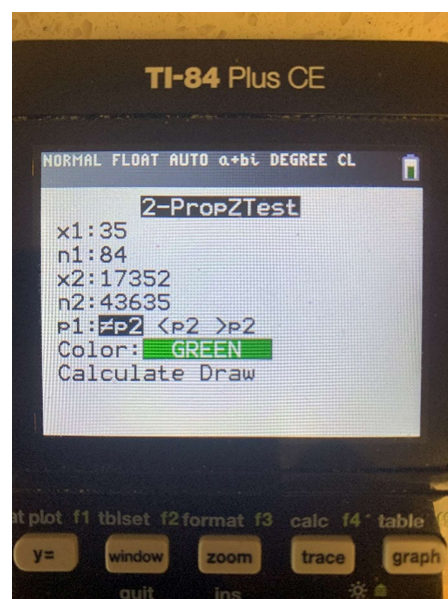
There are many tests and procedures in statistics for determining many things, but because astrology has emerged from informal measurements of how frequently certain things occur, my preferred test for statistical significance in this type of situation is the "z-test for two proportions." This is an easy-to-use test for comparing two proportions with one another to see if their difference is meaningful. The two samples should be independent of one another, and that simply means that the data values in one sample should not affect or influence in any way the data values in the other sample. That's the way most things are in this world. Also, the number of "successes" or "failures" for each variable should not be less than 5. When both of these conditions are met, then a graph of all possible differences between the proportions and their likelihoods will be approximately normally distributed. That means that we will get a graph similar to the one below where the peak in the middle represents an average value that is most likely while the extremes represented by the two tail sections are what is less likely. If the difference in proportions is plotted on the horizontal axis and if that difference is close to being below the hump, then that kind of difference could easily be due to chance. In contrast, if the difference falls on the part of the horizontal axis that corresponds to the tail sections, then that difference occurs with very low probability of happening by chance, and so we usually assume it is due to something more meaningful and not just mere chance.



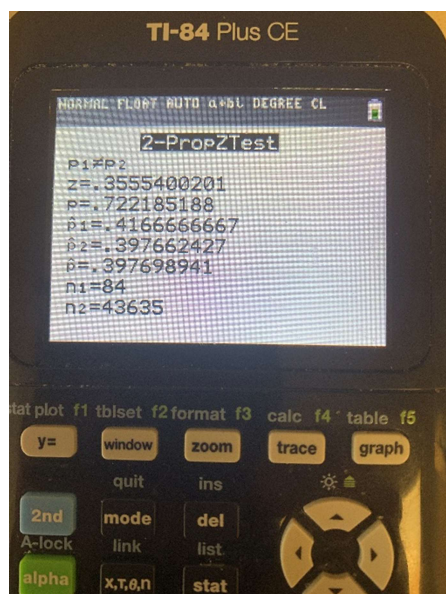
There are several ways in which you can implement the z-test for two proportions. If you have a Ti-84 calculator, then the images below can guide you. The first thing you want to do is to press the STAT button on your calculator, scroll to TESTS, and then select item 6 (2-PropZtest).



At this point you should now see the following screen. On this screen you want to enter your values for the number of successes in sample 1 (x_1), the size of sample 1 (n_1), the number of successes in sample 2 (x_2), and the size of sample 2 (n_2). As you do this, make sure that x_1 , $n_1 - x_1$, x_2 , and $n_2 - x_2$ are all 5 or larger because otherwise our approximation of a normal distribution may not be so exact.



In the image above it appears that I have two samples, one of size 84 and the other of size 43,635. In the first sample there were 35 successes, and in the second sample there were 17,352 successes. And since x_1 , $n_1 - x_1$, x_2 , and $n_2 - x_2$ are all at least 5, we can proceed with our test by clicking on “Calculate,” and when we do, we’ll get the following screen:



The most important thing on this screen is the probability value which we also call the p-value. The third line from the top says that $p = .722185188$, and this represents the likelihood that the differences between our two proportions is due to chance. In the classical way to do hypothesis testing, we usually deem the result statistically significant if p is 0.05 or less. In other words, if the likelihood of our result being due to chance is 5% or less, then we’ll conclude that our result is likely not due to chance, but due to something else. In this example, since p is much larger than 0.05, we conclude that the differences between our two proportions are just an example of random, chance fluctuations and not due to any relevant differences in the two populations. Also on this screen you’ll see \hat{p}_1 which is the proportion $\frac{x_1}{n_1}$ and \hat{p}_2 which is the proportion $\frac{x_2}{n_2}$. Additionally, the value $\hat{p} = .397698941$ is just a type of average of the two proportions that is used to compute our final p-value. It’s not something you have to pay attention to; just don’t confuse it with p , \hat{p}_1 , or \hat{p}_2 . Furthermore, you can also do this test using Excel file. However, you will have to enter some formulas, as indicated below, for the three cells on the bottom row:

| Ye Olde Z-Test for Two Proportions! | | | | | |
|-------------------------------------|---------|----------|--|---------|----------|
| | x_1 | 35 | | x_2 | 17352 |
| | n_1 | 84 | | n_2 | 43635 |
| | % | 41.67% | | % | 39.77% |
| | p-value | 0.72219 | | | |
| | | 0.722185 | | 0.35554 | 0.397699 |

| | | | | | | | |
|----|---|---------------|-------------------------------------|----------------------------------|---------|----------|--------|
| D8 | | ✕ ✓ <i>fx</i> | | =2*(1-NORM.S.DIST(ABS(E8),TRUE)) | | | |
| | A | B | C | D | E | F | G |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | Ye Olde Z-Test for Two Proportions! | | | | |
| 4 | | | x1 | 35 | | x2 | 17352 |
| 5 | | | n1 | 84 | | n2 | 43635 |
| 6 | | | % | 41.67% | | % | 39.77% |
| 7 | | | p-value | 0.72219 | | | |
| 8 | | | | 0.722185 | 0.35554 | 0.397699 | |

| | | | | | | | | | |
|----|---|-------------------------------------|---------|----------|---------|----------|--------|--|--|
| E8 | | ✖ | | ✓ | | fx | | =(D4/D5-G4/G5)/SQRT(F8*(1-F8)/D5+F8*(1-F8)/G5) | |
| | A | B | C | D | E | F | G | H | |
| 1 | | | | | | | | | |
| 2 | | | | | | | | | |
| 3 | | Ye Olde Z-Test for Two Proportions! | | | | | | | |
| 4 | | | x1 | 35 | | x2 | 17352 | | |
| 5 | | | n1 | 84 | | n2 | 43635 | | |
| 6 | | | % | 41.67% | | % | 39.77% | | |
| 7 | | | p-value | 0.72219 | | | | | |
| 8 | | | | 0.722185 | 0.35554 | 0.397699 | | | |

| | | | | | | | |
|----|---|---------------|-------------------------------------|------------------|---------|----------|--------|
| F8 | | ✕ ✓ <i>fx</i> | | =(D4+G4)/(D5+G5) | | | |
| | A | B | C | D | E | F | G |
| 1 | | | | | | | |
| 2 | | | | | | | |
| 3 | | | Ye Olde Z-Test for Two Proportions! | | | | |
| 4 | | | x1 | 35 | | x2 | 17352 |
| 5 | | | n1 | 84 | | n2 | 43635 |
| 6 | | | % | 41.67% | | % | 39.77% |
| 7 | | | p-value | 0.72219 | | | |
| 8 | | | | 0.722185 | 0.35554 | 0.397699 | |

x1 = number of "hits" or "successes" in sample 1

n1 = size of sample 1

x2 = number of "hits" or "successes" in sample 2

n2 = size of sample 2

p-value = probability that the observed results are due to chance

Additionally, if you don't have Excel or a TI-84 calculator, then you can also find online calculators for a z-test for two proportions at websites like <https://www.statology.org/two-proportion-z-test-calculator/>.

Now let's look at another example on how to do statistical research into astrology using Astrodatabank.

The first thing you'll want to do is to go to Astrodatabank by entering <https://www.astro.com/adb-search> into your web browser. This should take you to the following page.

ASTRO.COM EN Shopping Cart My Astro

Horoscopes Astro Shop All about Astrology **ASTRODIENST** Search

Astrodatabank research

registered user, not subscribed to extended data storage, has partial access. ⓘ

SEARCH
If no category is selected then all categories are searched. The same rule applies to gender and ratings.

Categories

- ☐ Traits
- ☐ Diagnoses
- ☐ Family
- ☐ Lifestyle
- ☐ Passions
- ☐ Personal
- ☐ Vocation
- ☐ Notable
- ☐ Mundane

Birthdates Default

ANY [D] ANY [M] 190 - 202

Options

- ☐ Data Set (ADB data)
- ☐ Results per Page (100)
- ☐ Gender (male, female)
- ☐ Ratings (AA, A, B, C)
- ☐ House System (Placidus)
- ☐ Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
- ☐ Other (combined, no, true, respect, day/night formula)

From here, open up "Ratings" under "Options," and unselect "C." This is basically ensuring that all the horoscopes we look at will probably have a fairly accurate birth time.

SEARCH
If no category is selected then all categories are searched. The same rule applies to gender and ratings.

Categories

- ☐ Traits
- ☐ Diagnoses
- ☐ Family
- ☐ Lifestyle
- ☐ Passions
- ☐ Personal
- ☐ Vocation
- ☐ Notable
- ☐ Mundane
- ☐ and...

Birthdates Default

ANY [D] ANY [M] 190 - 202

Options

- ☐ Data Set (ADB data)
- ☐ Results per Page (100)
- ☐ Gender (male, female)
- ☒ Ratings (AA, A, B)
 - ☒ AA
 - ☒ A
 - ☒ B
 - ☐ C
 - ☐ DD
 - ☐ X
 - ☐ XX
- ☐ House System (Placidus)
- ☐ Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
- ☐ Other (combined, no, true, respect, day/night formula)

The next step is to scroll down and select Sun in Pisces as our main condition.

The screenshot shows the Astrodatabank search interface. At the top, a search bar contains the text "1 have [Sun] in [Pisces]". Below the search bar, there are two main sections: "HAVE" and "IN ANY OF [✓] PLACES". The "HAVE" section is set to "ALL [✓] OBJECTS" and shows a list of celestial bodies under the "Planets" category. "Sun" is selected with a checkmark. The "IN ANY OF [✓] PLACES" section shows a list of zodiac signs under the "Signs" category. "Pisces" is selected with a checkmark. Other options like "Points", "Signs by Element", "Signs by Quality", and "Houses" are also visible but not selected.

Next, scroll down and click on “Show Results,” and you will see something like the following.

Astrodatabank research

registered user, not subscribed to extended data storage, has partial access. 

[Back to Search](#)

Search summary:

Day (any), Month (any), Years 1900 – 2021
Data Set (ADB data)
Results per Page (100)
Gender (male, female)
Ratings (AA, A, B)
House System (Placidus)
Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
Other (combined, no, true, respect, day/night formula)

1 have [Sun] in [Pisces]

3823 records found in 0.44 second(s).

☐ Show some Bio ☐ Show Categories

This says that our database contains 3823 people that are known to have Sun in Pisces. (NOTE: This number can change frequently as new data is added to Astrodatabank.) Write this number down, because next we have to determine how many of these people have heart problems. To figure this, go to “Diagnoses,” select “Major Diseases,” and then select “Heart Disease/Attack.” Your screen should now look something like the screen below.

SEARCH

If no category is selected then all categories are searched. The same rule applies to gender and ratings.

Categories

Traits

Diagnoses (1)

Major Diseases (1)

Aids

Allergies

Alzheimer's/Senility

Arthritis

Asthma

Autoimmune other

Cancer

Diabetes/ Hypoglycemia

Emphysema

Epilepsy

Heart disease/attack

High Blood Pressure

Lou Gehrig's disease

Multiple Sclerosis

Muscular Dystrophy

Osteoporosis

Birthdates

Default

ANY [D]

ANY [M]

190

-

202

Options

Data Set (ADB data)

Results per Page (100)

Gender (male, female)

Ratings (AA, A, B)

House System (Placidus)

Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)

Other (combined, no, true, respect, day/night formula)

Again, click on “Show Results” to get something like the following. However, remember that both this number and the one above may be a little different from what you see, and if this happens, then understand that it is because new charts get added to the database every day. Hence, the data is always changing!

Astrodatbank research

registered user, not subscribed to extended data storage, has partial access. 

[Back to Search](#)

Search summary:

Day (any), Month (any), Years 1900 – 2021
 Data Set (ADB data)
 Results per Page (100)
 Gender (male, female)
 Ratings (AA, A, B)
 House System (Placidus)
 Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
 Other (combined, no, true, respect, day/night formula)
 Categories: Diagnoses (1)

¹ have [Sun] in [Pisces]

50 records found in 0.41 second(s).

☐ Show some Bio ☐ Show Categories

So at this point we have found 3,823 people with Sun in Pisces and 50 people with Sun in Pisces who also have heart disease. Now we need to find similar data for people with Sun in other astrological signs. Thus, I'll first count how many people in the database have Sun in another sign besides Pisces, and then we'll see how many of these have a history of heart disease/attack. Below are the relevant screen shots.

FIND

¹ have [Sun] in [Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn or Aquarius]

HAVE

ALL [✓] OBJECTS

Planets

☒ Sun
☐ Moon
☐ Mercury
☐ Venus
☐ Mars
☐ Jupiter
☐ Saturn
☐ Uranus
☐ Neptune
☐ Pluto

Points

☐ Ascendant
☐ Medium Coeli

IN ANY OF [✓] PLACES

Signs

☒ Aries
☒ Taurus
☒ Gemini
☒ Cancer
☒ Leo
☒ Virgo
☒ Libra
☒ Scorpio
☒ Sagittarius
☒ Capricorn
☒ Aquarius
☐ Pisces

☐ Signs by Element
☐ Signs by Quality

Astrodatbank research

registered user, not subscribed to extended data storage, has partial access. 

[Back to Search](#)

Search summary:

Day (any), Month (any), Years 1900 – 2021
 Data Set (ADB data)
 Results per Page (100)
 Gender (male, female)
 Ratings (AA, A, B)
 House System (Placidus)
 Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
 Other (combined, no, true, respect, day/night formula)

¹ have [Sun] in [Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn or Aquarius]

40124 records found in 1.21 second(s).

☐ Show some Bio ☐ Show Categories

Categories

- ▶ ☐ Traits
- ▼ ☒ Diagnoses (1)
 - ▼ ☒ Major Diseases (1)
 - ☐ Aids
 - ☐ Allergies
 - ☐ Alzheimer's/Senility
 - ☐ Arthritis
 - ☐ Asthma
 - ☐ Autoimmune other
 - ☐ Cancer
 - ☐ Diabetes/ Hypoglycemia
 - ☐ Emphysema
 - ☐ Epilepsy
 - ☒ Heart disease/attack
 - ☐ High Blood Pressure

Birthdates

Default

ANY [D] ▼

ANY [M] ▼

190

-

202

Options

- ▶ ☒ Data Set (ADB data)
- ▶ ☒ Results per Page (100)
- ▶ ☒ Gender (male, female)
- ▶ ☒ Ratings (AA, A, B)
- ▶ ☒ House System (Placidus)
- ▶ ☒ Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
- ▶ ☒ Other (combined, no, true, respect, day/night formula)

Astrodatbank research

registered user, not subscribed to extended data storage, has partial access. 

[Back to Search](#)

Search summary:

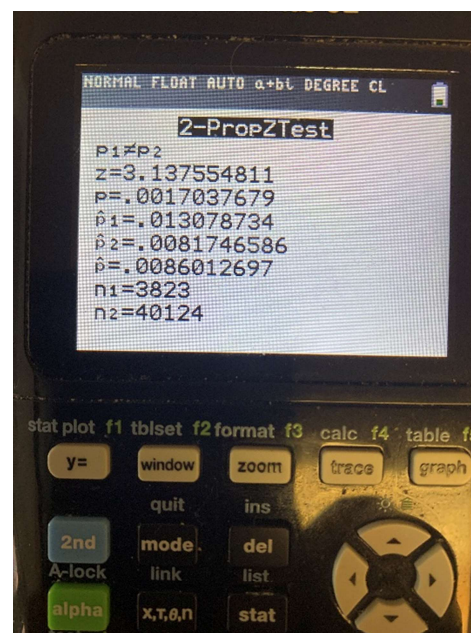
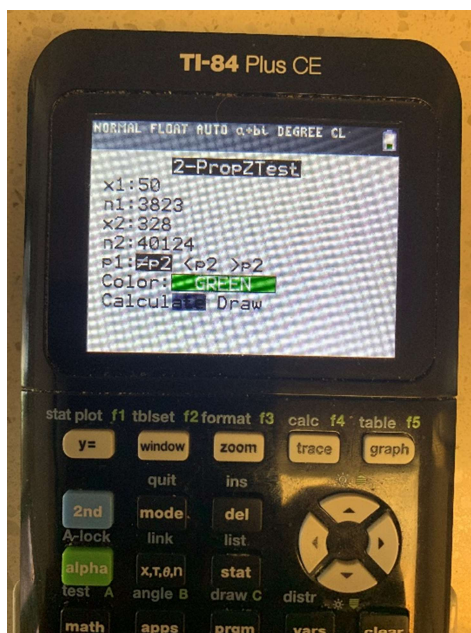
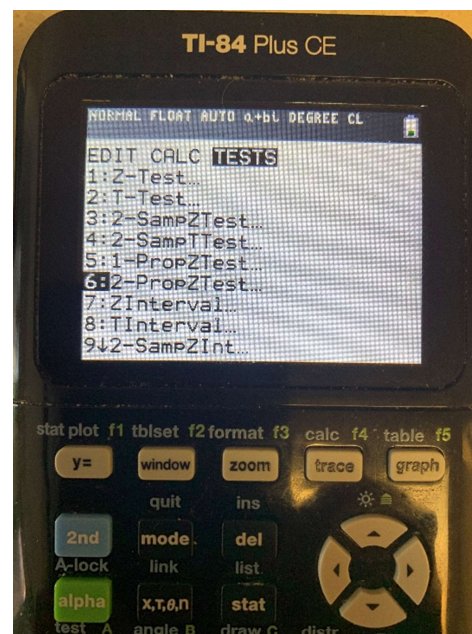
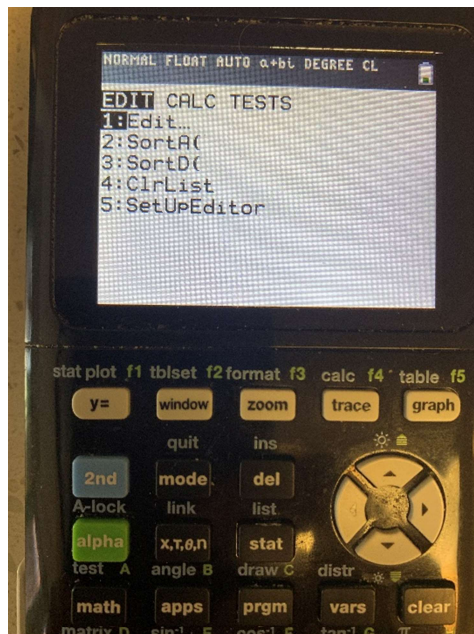
Day (any), Month (any), Years 1900 – 2021
Data Set (ADB data)
Results per Page (100)
Gender (male, female)
Ratings (AA, A, B)
House System (Placidus)
Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
Other (combined, no, true, respect, day/night formula)
Categories: Diagnoses (1)

¹ have [Sun] in [Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpio, Sagittarius, Capricorn or Aquarius]

328 records found in 0.52 second(s).

Overall, the data shows that there are 3,823 people with Sun in Pisces with 50 of those having heart disease/attack as compared with 40,124 people with Sun in other signs and 328 of those having heart disease/attack. This results in percentages of 1.3% and 0.817%, respectively. We can now do a z-test for two proportions to see if the difference is statistically significant. If you have a TI-84 calculator, then the

screen shots below will illustrate the steps you have to go through. Just press the STAT button on your calculator, switch to TESTS, select “6: 2-PropZTest,” fill in the blanks with the size of each sample (n_1 & n_2) and the number of successes in each sample (x_1 & x_2), select “Calculate,” and then you can interpret the results.



The most important number on the last screen is $p=0.0017037679$. This is called the probability value or more simply p-value for short, and this is the probability that the results you observed were due to chance. Typically, if this value is 0.05 or less, then we conclude that since the probability of getting this kind of result due to chance is at best 5%, then it's probably more likely that the results weren't due to chance. In the analysis above we can see that $p=0.0017037679$ is way below 0.05, and so we will conclude that what has happened is not due to chance at all. In other words, in this case astrology seems to work! Also included on the final screen are the values for each of your proportions, \hat{p}_1 and \hat{p}_2 . The value for \hat{p} below this is a kind of average of the two proportions, and you don't want to confuse this with the above p-value! Also, if you don't have a TI-84 calculator with you, then you can use Excel or an online calculator to compute the result.

| Ye Olde Z-Test for Two Proportions! | | | | | |
|-------------------------------------|---------|----------------|----------|----------|-------|
| | x1 | 50 | | x2 | 328 |
| | n1 | 3823 | | n2 | 40124 |
| | % | 1.31% | | % | 0.82% |
| | p-value | 0.00170 | | | |
| | | 0.001704 | 3.137555 | 0.008601 | |

You might wonder why I chose to use statistics to explore a possible connection between Pisces and heart disease rather than some other topic. The reason why goes back to a paper published in 2006 by Peter C. Austin that is titled "Testing multiple statistical hypotheses resulted in spurious associations: a study of astrological signs and health." As you might suspect, many in the scientific establishment consider astrology to be a pseudoscience, and, thus, whenever a statistical study uncovers something significant in astrology, they automatically assume that an error was made somewhere in the statistical analysis, and so they will then go to great lengths to determine what went wrong in order for an "obviously incorrect" result to occur. In this paper by Peter C. Austin, he notes that when 10,674,945 adult residents of Ontario were analyzed with respect to astrological sign and hospitalization for various ailments, it was found that people with Sun in Pisces were more likely to experience heart failure ($p = 0.0013$) or other forms of heart disease ($p = 0.0182$). However, the author of the article did several tests of various astrological effects and for those that appeared to be significant, the author claims that that significance (which he sees as an error) goes away if you do the "Bonferroni correction." So what is the Bonferroni correction? Well, it's based upon the observation that extreme results will occasionally occur by chance. Also, recall that the cutoff point that you decide to use for statistical significance (usually 0.05) is also the probability of getting an extreme result purely by chance. Thus, if you do your tests at the 0.05 level of significance and if you do 100 tests, then you would expect 5% of your test results to appear extreme purely by chance. And if something you observe is happening only as result of random chance, then it's not really meaningful after all. Thus, let me give you an example of the logic behind the Bonferroni correction. Again, if you do 100 tests at the 0.05 level significance, then you would expect 5 (5% of 100) of the test results to appear significant purely by chance. However, results that appear to be statistically significant but which are actually due to chance aren't really meaningful. Thus, to keep from identifying these results as significant in the first place, Bonferroni suggests using a more stringent level of significance, in this case $\frac{0.05}{100} = 0.0005$. However, even though there are many statisticians who routinely do the Bonferroni correction,

it is actually really, really dumb, and let me explain why. When you make the Bonferroni correction, it does, indeed, make it harder to accept a random result as a significant result, and that part is good. However, the Bonferroni correction also makes it more difficult to identify things that are important as being statistically significant (since your standard for significance is now too stringent), and that is a very bad thing. Consequently, in their effort to avoid spurious results, those statisticians who routinely utilize the Bonferroni correction will also tend to overlook other results that are actually very important. Thus, the Bonferroni correction fixes one problem only by creating another, equally bad problem! So what should one do in order to avoid accepting false results while simultaneously not overlooking true results? Simple! Just show that your result holds up under replication because that is really what a lot of statistics is all about. In other words, we want to identify meaningful relationships between variables that hold up over time. Hence, I don't care how significant your result looks if it doesn't hold up over time. And that is why I chose to go to Astrodatabank to test the proposition that people with Sun in Pisces are more prone to be diagnosed with heart disease/attack, and with $p = 0.0017$ the result is very significant! Hence, using a different set of data to verify our findings confirms its validity.

There are other criticisms one could make of the Bonferroni correction. For example, suppose that you are going to do five statistical tests today, and so you do the Bonferroni correction and none of them appear to be significant. However, suppose your neighbor does just one statistical test and it just happens to be one of the five that you did the Bonferroni correction on. Since he did only one test, he did not do the Bonferroni correction and the result was statistically significant. Now both statisticians followed accepted statistical procedures, but they have diametrically opposed results. Which one is correct? Similarly, should I do the Bonferroni correction only if I do the tests on the same day? Or should I correct for the total number of tests I intend to do in my lifetime? Or maybe I should do a very extreme Bonferroni correction based upon the notion that maybe thousands of other statisticians are also doing statistical tests today? Or what if I do five tests today, but publish the results in five different papers? Do I still need to do a Bonferroni correction? Hopefully, these sorts of questions can help you see how the Bonferroni correction can lead to a kind of Schrodinger's Cat situation in statistics where a result can be significant and insignificant at the same time. The bottom line is that the Bonferroni correction can cause many more problems than it fixes, and a much better way to verify results is to show that they hold up under replication. And when you think about it, that's all that really matters.

Before leaving this discussion behind, I should point out one more flaw in Peter Austin's paper. Namely, that he begins his research with the assumption that astrology isn't valid, and while this may seem obvious to him and to many others in the scientific community, to begin a study with any kind of bias is unacceptable when trying to do good statistics. Certainly, we can't help having opinions about many different things, but when we let those opinions affect how we do our analysis, then that's a problem. Because he assumes without proof that astrological effects don't occur, his bias leads him to reject any statistically significant astrological result as an error, and that is unacceptable.

We might also mention with regard to our result that people with Sun in Pisces are more likely to suffer significant heart problems that this is not a result that many astrologers would have necessarily predicted. Most astrologers would probably look to the Sun or the sign Leo that it rules since in traditional astrology, the Sun and Leo rule the heart. However, Pisces is often connected with chronic ailments, and that would likely also include heart disease. Hence, as is the case in many other disciplines, an overly simplistic understanding is not worth very much.

Now, however, let's explore astrological configurations that we think might make one more prone to schizophrenia. Astrological theory would suggest to many astrologers that such a horrible mental condition might be due to discordant aspects between either Uranus or Neptune and Mercury or the Moon. All of these hypotheses make some sense according to standard astrological theory, but statistics suggests that only one of these relationships (Uranus square Moon with a rating of A or AA) seems to have a meaningful association with schizophrenia. I'll leave it to you to complete the various z-tests for two proportions using data from Astrodatabank. However, this is the power of statistics. When done properly, it is like a wonderful flashlight that illuminates what is real and separates it from the unreal, and while I believe that much of standard astrological theory is correct, there are still many propositions that haven't been properly vetted and many things that can be fine-tuned through good data analysis. Enjoy!

Categories

- ▶ ☐ Traits
- ▼ ☒ Diagnoses (1)
 - ▶ ☐ Major Diseases
 - ▶ ☐ Body Part Problems
 - ▼ ☒ Psychological (1)
 - ☐ Abuse Alcohol
 - ☐ Abuse Drugs
 - ☐ Abuse - other addictions
 - ☐ ADD
 - ☐ ADHD
 - ☐ Anti-social Personality
 - ☐ Anxiety Disorder
 - ☐ Bi-Polar Disorder
 - ☐ Borderline Personality Disorder
 - ☐ Depression
 - ☐ Dyslexia
 - ☐ Eating Disorder
 - ☐ Institutionalized
 - ☐ Mental Illness
 - ☐ Multiple Personality
 - ☐ Nervous Breakdown
 - ☐ Obsessive/Compulsive Disorder
 - ☐ Phobias
 - ☐ Psychotic Episode
 - ☐ PTSD
 - ☒ **Schizophrenia**

Birthdates

Default

ANY [D] ▼ ANY [M] ▼ 190 - 202

Options

- ▶ ☒ Data Set (ADB data)
- ▶ ☒ Results per Page (100)
- ▶ ☒ Gender (male, female)
- ▶ ☒ Ratings (AA, A, B)
- ▶ ☒ House System (Placidus)
- ▶ ☒ Orbs (10°, 6°, 10°, 10°, 10°, 3°, 3°, 2°, 3°, 2°, 3°, 1°, 1°)
- ▶ ☒ Other (combined, no, true, respect, day/night formula)

FIND

1 have [Uranus] in [90°] aspect to [Mercury]

X

HAVE

ALL [✓] OBJECTS

Planets

☐ Sun
☐ Moon
☐ Mercury
☐ Venus
☐ Mars
☐ Jupiter
☐ Saturn
☒ Uranus
☐ Neptune
☐ Pluto

Points

☐ Ascendant
☐ Medium Coeli
☐ North Node
☐ Mean apogee (Lilith)

IN ANY OF [✓] ASPECTS TO

Major

☐ 0° Conjunction
☐ 60° Sextile
☒ 90° Square
☐ 120° Trine
☐ 180° Opposition

Minor

☐ 30° Semisextile
☐ 45° Semisquare
☐ 72° Quintile
☐ 135° Sesquisquare
☐ 144° Biquintile
☐ 150° Quincunx

Option: Only Applicative (Major/Minor) Aspects

Declination

ANY OF [✓] OBJECTS

Planets

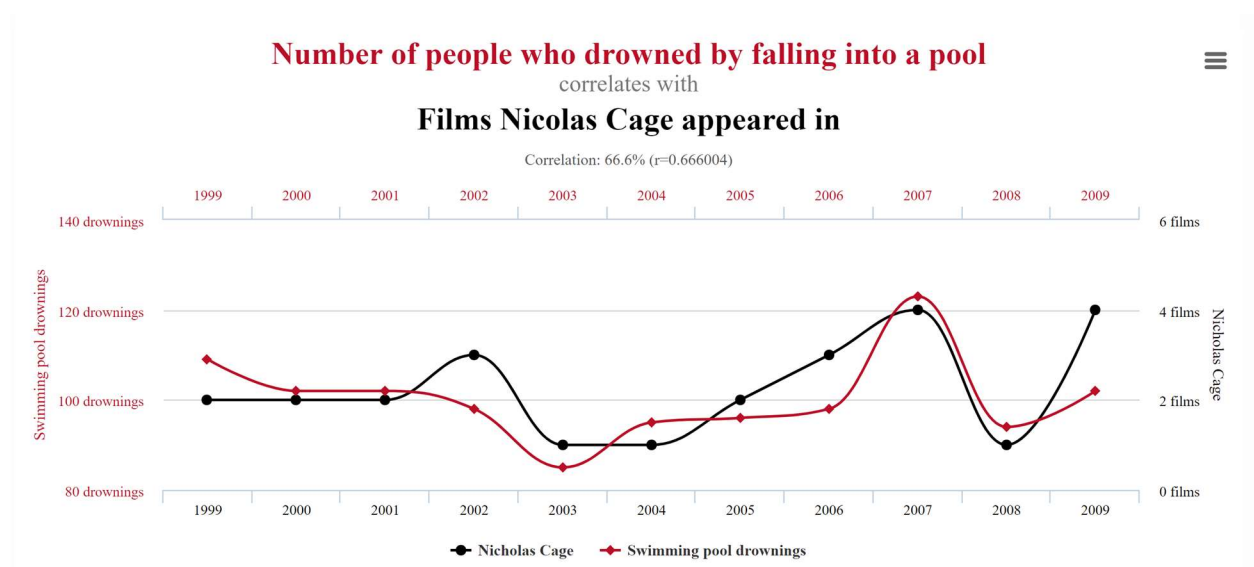
☐ Sun
☐ Moon
☒ Mercury
☐ Venus
☐ Mars
☐ Jupiter
☐ Saturn
☐ Uranus
☐ Neptune
☐ Pluto

Points

☐ Ascendant
☐ Medium Coeli
☐ North Node
☐ Mean apogee (Lilith)

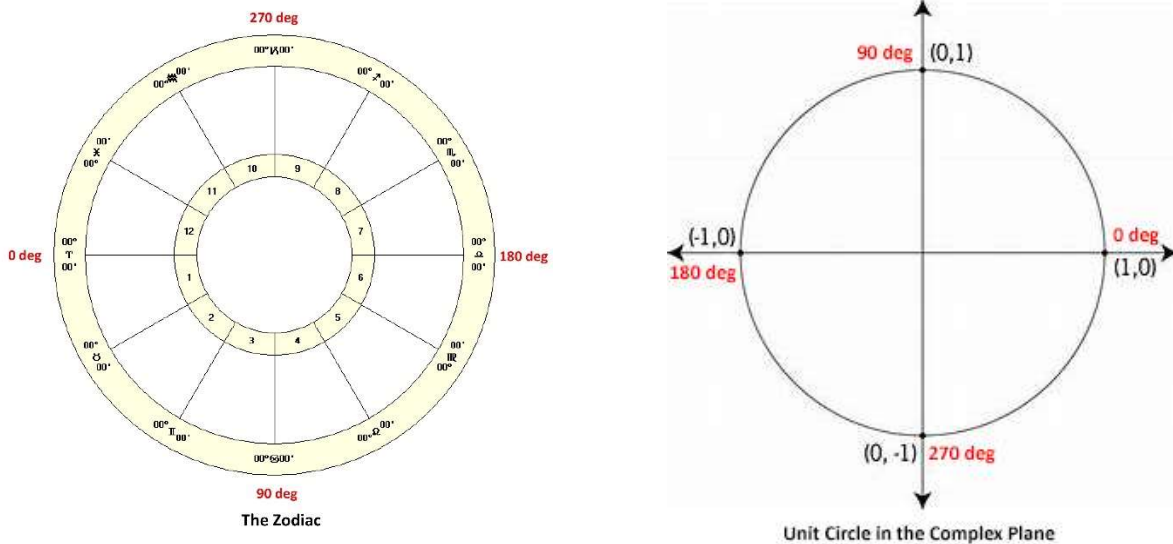
Asteroids

One final note. There are things in this world that appear to be related for absolutely no rhyme or reason, and several examples of such things can be found at <https://tylervigen.com/spurious-correlations>. My favorite example is that the more films that Nicolas Cage makes, the more often that people will drown in a swimming pool. I guess they really dislike Nicolas Cage!



ASTROLOGY AND COMPLEX NUMBERS

A rather surprising development is the realization that complex numbers can be used to model certain aspects of harmonic charts in astrology. For example, recall that the 4th harmonic angles in a horoscope are those that are integer multiples of $90^\circ \text{ modulo } 360^\circ$ since $\frac{360^\circ}{4} = 90^\circ$. Hence, the distinct 4th harmonic angles are $0^\circ, 90^\circ, 180^\circ$, and 270° , and these angles are equally spaced around the zodiacal circle. A similar situation occurs in the realm of complex numbers where the number 1 always has n distinct complex roots that all lie on a circle of radius 1 with center at the origin (called the *unit circle*) and like the 4th harmonic angles they are equally spaced at $0^\circ, 90^\circ, 180^\circ$, and 270° . More generally, if n is a natural number, then the n^{th} harmonic angles θ such that $0^\circ \leq \theta < 360^\circ$ are $k \left(\frac{360^\circ}{n} \right)$ where $k = 0, 1, 2, \dots, n - 1$, and these are the exact same angles that are used in complex numbers to represent the n^{th} roots of unity! For example, below are diagrams of the zodiac and the unit circle showing the placements of the 4th harmonic angles in each. Except for the arbitrary placement of 0° as a starting point, the diagrams are the same.



A complex number has two basic forms. First, there is its *rectangular form* which looks like $z = a + bi$, and second, there is its *polar form* which appears as $z = re^{i\theta}$ where i is the square root of -1, r is the number's distance from the origin in the complex plane, and θ is the angle that is made with the positive real number axis. Additionally, these two forms are related by the formula $re^{i\theta} = r(\cos\theta + i\sin\theta)$. This latter expression in parentheses is often abbreviated by mathematicians as $\text{cis}(\theta)$. Furthermore, the polar form will make it easy to prove various properties of complex numbers that also apply to harmonic charts in astrology. We begin with the following.

Definition: If n is a natural number, then the angle $\frac{360^\circ}{n}$ will be referred to as the n^{th} harmonic or the *fundamental* or *root n^{th} harmonic angle*. Furthermore, for any *fundamental* or *root n^{th} harmonic angle*, by the *family of all distinct n^{th} harmonic angles* we will mean the set $\left\{ k \left(\frac{360^\circ}{n} \right) \text{ modulo } 360^\circ \mid k \in \mathbb{Z} \right\}$,

and the number n that we divide 360° by will also frequently be referred to as the n^{th} harmonic just as is the corresponding angle $\frac{360^\circ}{n}$. Also, note that if $n = 4$ and $k = 2$, then the $\frac{2}{4}$ harmonic angle is $\frac{2}{4}(360^\circ) = 180^\circ$, and this is exactly the same as the $\frac{1}{2}$ harmonic angle since $\frac{1}{2}(360^\circ) = 180^\circ$. Thus, even though 180° is both a $\frac{1}{2}$ and a $\frac{2}{4}$ harmonic angle, most of the time we will reduce a fraction to its lowest terms when talking about what kind of harmonic angle it is. Additionally, even though an angle like 180° is both a 2^{nd} harmonic angle and a 4^{th} harmonic angle (among others), we will usually identify this and other angles with the smallest natural number harmonic that applies.

Example: If, for instance, we want to examine or discuss the 4^{th} harmonic, then the fundamental or root 4^{th} harmonic angle is $\frac{360^\circ}{4} = 90^\circ$ and the family or set of distinct 4^{th} harmonic angles is $\{0^\circ, 90^\circ, 180^\circ, 270^\circ\}$. However, of these angles, $\frac{0}{4}, \frac{1}{4}, \frac{2}{4}$, and $\frac{3}{4}$ times 360° , we usually reduce ones like $\frac{2}{4}$ to $\frac{1}{2}$ and refer to it primarily as a $\frac{1}{2}$ harmonic angle or a 2^{nd} harmonic.

Comment: There are two ways to find the position of an n^{th} harmonic. We can find, for example, the value of $\theta \text{ modulo } \frac{360^\circ}{n}$ and then multiply this result by n , or we can multiply θ by n and then express the result *modulo* 360° . Recall that one way to find a value of an angle $\theta \text{ modulo } \alpha$ is to subtract a multiple of α from θ that yields a result that is less than α but greater than or equal to zero ($0 \leq \theta - k \cdot \alpha < \alpha$). However, we can easily see from the math that $n\left(\theta \text{ modulo } \frac{360^\circ}{n}\right) = n\left(\theta - k \cdot \frac{360^\circ}{n}\right) = n\theta - k \cdot 360^\circ = n\theta \text{ modulo } 360^\circ$, and this means that we can compute our final value using either the first formula, $n\left(\theta \text{ modulo } \frac{360^\circ}{n}\right)$, or the last formula, $n\theta \text{ modulo } 360^\circ$. In practice, most people usually find the second formula easier since all one has to do is to first multiply θ by the appropriate harmonic and then express the result *modulo* 360° .

Summary: Before we proceed to the proofs, below is a listing of some of our main results. Many of these are probably known either consciously or through some other level of experience by those astrologers who specialize in harmonics, but the point is that we are providing more rigorous proofs of these things and by fleshing out the underlying mathematical theory, other things that are currently not so evident will gradually become clear. So with that said, here are some of our results.

1. If $j = mn$, then the j^{th} harmonic is equal to the m^{th} harmonic of the n^{th} harmonic.
2. If θ is an n^{th} harmonic angle equal to $k\left(\frac{360^\circ}{n}\right)$ for a natural number n where $k = 0, 1, 2, \dots, n - 1$, then any integer multiple of $\theta \text{ modulo } 360^\circ$ is also an n^{th} harmonic angle.
3. If θ_1 and θ_2 are angles such that $\theta_2 - \theta_1$ is an n^{th} harmonic angle and if k is a natural number, then the difference between the corresponding angles in the k^{th} harmonic is also an n^{th} harmonic angle.
4. If θ is an n^{th} harmonic angle for some natural number n , then $n\theta = 0^\circ \text{ modulo } 360^\circ$. In other words, θ is equivalent to 0° in an n^{th} harmonic chart.
5. If θ is equivalent to 0° in an n^{th} harmonic chart, then θ is an n^{th} harmonic angle.
6. The angle 0° is equivalent to 0° in all n^{th} harmonic charts.

7. If n and m are natural numbers and if n is a factor of m , then each of the n^{th} harmonic angles is equivalent to $0^\circ \text{ modulo } 360^\circ$ in the m^{th} harmonic chart.
8. If m is equal to a natural number power of $n + 1$, then each of the n^{th} harmonic angles is an unchanged fixed point when the original chart is transformed into the m^{th} harmonic.
9. If θ is a fixed point in an $(n + 1)^{th}$ harmonic chart, then θ is an n^{th} harmonic angle.
10. If n and m are natural numbers and if n is a factor of m , then each of the n^{th} harmonic angles is equivalent to $0^\circ \text{ modulo } 360^\circ$ in the m^{th} harmonic chart.
11. If m is not a power of $n + 1$ and if n is not a factor of m , then the m^{th} harmonic will produce a permutation of the n^{th} harmonic angles.
12. If θ is a root m^{th} harmonic angle for some natural number m and a natural number n divides m , then the root n^{th} harmonic angle is a natural number multiple of the root m^{th} harmonic angle.
13. If an angle θ can be written as $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m , respectively, and if k is an integer, then $k\theta$ can also be written as the sum of n^{th} and m^{th} harmonic angles.
14. If $z = re^{i\theta}$ and $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m , and if k is an integer, then z^k can be written as a product of complex numbers with angles that are n^{th} and m^{th} harmonic angles.
15. If $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m and if $q = lcm(n, m)$ is the least common multiple of m and n , then θ is a q harmonic angle.
16. If an angle is the sum of n^{th} and m^{th} harmonic angles for some natural numbers n and m with θ_1 and θ_2 being the respective n^{th} and m^{th} root harmonic angles and if $q = lcm(n, m)$ is the least common multiple of m and n , then $\theta = \frac{360^\circ}{q}$, the root q^{th} harmonic angle, is the greatest common divisor of θ_1 and θ_2 . In symbols, $\theta = gcd(\theta_1, \theta_2)$.
17. If an angle is the sum of two angles θ_1 and θ_2 where θ_1, θ_2 are n^{th} and m^{th} harmonic angles, respectively, for natural numbers n and m and if $q = lcm(n, m)$ and $\theta = gcd(\theta_1, \theta_2)$, then $\frac{360^\circ}{q} = \theta = \theta_1 + \theta_2$ and $n\theta$ is an m^{th} harmonic angle.
18. If m and n are natural numbers with no common divisor other than 1 and if $q = lcm(m, n) = mn$ and $\theta = \frac{360^\circ}{q}$, then $n\theta$ is an m^{th} harmonic angle and $m\theta$ is an n^{th} harmonic angle.
19. If m and n are natural numbers with no common divisor other than 1 and if $q = lcm(m, n) = mn$ and j, k are natural numbers such that $j = kq = kmn$ and if $\theta = \frac{360^\circ}{j}$, then $kn\theta$ is an m^{th} harmonic angle and $km\theta$ is an n^{th} harmonic angle.
20. If an angle θ as measured in degrees is a rational fraction of 360° of the form $\frac{360^\circ}{f/g} = \frac{g(360^\circ)}{f}$ where $f, g \in \mathbb{N}$, then $f\theta = 0^\circ \text{ modulo } 360^\circ$ and $(f + 1)\theta = \theta \text{ modulo } 360^\circ$.
21. If $\theta = \frac{360^\circ}{f}$ where f is irrational, then θ is irrational, and there is no natural number g such that $g\theta = 0^\circ \text{ modulo } 360^\circ$.
22. If $\theta = \frac{360^\circ}{f}$ where f is irrational, then there is no natural number $g > 1$ such that $g\theta = \theta \text{ modulo } 360^\circ$.
23. Let $\theta = k \left(\frac{360^\circ}{n} \right)$ be a nonzero n^{th} harmonic angle, and let m be a natural number. If $\theta = k \left(\frac{360^\circ}{n} \right)$ is fixed in the m^{th} harmonic, then all n^{th} harmonic angles are fixed in the m^{th} harmonic.

24. The n^{th} roots of unity form a finite cyclic group of order n under addition that is isomorphic to \mathbb{Z}_n .

And now, let's do some proofs!

Theorem: If $j = mn$, then the j^{th} harmonic is equal to the m^{th} harmonic of the n^{th} harmonic.

Proof: If θ is an angle, then $j\theta \text{ modulo } 360^\circ$ is the j^{th} harmonic of that angle. But since $j\theta = m(n\theta) \text{ modulo } 360^\circ$, it follows immediately that the j^{th} harmonic is equal to the m^{th} harmonic of the n^{th} harmonic.

□

Comment: This theorem greatly simplifies our understanding of things by assuring us that if we start, for example, with a 3^{rd} harmonic chart and then take the 2^{nd} harmonic of that chart, then the end result is the same as taking the 6^{th} harmonic of the original chart. Thus, if you are looking at a 3^{rd} harmonic chart and notice an opposition that you want to convert to a conjunction by computing the 2^{nd} harmonic of the 3^{rd} harmonic, then this gives the same result as taking the 6^{th} harmonic of your original chart!

Theorem: If z_1, z_2 are complex numbers, then the magnitude of their product is equal to the product of their magnitudes, and the angle of their product is equal to the sum of their angles *modulo* 360° .

Proof: This is a well-known result that we are presenting for the sake of completeness. Thus, if our complex numbers have the polar forms $z_1 = r_1 e^{i\theta_1}$ and $z_2 = r_2 e^{i\theta_2}$ where r_1 and r_2 are their respective magnitudes and θ_1 and θ_2 are their respective angles, then their product is $z_1 z_2 = r_1 e^{i\theta_1} r_2 e^{i\theta_2} = r_1 r_2 e^{i\theta_1 + i\theta_2} = r_1 r_2 e^{i(\theta_1 + \theta_2)}$, and this last expression implies that the magnitude of the product is $r_1 r_2$ and the angle of the product is $\theta_1 + \theta_2 \text{ modulo } 360^\circ$. Hence, the theorem is verified.

□

Comment: We express our final angles *modulo* 360° only for convenience, and the above theorem is true even without this reduction. Additionally, notice that since every complex number on the unit circle has magnitude equal to 1, it follows that the product of any two complex numbers on the unit circle will be another complex number on the unit circle whose angle will be the sum of the two angles of the two numbers that we will normally express *modulo* 360° . Furthermore, when convenient, we can also express angles by their corresponding complex numbers on the unit circle, and keep in mind that the n^{th} harmonic angles of astrology are exactly the same as the n^{th} roots of unity angles used in complex analysis. Additionally, recall that in each case we will refer to the smallest such angle θ with $0^\circ \leq \theta < 360^\circ$ as the *fundamental* or *root harmonic* for that given value of n . Now let's look at some more theorems!

Theorem: If θ is an n^{th} harmonic angle equal to $k \left(\frac{360^\circ}{n} \right)$ for a natural number n where $k = 0, 1, 2, \dots, n - 1$, then any integer multiple of θ modulo 360° is also an n^{th} harmonic angle.

Proof: This follows immediately from the definition of a n^{th} harmonic angle.

□

Corollary: If θ_1 and θ_2 are angles such that $\theta_2 - \theta_1$ is an n^{th} harmonic angle and if k is a natural number, then the difference between the corresponding angles in the k^{th} harmonic is also an n^{th} harmonic angle.

Proof: Since natural number (or even integer) multiples of an n^{th} harmonic angle result in an n^{th} harmonic angle, it follows that $k\theta_2 - k\theta_1$ modulo $360^\circ = k(\theta_2 - \theta_1)$ modulo 360° is an n^{th} harmonic angle.

□

Comment: One of the things the above result shows us is that planets do not wind up just anywhere in an n^{th} harmonic chart. Some structure of the original birth chart is always preserved. Thus, if two planets are 90° apart in a birth chart, then in any n^{th} harmonic chart for either an integer or a natural number n , the difference between the transformed angles will always be an n^{th} harmonic angle. That is, either $0^\circ, 90^\circ, 180^\circ$, or 270° . Hence, if we think of the 4^{th} harmonic in astrology as involving tension, then some form of this tension will persist in each of the various natural number harmonic charts. Below, for example, are the values in various n^{th} harmonics for the 4^{th} harmonic angle 90° .

| HARMONIC | NTH HARMONIC MODULO 360 |
|----------|-------------------------|
| 1 | 90 |
| 2 | 180 |
| 3 | 270 |
| 4 | 0 |
| 5 | 90 |
| 6 | 180 |
| 7 | 270 |
| 8 | 0 |

Theorem: If θ is an n^{th} harmonic angle for some natural number n , then $n\theta = 0^\circ$ (modulo 360°). In other words, θ is equivalent to 0° in an n^{th} harmonic chart.

Proof: If θ is an n^{th} harmonic angle for a natural number n , then $\theta = k \left(\frac{360^\circ}{n} \right)$ where k is an integer. Thus, $n\theta = n \times k \left(\frac{360^\circ}{n} \right) = k(360^\circ)$ which implies that $n\theta = 0^\circ$ modulo 360° and that θ is equivalent to 0° in an n^{th} harmonic chart.

□

Comment: This is a simple, but very useful result as it lets us know all n^{th} harmonic that all n^{th} harmonic angles will be equivalent to 0° in an n^{th} harmonic chart.

Theorem: If θ is equivalent to 0° in an n^{th} harmonic chart, then θ is an n^{th} harmonic angle.

Proof: The angle that θ gets mapped to in the n^{th} harmonic chart is $n\theta \text{ modulo } 360^\circ$, and $n\theta = 0 \text{ modulo } 360^\circ$ if and only if $n\theta = k(360^\circ)$ for some integer k . But this means that $\theta = k\left(\frac{360^\circ}{n}\right)$, and, hence, θ is an n^{th} harmonic angle.

□

Comment: Again, it is very useful to know that the only angles that will be equivalent to 0° in an n^{th} harmonic chart are precisely those that are n^{th} harmonic angles.

Theorem: The angle 0° is equivalent to 0° in all n^{th} harmonic charts.

Proof: This is obvious since $n(0^\circ) = 0^\circ \text{ modulo } 360^\circ$.

□

Theorem: If θ is an n^{th} harmonic angle, then $(n + 1)\theta = \theta \text{ modulo } 360^\circ$, or, in other words, θ is a fixed point in an $(n + 1)^{th}$ harmonic chart.

Proof: If θ is an n^{th} harmonic angle, then $\theta = k\left(\frac{360^\circ}{n}\right)$ where $k = 0, 1, 2, \dots, n - 1$. Thus, $(n + 1)\theta = (n + 1)k\left(\frac{360^\circ}{n}\right) = k(360^\circ) + k\left(\frac{360^\circ}{n}\right) = k\left(\frac{360^\circ}{n}\right) \text{ modulo } 360^\circ = \theta \text{ modulo } 360^\circ$.

□

Comment: In mathematics, points that remain fixed under a given transformation are always of interest, and once again this shows us that harmonic charts preserve more of the structure of the original chart than first realized.

Theorem: If θ is a fixed point in an $(n + 1)^{th}$ harmonic chart, then θ is an n^{th} harmonic angle.

Proof: If θ is a fixed point in an $(n + 1)^{th}$ harmonic chart, then $(n + 1)\theta = \theta \text{ modulo } 360^\circ$ implies that $n\theta + \theta = \theta \text{ modulo } 360^\circ$ which implies that $n\theta = 0^\circ \text{ modulo } 360^\circ$. But this, in turn, means that $n\theta = k(360^\circ)$ for some integer k , and, hence, $\theta = k\left(\frac{360^\circ}{n}\right)$, and, therefore, θ is an n^{th} harmonic angle.

□

Comment: Just as we showed that the only angles that go to 0° in an n^{th} harmonic chart, so is it the case that the only angles that are fixed when we transform to an $(n + 1)^{th}$ harmonic chart are precisely those angles in the original chart that are n^{th} harmonic angles.

Theorem: If n and m are natural numbers and if n is a factor of m , then each of the n^{th} harmonic angles is equivalent to $0^\circ \text{ modulo } 360^\circ$ in the m^{th} harmonic chart.

Proof: Suppose that $\theta = k \left(\frac{360^\circ}{n} \right)$ is an n^{th} harmonic angle and that $m = qn$ where $q, n \in \mathbb{N}$. Then the m^{th} harmonic of θ is $m\theta = qn\theta = qnk \left(\frac{360^\circ}{n} \right) = qk(360^\circ) = 0^\circ \text{ modulo } 360^\circ$. Therefore, each of the n^{th} harmonic angles is equivalent to $0^\circ \text{ modulo } 360^\circ$ in the m^{th} harmonic chart.

□

Comment: Again, this is a useful result that can allow you to arrive at some results automatically.

Theorem: If m is equal to a natural number power of $n + 1$, then each of the n^{th} harmonic angles is an unchanged fixed point when the original chart is transformed into the m^{th} harmonic.

PROOF: If θ is an n^{th} harmonic angle, then $\theta = k \left(\frac{360^\circ}{n} \right)$ where k is an integer. Thus, $m\theta = (n + 1)^j \theta = (n + 1)(n + 1) \dots (n + 1)k \left(\frac{360^\circ}{n} \right)$ for some natural number j . Since by previous proof we know that $(n + 1)\theta = (n + 1)k \left(\frac{360^\circ}{n} \right) = nk \left(\frac{360^\circ}{n} \right) + k \left(\frac{360^\circ}{n} \right) = nk \left(\frac{360^\circ}{n} \right) + \theta = \theta \text{ modulo } 360^\circ$, it follows that every time we multiply $k \left(\frac{360^\circ}{n} \right)$ by another factor of $(n + 1)$, the result is always equivalent to $\theta \text{ modulo } 360^\circ$. Hence, it follows that $(n + 1)^j \theta = \theta \text{ modulo } 360^\circ$, and, thus, θ is a fixed point in the m^{th} harmonic chart.

□

Comment: Thus, not only are n^{th} harmonic angles fixed in the $n + 1$ harmonic chart, they're also fixed in any $(n + 1)^j$ harmonic chart where j is a natural number.

Theorem: If m is not a power of $n + 1$ and if n is not a factor of m , then the m^{th} harmonic will produce a permutation of the n^{th} harmonic angles.

Proof: Suppose that $\theta = k \left(\frac{360^\circ}{n} \right)$, for some natural number k with $0 \leq k < n$, is an n^{th} harmonic angle and that m is not a power of $n + 1$ and n is not a factor of m . Then $m\theta = mk \left(\frac{360^\circ}{n} \right) \text{ modulo } 360^\circ$ is also an n^{th} harmonic angle since m is not divisible by n . Now suppose that there exist integers k_1, k_2 such that $k_1 \neq k_2, k_1 \& k_2 \in \{0, 1, \dots, n - 1\}$, and $mk_1 \left(\frac{360^\circ}{n} \right) = mk_2 \left(\frac{360^\circ}{n} \right) \text{ modulo } 360^\circ$. Then $m(k_1 -$

$k_2) \left(\frac{360^\circ}{n} \right) = 0^\circ \text{ modulo } 360^\circ$ which implies that n divides $k_1 - k_2$. However since $k_1 - k_2 \leq n - 1$, this is not possible. Therefore, the m^{th} harmonic produces a permutation of the n^{th} harmonic angles.

□

Comment: Once more we see that harmonic charts possess incredible structure and that n^{th} harmonic angles remain n^{th} harmonic angles in higher, natural number harmonic charts.

Theorem: If θ is a root m^{th} harmonic angle for some natural number m and a natural number n divides m , then the root n^{th} harmonic angle is a natural number multiple of the root m^{th} harmonic angle.

Proof: If θ is an m^{th} harmonic angle, then the root angle is $\frac{360^\circ}{m}$. But if $m = fn$ for some $f \in \mathbb{N}$, then $\frac{360^\circ}{m} = \frac{360^\circ}{fn} = \frac{1}{f} \left(\frac{360^\circ}{n} \right)$. Hence, the n^{th} harmonic root angle is $\frac{360^\circ}{n} = f \left(\frac{360^\circ}{fn} \right) = f \left(\frac{360^\circ}{m} \right) = f\theta$. Therefore, the root n^{th} harmonic angle is a natural number multiple of the root m^{th} harmonic angle.

□

Comment: Again, this is another potentially useful result that is good to know as we continue to complete the mathematical theory of harmonic charts.

Theorem: If an angle θ can be written as $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m , respectively, and if k is an integer, then $k\theta$ can also be written as the sum of n^{th} and m^{th} harmonic angles.

Proof: This follows immediately from the fact that $k\theta = k(\theta_1 + \theta_2) = k\theta_1 + k\theta_2$, and by our previous results the latter is sum of n^{th} and m^{th} harmonic angles.

□

Comment: This is a very interesting result, so let's consider the ramifications by taking a simple example. Hence, consider $210^\circ = 120^\circ + 90^\circ$, the sum of a 3rd harmonic angle with a 4th harmonic angle. If we now look at various natural number harmonics (as indicated in the table below), then we can experience for ourselves that the harmonic of a 3rd harmonic angle is another 3rd harmonic angle, the harmonic of a 4th harmonic angle is another 4th harmonic angle, and the sum of these new harmonic angles is equivalent *modulo* 360° to the new harmonic of 210° .

| HARMONIC | NTH HARMONIC <i>MODULO</i> 360 | THETA1 | THETA2 | THETA1 + THETA 2 <i>MODULO</i> 360 |
|----------|--------------------------------|--------|--------|------------------------------------|
| 1 | 210 | 120 | 90 | 210 |
| 2 | 60 | 240 | 180 | 60 |
| 3 | 270 | 0 | 270 | 270 |
| 4 | 120 | 120 | 0 | 120 |
| 5 | 330 | 240 | 90 | 330 |
| 6 | 180 | 0 | 180 | 180 |

Theorem: If $z = re^{i\theta}$ and $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m , and if k is an integer, then z^k can be written as a product of complex numbers with angles that are n^{th} and m^{th} harmonic angles.

Proof: We prove the result for $z = re^{i\theta}$, but it applies in particular to complex numbers on the unit circle which always have the form $z = e^{i\theta}$. Thus, if $z = re^{i\theta}$ and $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles and if k is an integer, then $z^k = (re^{i\theta})^k = r^k e^{ik\theta} = r^k e^{ik(\theta_1 + \theta_2)} = (r^k e^{ik\theta_1}) e^{ik\theta_2}$, and by our previous results, $k\theta_1$ and $k\theta_2$ are n^{th} and m^{th} harmonic angles, respectively.

□

Comment: Once more we see that a lot of our original structure is preserved in harmonic charts.

Theorem: If $\theta = \theta_1 + \theta_2$ where θ_1, θ_2 are n^{th} and m^{th} harmonic angles for natural numbers n and m and if $q = \text{lcm}(n, m)$ is the least common multiple of m and n , then θ is a q harmonic angle.

Proof: Since θ_1 is an n^{th} harmonic angle and since q is a multiple of n , it follows that $q\theta_1 = 0^\circ \text{ modulo } 360^\circ$. And similarly, that $q\theta_2 = 0^\circ \text{ modulo } 360^\circ$. Hence, $q\theta = q\theta_1 + q\theta_2 = 0^\circ \text{ modulo } 360^\circ$, and, thus, θ is a q harmonic angle. Furthermore, since $q = \text{lcm}(n, m)$, it is the smallest such natural number.

□

Commentary: I find this result both quite interesting and quite useful as it tells us, for example, that the sum of a 2^{nd} harmonic angle and a 3^{rd} harmonic angle will always be a 6^{th} harmonic angle. Thus, for instance, $180^\circ + 120^\circ = 300^\circ$ is a 6^{th} harmonic angle since $300^\circ = 5 \cdot 60^\circ = 5 \cdot \frac{360^\circ}{6}$.

Corollary: If an angle is the sum of n^{th} and m^{th} harmonic angles for some natural numbers n and m with θ_1 and θ_2 being the respective n^{th} and m^{th} root harmonic angles and if $q = \text{lcm}(n, m)$ is the least common multiple of m and n , then $\theta = \frac{360^\circ}{q}$, the root q^{th} harmonic angle, is the greatest common divisor of θ_1 and θ_2 . In symbols, $\theta = \text{gcd}(\theta_1, \theta_2)$.

Proof: Suppose θ_1, θ_2 are the respective n^{th} and m^{th} root harmonic angles for some natural numbers n and m , and suppose also that $q = lcm(n, m)$ and $\theta = \frac{360^\circ}{q}$. Then $\theta_1 = \frac{360^\circ}{n}$ and $\theta_2 = \frac{360^\circ}{m}$, and $\theta = \frac{360^\circ}{q}$ is a root q^{th} harmonic angle. Since $q = lcm(n, m)$, we can write $q = nq_1 = mq_2$. Thus, $\theta = \frac{360^\circ}{q} = \frac{360^\circ}{nq_1} = \frac{360^\circ/n}{q_1} = \frac{\theta_1}{q_1} \Rightarrow \theta_1 = q_1 \cdot \theta$ and $\theta = \frac{360^\circ}{q} = \frac{360^\circ}{mq_2} = \frac{360^\circ/m}{q_2} = \frac{\theta_2}{q_2} \Rightarrow \theta_2 = q_2 \cdot \theta$. Hence, θ_1 and θ_2 are both natural number multiples of θ , and, thus, θ is a common divisor of θ_1 and θ_2 . Our claim now is that θ is the greatest common divisor of θ_1 and θ_2 , and to show this let's assume that there exists another common divisor θ' such that $\theta' > \theta$. Then since θ' is a divisor of θ_1 and θ_2 , there exist q_1' and q_2' such that $\theta_1 = q_1' \theta'$ and $\theta_2 = q_2' \theta'$. Hence, $\theta' = \frac{\theta_1}{q_1'} = \frac{360^\circ/n}{q_1'} = \frac{360^\circ}{nq_1'}$ and $\theta' = \frac{\theta_2}{q_2'} = \frac{360^\circ/m}{q_2'} = \frac{360^\circ}{mq_2'}$. From this it follows that $nq_1' = mq_2'$, and if we set $q' = nq_1' = mq_2'$, then $\theta' = \frac{360^\circ}{q'}$. From this we can conclude that q' is a common multiple of n and m and that $q' = \frac{360^\circ}{\theta'}$. However, since we assumed that $\theta' > \theta$, it follows that $q' = \frac{360^\circ}{\theta'} < \frac{360^\circ}{\theta} = q$. But since q' is a common multiple of n and m , this contradicts our assertion that $q = lcm(n, m)$, and the assumption that led to this contradiction was that θ was not the greatest common divisor of θ_1 and θ_2 . Therefore, $\theta = gcd(\theta_1, \theta_2)$.

□

Comment: The angle 210° is equal to $90^\circ + 120^\circ$, a 4^{th} harmonic angle plus a 3^{rd} harmonic angle. By our theorem, it should follow that 210° is a 12^{th} harmonic angle and that $\frac{360^\circ}{12} = 30^\circ$ is the greatest common divisor for 90° and 120° , and that is indeed the case.

Theorem: If an angle is the sum of two angles θ_1 and θ_2 where θ_1, θ_2 are n^{th} and m^{th} harmonic angles, respectively, for natural numbers n and m and if $q = lcm(n, m)$ and $\theta = gcd(\theta_1, \theta_2)$, then $\frac{360^\circ}{q} = \theta = \theta_1 + \theta_2$ and $n\theta$ is an m^{th} harmonic angle.

Proof: It follows from previous proofs that $\frac{360^\circ}{q} = \theta = \theta_1 + \theta_2$, and since where θ_1, θ_2 are n^{th} and m^{th} harmonic angles, respectively, for natural numbers n and m , we have that $n\theta = n\theta_1 + n\theta_2 = 0^\circ + n\theta_2 \text{ modulo } 360^\circ = n\theta_2 \text{ modulo } 360^\circ$, and since θ_2 is an m^{th} harmonic angle, it follows that $n\theta_2$ is also an m^{th} harmonic angle.

□

Comment: Nice!

Theorem: If m and n are natural numbers with no common divisor other than 1 and if $q = lcm(m, n) = mn$ and $\theta = \frac{360^\circ}{q}$, then $n\theta$ is an m^{th} harmonic angle and $m\theta$ is an n^{th} harmonic angle.

Proof: Since θ is a q harmonic angle, it follows from previous proof that $q\theta = 0^\circ \text{ modulo } 360^\circ$. However, since $q = mn$, it follows that $0^\circ \text{ modulo } 360^\circ = q\theta = m(n\theta) = n(m\theta)$. These last two inequalities imply that $n\theta$ is an m^{th} harmonic angle and $m\theta$ is an n^{th} harmonic angle.

□

Corollary: If m and n are natural numbers with no common divisor other than 1 and if $q = lcm(m, n) = mn$ and j, k are natural numbers such that $j = kq = kmn$ and if $\theta = \frac{360^\circ}{j}$, then $kn\theta$ is an m^{th} harmonic angle and $km\theta$ is an n^{th} harmonic angle.

Proof: Since $0^\circ \text{ modulo } 360^\circ = j\theta = kq\theta = m(kn\theta) = n(km\theta)$, it follows that $kn\theta$ is an m^{th} harmonic angle and $km\theta$ is an n^{th} harmonic angle.

□

Comment: The better you know and understand these theorems, the more you will be able to play harmonic charts like a violin, and these theorems are also stepping stones to new theorems yet to come!

Theorem: If an angle θ as measured in degrees is a rational fraction of 360° of the form $\frac{360^\circ}{f/g} = \frac{g(360^\circ)}{f}$, where $f, g \in \mathbb{N}$, then $f\theta = 0^\circ \text{ modulo } 360^\circ$ and $(f + 1)\theta = \theta \text{ modulo } 360^\circ$.

Proof: Clearly, $f\theta = f\left(\frac{g(360^\circ)}{f}\right) = g(360^\circ) = 0^\circ \text{ modulo } 360^\circ$, and $(f + 1)\theta = (f + 1)\left(\frac{g(360^\circ)}{f}\right) = g(360^\circ) + \frac{g(360^\circ)}{f} = 0^\circ + \theta = \theta \text{ modulo } 360^\circ$.

□

Comment: This theorem helps to extend out results from natural number harmonics to rational number harmonics.

Theorem: If $\theta = \frac{360^\circ}{f}$ where f is irrational, then θ is irrational, and there is no natural number g such that $g\theta = 0^\circ \text{ modulo } 360^\circ$.

Proof: If θ is rational and f is irrational, then that would mean that $f\theta = 360^\circ$ is irrational. Clearly not true. Therefore, θ is irrational. Thus, it also follows that $g\theta$ is irrational and never equal to a natural number multiple of 360° . Hence, there is no natural number g such that $g\theta = 0^\circ \text{ modulo } 360^\circ$.

□

Corollary: If $\theta = \frac{360^\circ}{f}$ where f is irrational, then there is no natural number $g > 1$ such that $g\theta = \theta \text{ modulo } 360^\circ$.

Proof: If there were a natural number $g > 1$ such that $g\theta = \theta \text{ modulo } 360^\circ$, then we would have $(g - 1)\theta = g\theta - \theta = \theta - \theta = 0^\circ \text{ modulo } 360^\circ$ in contradiction to our theorem.

□

Commentary: As noted in our chapter on *Astrology and Fractals*, irrational number harmonics could lead to *strange attractors*. However, we also note that every irrational number can be approximated by a rational number. Thus, the rational numbers may be sufficient for all practical applications.

Theorem: Let $\theta = k\left(\frac{360^\circ}{n}\right)$ be a nonzero n^{th} harmonic angle, and let m be a natural number. If $\theta = k\left(\frac{360^\circ}{n}\right)$ is fixed in the m^{th} harmonic, then all n^{th} harmonic angles are fixed in the m^{th} harmonic.

Proof: Let $\theta = k\left(\frac{360^\circ}{n}\right)$ be a nonzero n^{th} harmonic angle for some natural number k , and suppose m is a natural number such that $m\theta = \theta \text{ modulo } 360^\circ$. Then $mk\left(\frac{360^\circ}{n}\right) = k\left(\frac{360^\circ}{n}\right) \text{ modulo } 360^\circ$, and this implies via division by k that $m\left(\frac{360^\circ}{n}\right) = \frac{360^\circ}{n} \text{ modulo } 360^\circ$. Hence, it now follows that for any natural number f that $mf\left(\frac{360^\circ}{n}\right) = fm\left(\frac{360^\circ}{n}\right) = f\left(\frac{360^\circ}{n}\right) \text{ modulo } 360^\circ$. Therefore, if one nonzero n^{th} harmonic angle is fixed in the m^{th} harmonic, then all n^{th} harmonic angles are fixed in the m^{th} harmonic.

□

Comment: This strengthens one of our earlier results.

Theorem: The n^{th} roots of unity form a finite cyclic group of order n under addition that is isomorphic to \mathbb{Z}_n .

Proof-1: Obvious.

Proof-2: Easy.

Proof-3: Clear.

Proof-4: Why do you want more proofs? I've already given you three!! 😊

□

Comment: If you want something done right, do it yourself!

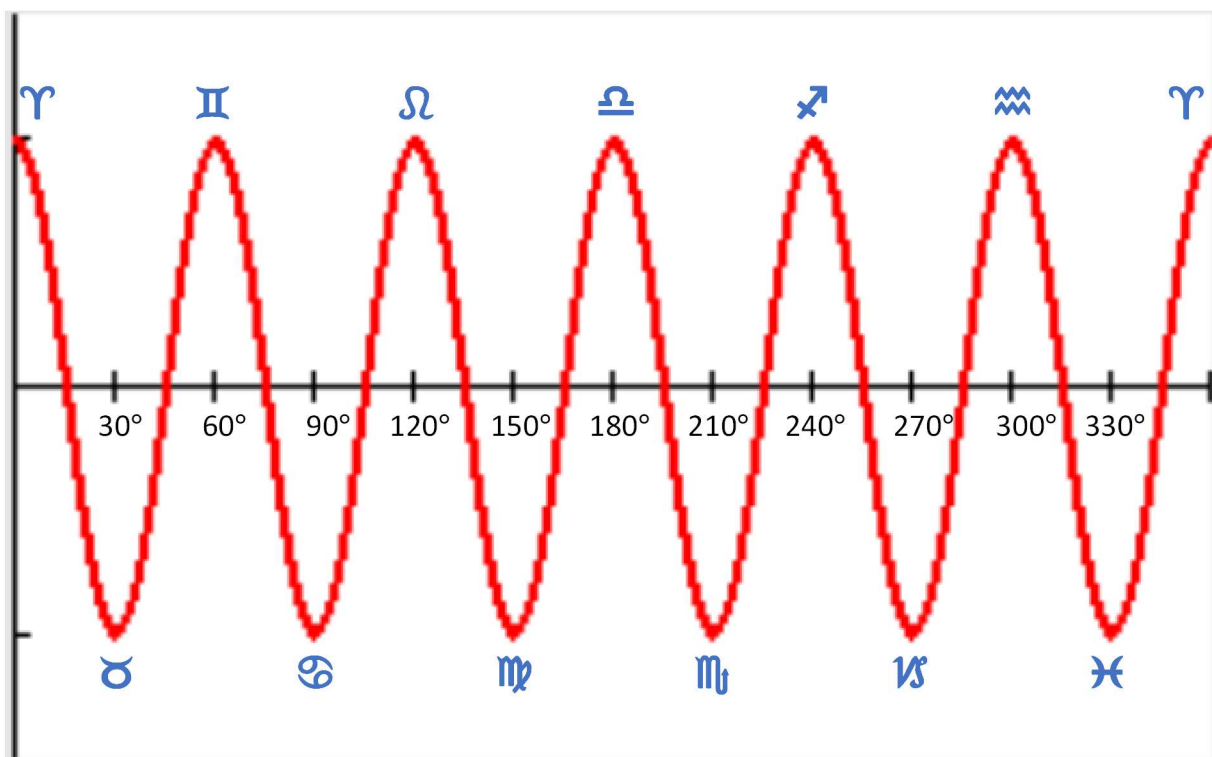
MATHEMATICAL MODELS FOR ASPECTS

We have all done it for so long that we tend to take for granted the division of the sky into twelve signs that each represent 30° of arc in our 360° circle. Rarely do we ask why this division into 12 parts rather than some other scheme such as 4 parts or 8 parts. For instance, we usually speak of the monthly lunar cycle in terms of quarters, so why not also divide the zodiac into 4 parts? The answer, in my opinion, lies in the fact that the most stressful aspect in astrology has been observed to be the square (90°), and the least stressful aspect is the trine (120°). Since the square is a 4th harmonic aspect and the trine is a 3rd harmonic aspect, the smallest harmonic that incorporates both squares and trines is the 12th harmonic since 12 is the least common multiple of 3 and 4. Thus, there are two ways we might go about things when it comes to defining a set of aspects. One way is to simply choose what aspects we want and just go with it, and there are many astrologers that do this without any concern for the underlying mathematics. The other way, however, is to trust the math and pick an aspect set that will contain the trines and squares and any other aspects that we desire. I do the latter, and again since 12 is the least common multiple of 3 and 4, the 12th harmonic is the smallest harmonic that will result in an aspect set that includes both the square and the trine.

The root 12th harmonic angle is $30^\circ = \frac{360^\circ}{12}$, and the subsequent 12th harmonic angles are obtained by multiplying by natural numbers and then expressing the result modulo 360° are given in the table below.

| ANGLE | NAME |
|-------|----------------------|
| 0 | conjunct |
| 30 | semisextile (waxing) |
| 60 | sextile (waxing) |
| 90 | square (waxing) |
| 120 | trine (waxing) |
| 150 | inconjunct (waxing) |
| 180 | opposition |
| 210 | inconjunct (waning) |
| 240 | trine (waning) |
| 270 | square (waning) |
| 300 | sextile (waning) |
| 330 | semisextile (waning) |

What I want to do next is to set up a mathematical model for these aspects, and in doing so I'm going to this time follow the *dwadasama* system of Vedic astrology that I discussed in the chapter on *Astrology and Fractals* and which resulted in the conclusion that the point in each sign that is most representative of the characteristics of that sign is the starting point of 0° . Thus, in this system, the point 0° Aries should be the strongest Aries point, the point 0° Taurus should be the position that is most Taurus, 0° Gemini is the position that is most strongly Gemini, and so on. Fortunately, these characteristics can easily be modeled by the equation $y = \cos(6x)$ where x is measured in degrees. An annotated graph of this function is given below.

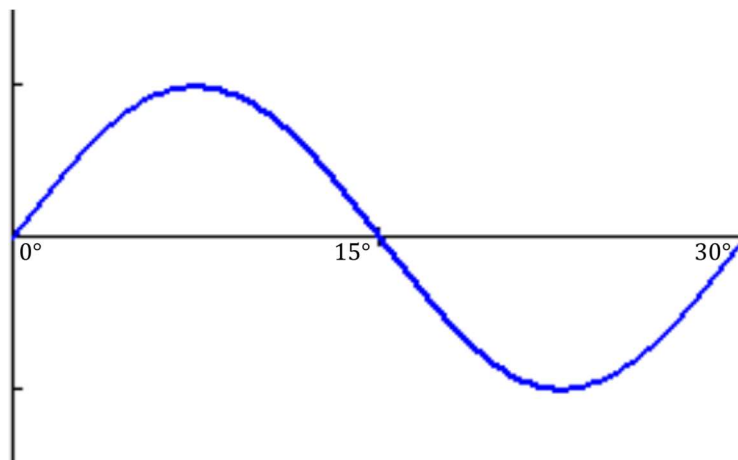


In this model, the strength of a position in the zodiac with respect to the sign of the zodiac that it falls in can be given by the magnitude of the distance that the corresponding point on the graph is from the horizontal axis. Hence, based on this mathematical model which aligns with the *dwadasama* system of Vedic astrology, we can see that that most Aries point of the zodiac is at 0°, the maximum Taurus point is at 30°, the maximum or most Gemini point is at 60°, and so on. However, as often happens whenever we model something mathematically, we notice additional patterns in our model that may reveal other features of our reality. For example, those points on the above graph that are as far above the horizontal axis as possible correspond to the signs Aries, Gemini, Leo, Libra, Sagittarius, and Aquarius. These are the signs that we usually describe as positive or masculine signs in astrology, and they correspond to energy that is extroverted or outgoing. Similarly, the points on the above graph that are as far below the horizontal axis as possible all correspond to the negative or feminine signs of Taurus, Cancer, Virgo, Scorpio, Capricorn, and Pisces. Also, the points above where our graph crosses the horizontal axis occur at 15°, 45°, 75°, 105°, 135°, 165°, 195°, 225°, 255°, 285°, 315°, and 345°, and these correspond to the following astrological aspects.

| ANGLE | NAME |
|-------|----------------------------|
| 15 | quattuorvigintile (waxing) |
| 45 | semisquare (waxing) |
| 75 | squile (waxing) |
| 105 | squine (waxing) |
| 135 | sesquiquadrate (waxing) |
| 165 | quindécile (waxing) |
| 195 | opposition |
| 225 | quindécile (waning) |
| 255 | squine (waning) |
| 285 | squile (waning) |
| 315 | semisquare (waning) |
| 345 | quattuorvigintile (waning) |

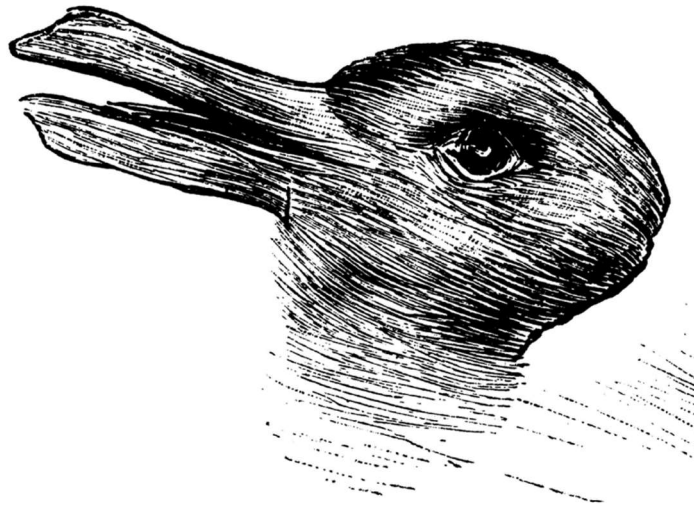
These aspects are all 24th harmonic aspects since the root 24th harmonic is $15^\circ = \frac{360^\circ}{24}$, and the complete set of 24th harmonic aspects consists of these plus the 12th harmonic aspects listed earlier. More specifically, the 12th harmonic aspects correspond to even multiples of 15° (modulo 360°) while the remaining 24th harmonic aspects correspond to odd multiples of 15° (modulo 360°).

Based on the graph above of $y = \cos(6x)$ one might conclude that a sign such as Aries actually ends when we reach 15° Aries and the influence of Taurus starts to increase. However, this is not the case because another mathematical model is also in play. Specifically, we can also use the equation $y = \sin(12x)$ as a model for each generic 30° cycle. In this model the unions (cycle conjunctions) that happen at the beginning of the cycle at 0° and the end of the cycle at 30° correspond to points on the horizontal axis while two squares in the cycle correspond to those points which are the farthest away from the horizontal axis. However, we see one other graph point on the horizontal axis midway between the beginning and the end of the cycle. This midpoint corresponds to a “full moon” experience, and we know that in many ways a full moon is like a conjunction in that each of the two luminaries casts its light upon the other. Hence, the 15° or midpoint of any sign is also a “full moon” point where the light of the sign and the promise at the beginning are most fully realized.



However, are we contradicting ourselves by applying two different mathematical models that yield different results? Not at all! Our reality is large and can accommodate more than one model at the same

time, and both can be valid even if they lead to different results. For example, consider the optical illusion below. Is it a rabbit or a duck? In my view, it is both. Likewise, both mathematical models above apply to the astrological signs even though one may work better in some circumstances while the other will work better in others.



The bottom line from using both mathematical models for signs is that while each sign may experience its nature most strongly at the beginning, it, nonetheless, also experiences a special intensity at its “full moon” point halfway through the sign which is also when the energy of that sign starts waning while the energy of the coming sign starts increasing. This coincides, too, with observations by both Gauquelin and the Huber school of astrology, both of which note that the influence of a planet increases before it reaches a particular house cusp. In other words, even though the energy of Taurus wanes and that of Gemini grows from 15° to 30° of Taurus, as a result of the influence of the generic 30° cycle Taurus doesn’t completely end nor Gemini fully begin until 0° Gemini is reached.

Returning to our first model above, the angles 0°, 30°, 60°, 90°, 120°, 150°, 180°, 210°, 240°, 270°, 300°, and 330° correspond those points on the graph that are a maximum distance from the horizontal axis, and I see them all as way stations or momentary stopping points in the *cycle of becoming* that we discussed in a previous chapter. They correspond to the traditional astrological signs and also what I consider as my primary aspects. As for the angles 15°, 45°, 75°, 105°, 135°, 165°, 195°, 225°, 255°, 285°, 315°, and 345° where the graph above crosses the horizontal axis, I see these as points where the quality of the astrological influence is undergoing a fundamental change. For example, I see the 15° point as the place where the waning influence of Aries is suddenly superseded by the waxing influence of Taurus. Likewise, at the 45° point the weakening influence of Taurus starts to be replaced by the increasing presence of Gemini. Hence, I interpret these aspects as “energy in motion,” critical moments in the process of transition from one state to another. Since we pause and experience maximum intensity at the 12th harmonic aspects, I consider them my primary or major aspects, and since energy is in transition at the remaining 24th harmonic aspects, I call those my secondary or minor aspects. Additionally, I believe that we tend to be more consciously aware of those things associated with the primary aspects while the secondary aspects correspond to energy in motion that we are often less consciously aware of. Nonetheless, these secondary aspects are also important because they show us

ahead of time where we are going and, consequently, they also give us an opportunity to make adjustments ahead of time.

As for orbs, each harmonic has a natural orb that can be defined as halfway between any two consecutive angles. For example, there are only two 2nd harmonic angles, 0° and 180°, and so the orb for such a harmonic angle would be 90° on each side. Now when I state this, pay attention also to what I am not saying. For instance, I'm not saying that planets that are 89° apart are strongly conjunct one another. They're not. No, I'm simply saying that if you only use the 2nd harmonic angles, then two planets which are 89° apart are still closer to conjunction than opposition, and this is exactly what we do when we use the quarters of the moon to determine whether we are closer to a new moon or to the full moon. In a similar manner if we use only 12th harmonic angles, then the natural orb for this harmonic is one half of 30° or, in other words, 15°. But again, I am not claiming that claiming that planets that are 14° apart are strongly conjunct. All I'm saying is that in the 12th harmonic that 15° is the turning point where, for example, a conjunction starts to transition to a semisextile or a sextile starts to transition to a square. However, if we adopt 24th harmonic angles as described above where half of these angles are considered major aspects (way stations) and the other half are our minor aspects (points of transition), then the natural orb for this harmonic is 7° 30', and this seems like a very reasonable orb to use in practice as many could probably accept this as a point where the given aspect is so weak that one should consider the next aspect as becoming more influential. Hence, when dealing with 24th aspects, once one gets more than 7° 30' beyond a trine, one should consider the sesquiquadrate to be more dominant. Also, notice that if one uses that natural orb associated with a particular harmonic, then every planet will always form some sort of aspect with every other planet. In other words, every planet will have some sort of relationship with every other, and that seems to be the way things are in the real world. We always stand in some sort of relationship to everything else.

Most astrologers these days, instead of strictly adhering to some particular set of n^{th} harmonic aspects, seem to use a hodgepodge of aspects from different harmonics. For instance, it's not uncommon for one to combine the 12th harmonic aspects of 0°, 60°, 90°, 120°, and 180° with the minor 24th harmonic aspects of 45° and 135° and then also throw in the 5th harmonic aspects (quintiles) and the 7th harmonic aspects (septiles) and then maybe also even some 9th harmonic aspects (noviles). These astrologers are, nonetheless, able to make such a mishmash of harmonics work for them, and I am in no way saying that they are doing things incorrectly. I am just presenting another way to understand things.

I don't entirely ignore aspects like quintiles and sextiles, but I do put them into the context of what I'm doing with 24th harmonics and the *cycle of becoming*. For example, a quintile is an aspect of 72°, and most texts describe the quintile being associated with playfulness, creativity, innovation, and talents. In my world of 24th harmonics, the quintile occurs after the sextile, but before the squile (75°) and the square (90°). Thus, the quintile occurs right after what I characterize as the "first date," but right before the enthusiasm might wane as one begins to question if this is what one really wants. Hence, one is still in the throes of euphoria, and this naturally results in playfulness and creativity. And as for talents, I think of these as experience points. Following the sextile, one has had a good experience with something, and as in games such as Dungeons and Dragons the experience gained heightens one's abilities in a certain area. If an aspect is very close to an exact quintile, then it is also close to the squile aspect of 75°, but the closer it is to the quintile, the more I color my interpretation of the squile with what others have observed in practice regarding the quintile. Nevertheless, I still always try to place everything first within the context of 24th harmonics and the *cycle of becoming*.

When it comes to the septile, $\frac{360^\circ}{7} = 51\frac{3}{7}^\circ$, there is a historical error I must correct. In particular, the great astrologer Dane Rudhyar who was responsible for greatly advancing our theoretical understanding of astrology, nonetheless, made an error regarding the septile. Specifically, in the book “Astrological Aspects: A Process Oriented Approach” he says with regard to the septile, “51° 25’ 42” ... converted into decimals it is 51.4285714285714... . It is thus an ‘irrational’ value.” In this statement Rudhyar and his co-author Leyla Rael seem to misclassify a rational number with a repeating decimal expansion as an irrational number, and this seems to have been an impetus to associate the septile with irrationality. In a similar way, others seem to draw upon the tradition of the Sabbath being the seventh day of the week to associate the septile with spirituality and higher wisdom. Are all those who make such statements in error? Not necessarily. Many astrologers are astute observers of events and human behavior, and, thus, the septile may indeed be associated with some kind of irrationality even though $51\frac{3}{7}$ is not an irrational number, and likewise there may also be true connections between septiles and wisdom or spirituality. However, I consider master astrologer David Cochrane’s statement that “the 7th harmonic indicates self-control, introversion, an inner-direct and focus” to likely be the most evidence-based assessment of the septile that is currently available, and this is an interpretation that is consistent with my use of 24th harmonics and the *cycle of becoming*. As I see it, the septile resides between the semisquare and the sextile, and since a metaphor for the sextile is the “first date,” David Cochrane’s interpretation of focus and self-control describes quite well the preparation that one undergoes ahead of time. Also, if the septile is a little closer to the semisquare, then I can see how this energy in motion could be perceived as irrationality. The bottom line, though, is that I am generally able to place all of the higher harmonics, like the quintile and the septile, in the context of the 24th harmonics and the *cycle of becoming* and to find interpretations that are consistent with the observations of other astrologers. For these and other reasons I find that the 24th harmonic angles along with the *cycle of becoming* provide the best way to understand all astrological aspects. In particular, I believe that all aspects, whether 24th harmonic angles or not, need to be understood and interpreted in light of the *cycle of becoming*.

Quotient

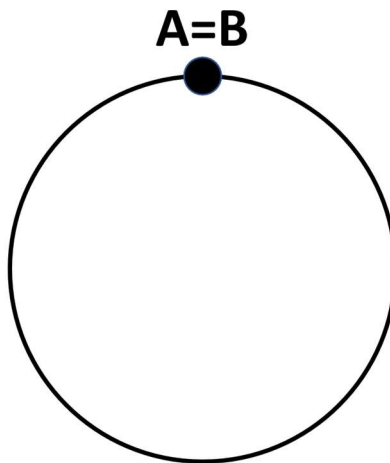
Astrology

QUOTIENT STRUCTURES

Consider the line segment below with endpoints labeled A and B. Clearly in this picture, A and B represent two different points.



Now suppose instead of seeing A and B as two separate points, we see them as the same point. If that is the case, then our line segment is transformed into a circle.



The transformation from a line segment to a circle that occurred by identifying point A with point B is also an example of what in mathematics we call a *quotient structure*. This type of structure receives its name from the fact that something is, in a sense, divided out just as when we transform $\frac{4}{6}$ to $\frac{2}{3}$ by dividing out canceling out a 2 in both numerator and denominator. Few people outside of mathematics will be aware of quotient structures, but, nonetheless, it is probably the single most important concept in abstract mathematics to emerge in the 20th century. Thus, let's look a few more examples before we discuss more deeply the importance of such things.

Next, we'll consider the integers, $\mathbb{Z} = \{\dots, -3, -2, -1, 0, 1, 2, 3, \dots\}$. These are the numbers that we usually mark off for our scale on the number line. Also, it's common to classify each integer as *even* if it is divisible by 2 and *odd* if it isn't. In other words, $even = \{0, \pm 2, \pm 4, \pm 6, \dots\}$ and $odd = \{\pm 1, \pm 3, \pm 5, \dots\}$. I'm certain that almost everyone in the world knows what even and odd numbers are, but few will realize that this

represents a quotient structure. However, it does, and what is being “divided” out are the differences between particular even integers and the differences between particular odd integers. Thus, whereas in the “integer world” we see differences between 2 & 4 and between 1 & 5, in the quotient structure of the “even and odd world,” no difference is seen between any of the even integers nor between any of the odd numbers. In other words, those things which made us see differences between particular even or odd integers have been divided out.

This last example brings to mind the common saying that someone is unable to see the forest for the trees. Similarly, one might say that another person might have difficulty seeing the trees for the forest! In each scenario “forest” represents a quotient structure where the differences between individual trees have been divided out. When one sees the individual trees, the “forest” is not present, and when one sees the forest, the individual “trees” are no longer perceived, only the whole. This also illustrates another aspect of quotient structures, namely the concept of pieces of a puzzle coming together to form something new, and this is exactly what happens when we create something. Creativity is often described as an “Aha!” or “Eureka” moment when the pieces of the puzzle suddenly come together in our mind, and we can now see that every such moment corresponds to the creation of a quotient structure in our minds. Furthermore, I note that if any artificial intelligence is supposed to successfully mimic human intelligence, then it will have to have the capacity to create quotient structures. It will have to be capable of “Aha” moments.

Another thing we might notice from our even and odd example is that we could say that we took the entire set of integers and just threw each integer into one of two boxes, either the even box or the odd box, and it turns out that this is just another way of looking at quotient structures. In other words, anytime we take a set of objects and pigeonhole each object into exactly one of a finite or even infinite number of boxes, then the result is a quotient structure in which no distinction is made between any of the elements in any particular box. Additionally, one can use quotient structures to better understand the structure of one’s own life. For example, one could set up three boxes labeled “like,” “dislike” and “neither,” and then one could proceed to classify everything one knows with exactly one of these three labels, and the result is a quotient structure that represents your likes and dislikes. Similarly, one could create a quotient structure that describes one’s morality by classifying things as “right,” “wrong,” or “neither.”

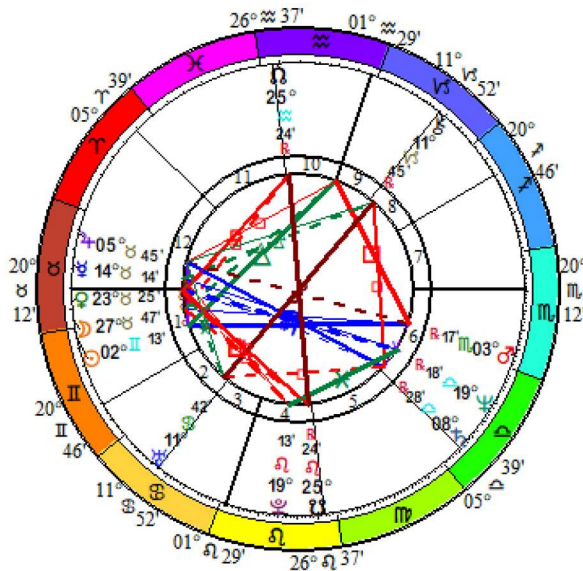
If we look around us, we’ll see that we are creating quotient structures all the time. Every time we have an epiphany and every time we implement a classification scheme, quotient structures are being created, and they help draw certain aspects of our reality into focus by eliminating other features. Thus, quotient structures are actually just as common in real life as they are in mathematics, and as we will see in the chapters that follow that many things utilized in astrology these days are also examples of quotient structures. However, before moving on to that, let’s list some more quotient structures that define our lives, and my claim is that when we examine things, we’ll see that just about everything we know is a quotient structure. For example, look at a chair in your home. That is a quotient structure because you are seeing the chair as a completed whole rather than just a collection of parts. You can, of course, quickly switch your attention to the component parts such as legs, back, cushions, and so on, but when you see the “chair,” your mind is focused only on the whole. Likewise, every other object you see is also likely a quotient structure where the difference between individual components has been divided out in order to produce the perception of a single whole. Other quotient structures can be identified by simply thinking of all the ways you might complete the sentence, “I am (a) ____.” For instance, my list of the ways in which I could complete that sentence includes things such as male, mathematician, liberal, Jew, hippie,

astrologer, retired, Gemini, and so on. Each of these items is being identified with the self as I pigeonhole ourselves into that particular category and the difference between each description and myself is divided out. Hence, every person's description of themselves is also part of a quotient structure.

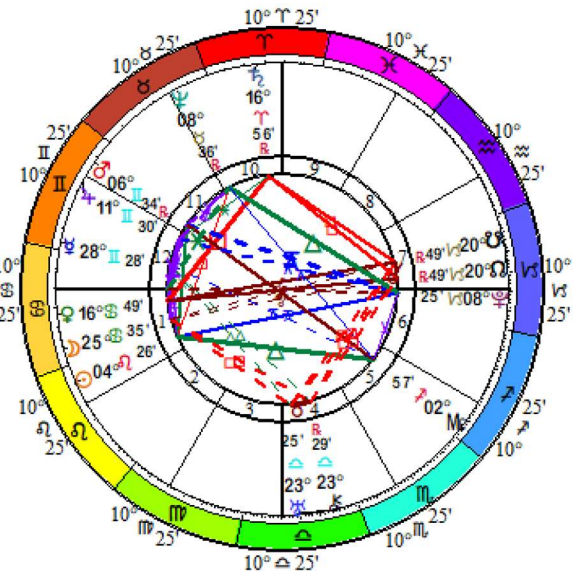
And lastly, whenever we categorize people by their Sun sign, we are also creating a quotient structure where everything about the person other than the sign their Sun was in at birth has been divided out. Just as the categories of even or odd reduce an infinity of integers down to two possibilities, so do the Sun signs reduce the billions of people on the planet down to just twelve categories. In the process of forming a quotient structure, some of the original structure is lost, divided out, but, nonetheless, other parts are retained, and the quotient can bring some things into greater focus while eliminating others. And every time we group things into categories, we also create a quotient structure. Furthermore, just as the concept of a quotient structure has proven to be so fundamental to the understanding of higher mathematics, so will it turn out to be a useful and unifying concept in astrology, as the subsequent chapters will show.

QUOTIENT STRUCTURES AND HARMONIC ASTROLOGY

One reason why every astrologer should know about quotient structures is because every harmonic chart is a quotient! For example, if we look at the 2nd harmonic of a birth chart, then in this harmonic, points that are 180° apart are identified with each other. Thus, in this quotient structure, we make no distinction between 0° Aries and 0° Libra, and planets at these two points will appear conjunct in the 2nd harmonic. Likewise, planets whose angle of separation is a multiple of $120^\circ = \frac{360^\circ}{3}$ will appear conjunct in the 3rd harmonic, and planets with an angle of separation that is a multiple of $90^\circ = \frac{360^\circ}{4}$ will appear conjunct in the 4th harmonic. Recall, too, that the quick and easy way to find the n^{th} harmonic position for a given planet is to multiply its angular distance from 0° Aries by the desired harmonic and then reduce the result to an angle between 0 and 360 degrees by subtracting multiples of 360° from the product until you get a difference that is in the 0° to 360° range. For example, if you have a planet at 0° Sagittarius, then that is 240° from 0° Aries, and if we want the 2nd harmonic position, then we first multiply this by 2 to get 480°. To now get its position on a 360° clock, we subtract just one occurrence of 360° to get everything in the proper range, and when we do so we get $480^\circ - 360^\circ = 120^\circ$ which is equivalent to 0° Leo. Hence, in the 2nd harmonic chart, 0° Sagittarius is transformed into 0° Leo. Below now is my birth chart and my 2nd harmonic chart.

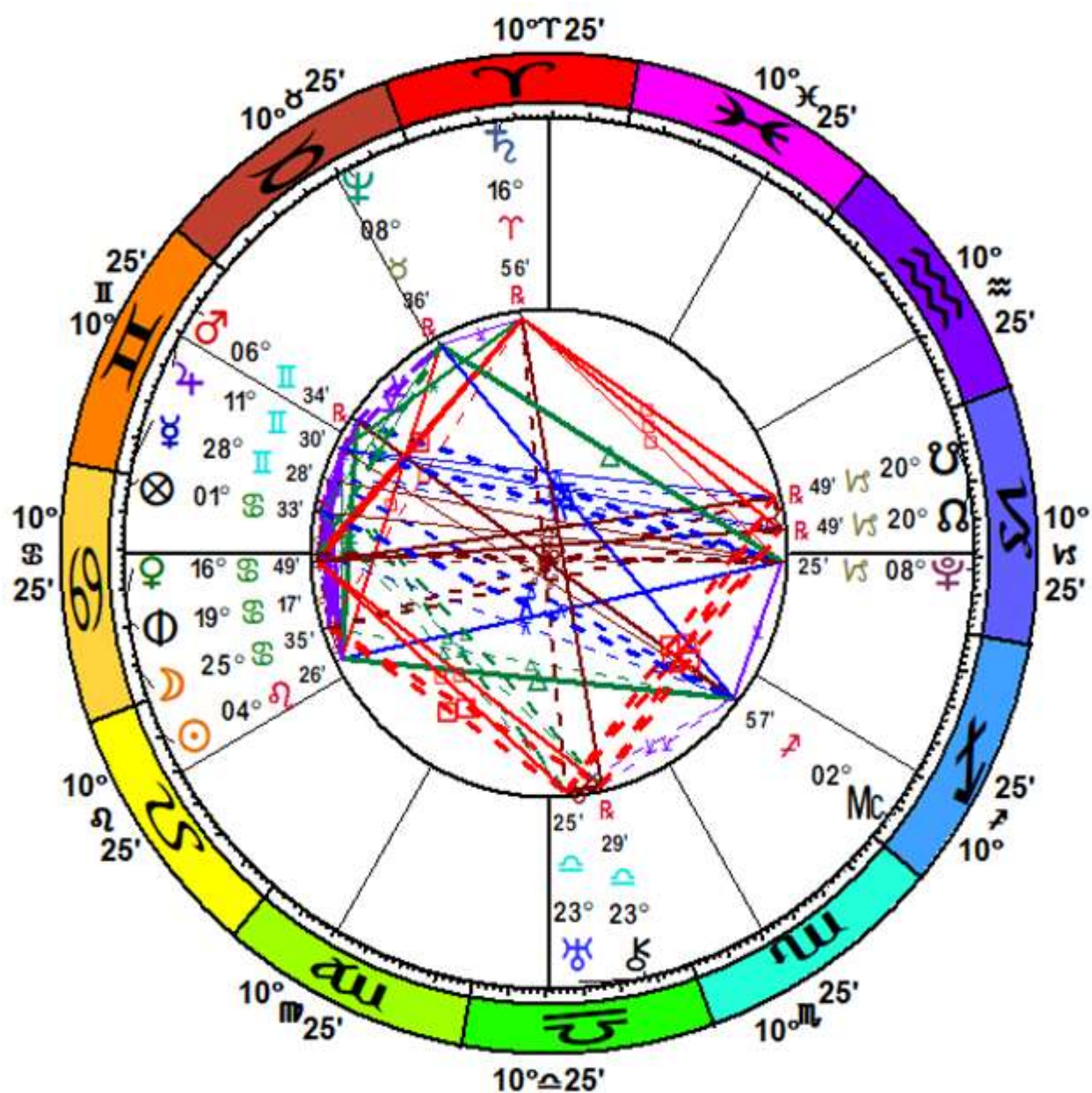


Christopher Benton
May 23, 1952
4:29 AM
Joplin, Missouri
37N05°03" 94W30°47"
Standard Time
Time Zone: 6 hours West
Tropical Regiomontanus
NATAL CHART



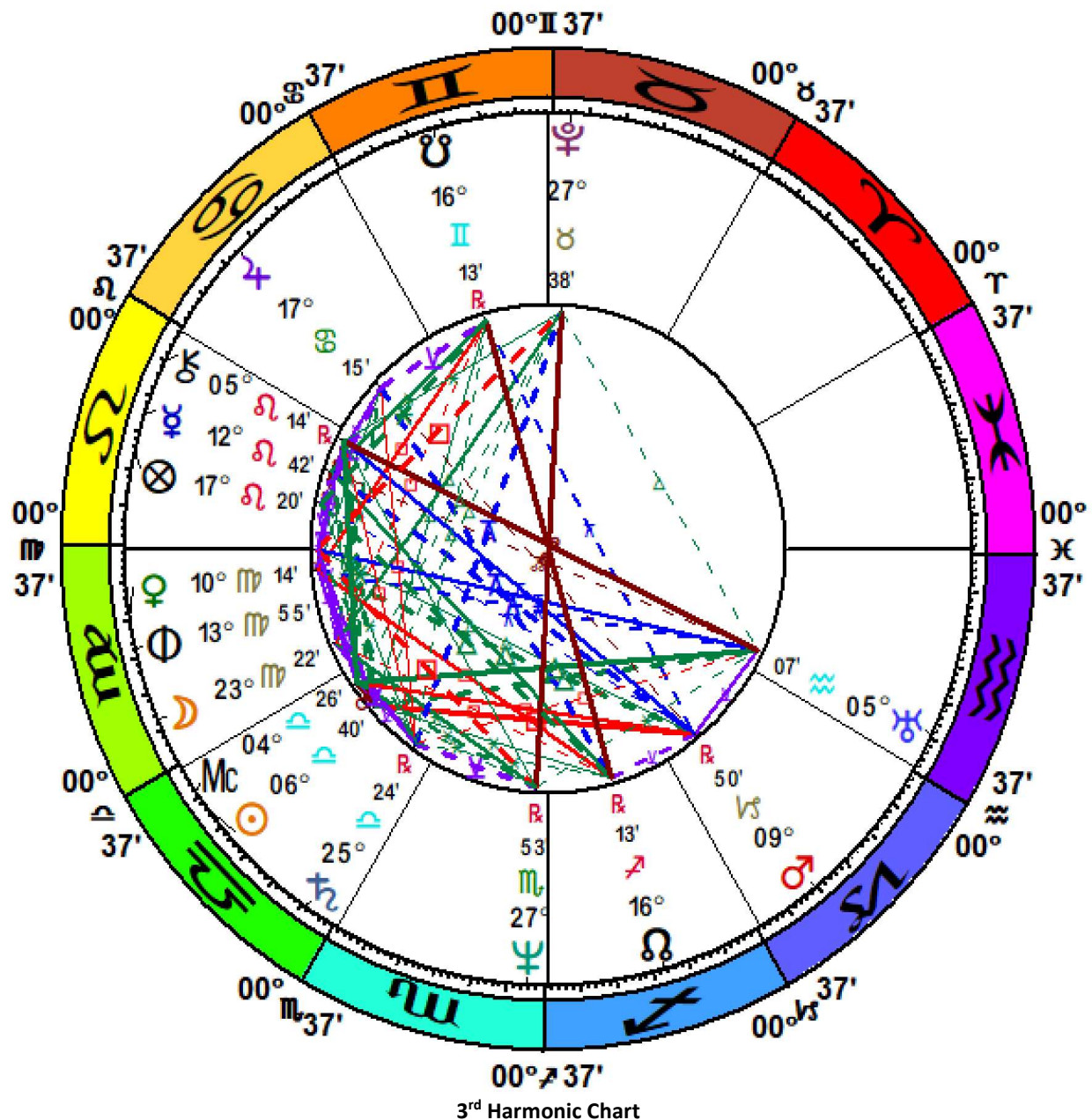
Christopher Benton
May 23, 1952
4:29 AM
Joplin, Missouri
37N05°03" 94W30°47"
Standard Time
Time Zone: 6 hours West
Tropical Equal
2nd Harmonic NATAL CHART

Again, in a 2nd harmonic chart, points that are in opposition to one another appear as conjunct, and that means that what is being divided out is the difference between every pair of points that are 180° apart from one another. Thus, in my birth chart above one can see that Jupiter and Mars are approximately 180° apart as are the two Lunar Nodes and Pluto and also my Uranus and Chiron, and so in the 2nd harmonic chart the difference between each of those planets in opposition is divided out and the planets appear conjunct. Thus, in the 2nd harmonic chart below we see Jupiter conjunct Mars in Gemini, the North and South Node both conjunct Pluto in Capricorn, and Uranus and Chiron in a strong conjunction in Libra, and the closer the opposition in the birth chart, the stronger the conjunction in the 2nd harmonic chart.

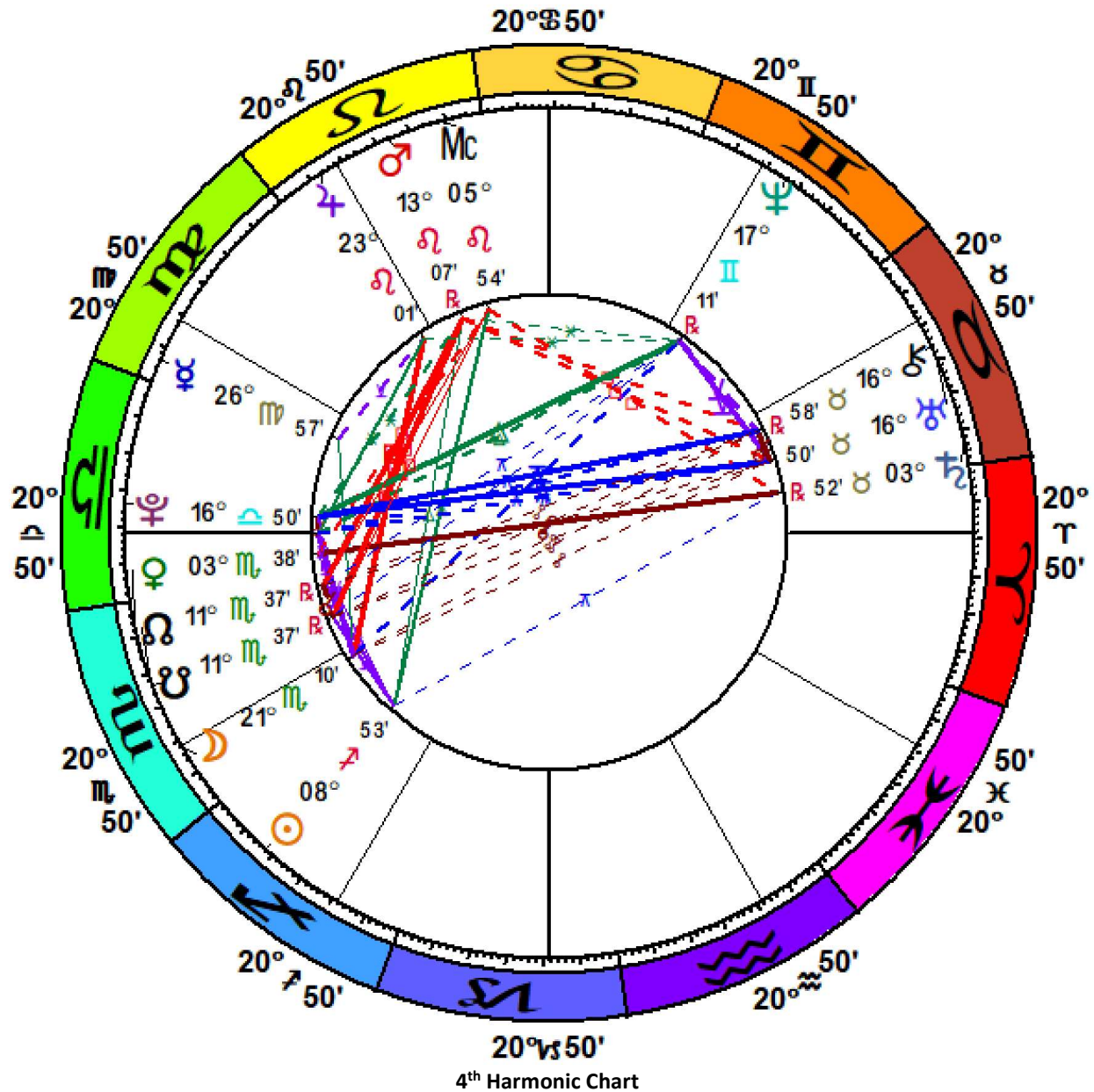


2nd Harmonic Chart

If we next look at the 3rd harmonic chart below, then since the root 3rd harmonic angle is $\frac{360^\circ}{3} = 120^\circ$, the angular distance between planets that are 120° apart is divided out so that planets that are trine one another in the birth chart will be experienced as a conjunction in the 3rd harmonic chart. Thus, for example, there is a strong trine in my birth chart between my Sun and Midheaven, and in my 3rd harmonic chart they appear strongly conjunct one another.



Similarly, in the 4th harmonic chart, planets that are separated by multiples of $90^\circ = \frac{360^\circ}{4}$ will appear conjunct, and in the chart below we can see that Ascendant square Pluto (natal chart) is now Ascendant conjunct Pluto, Jupiter opposite Mars (natal chart) is now Jupiter conjunct Mars, and Uranus square Saturn and opposite Chiron (natal chart) is now a Uranus-Saturn-Chiron stellium in the 4th harmonic.



It is generally felt that the root or fundamental n^{th} harmonic angle sets the tone for all of the n^{th} harmonic angles. For example, the tone of the 2nd harmonic is set by the opposition ($180^\circ = \frac{360^\circ}{2}$), the tone of the 3rd harmonic is determined by the trine ($120^\circ = \frac{360^\circ}{3}$), and the tone of the 4th harmonic is set by the square ($90^\circ = \frac{360^\circ}{4}$). In the case of a composite number like $6 = 2 \cdot 3$, the harmonic angles are characterized as

a blend between the opposition and the trine. Some will tend more toward one or the other, but the root 6th harmonic angle ($60^\circ = \frac{360^\circ}{6}$) should be definite blend of these two qualities. Hence, we conclude that the sextile combines both the integrative qualities of the opposition and the ease of coordination associated with the trine with the bottom line being that it is an easy aspect, though not so easy as the trine, and that it also involves integration of the two planetary drives involved. Given this theoretical framework, we can now understand why a division of our circle into twelve sectors called “signs” is considered so fundamental. Since $12 = 3 \cdot 4$, it combines the aspect of maximum ease (the trine) with the aspect of maximum stress (the square), and as a consequence, it also provides a decent model of the ups and downs of reality. Hence, the qualities of both the trine and the square are combined in the root 12th harmonic angle ($30^\circ = \frac{360^\circ}{12}$).

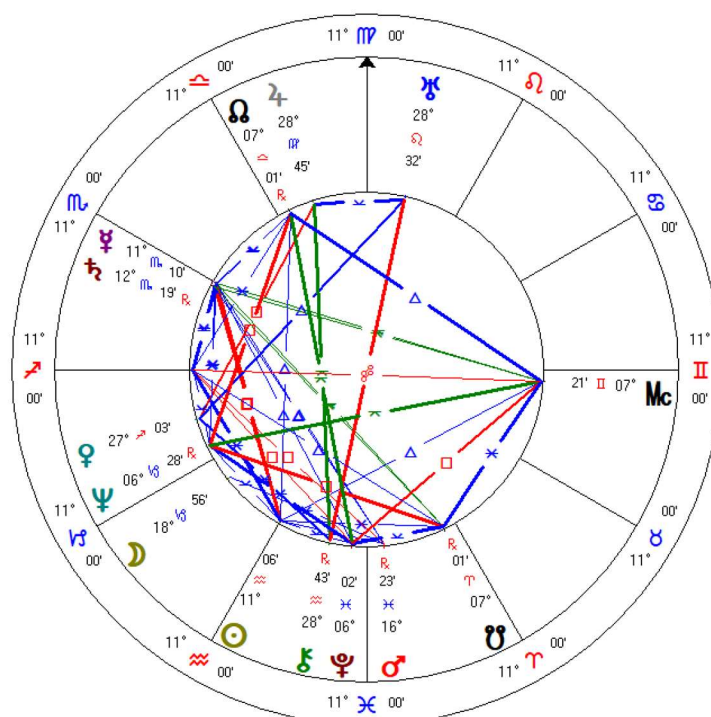
When we construct a 12th harmonic chart, all points in the natal chart that are 30° apart are identified with one another in order to produce this derived chart, and while some of the structure of the original natal chart is divided out, others parts carry over from the natal chart to the harmonic chart. However, this is not the only way in which we use harmonics to define quotient structures. For example, in the case of the 12th harmonic, we can mark off our 12th harmonic angles around a circle, and then if we identify all the points in between any two 12th harmonic angles with each other, then the result is a quotient structure that defines our traditional 12 astrological signs. In other words, Aries is defined by quotient structure in which all the points in the half-open interval $[0^\circ, 30^\circ)$ are identified with one another, Taurus is defined by the identification of the points in the interval $[30^\circ, 60^\circ)$ with one another, Gemini by $[60^\circ, 90^\circ)$, and so on. This also provides a deeper explanation of what is happening when one uses either whole sign houses or whole sign aspects in astrology. In each case we are simply looking at things from the perspective of a quotient structure in which no distinction is made between separate points within the corresponding astrological signs. Thus, the only question in my mind is not whether such whole sign relationships exist (they exist within the appropriate quotient structure), but instead, how strong are they? As always in astrology, the astrologer needs to consider a multitude of influences and then decide which ones are going to be dominant at any particular moment.

The 12th harmonic angles that are based on harmonics 3 and 2² are the most widely used ones in astrology ($0^\circ, 30^\circ, 60^\circ, 90^\circ, 120^\circ, 150^\circ, 180^\circ, 210^\circ, 240^\circ, 270^\circ, 300^\circ, 330^\circ$), but they leave out one very important harmonic, namely the 5th harmonic which is important since 5 is a factor of 360. The root 5th harmonic angle is $72^\circ = \frac{360^\circ}{5}$, and the 5th harmonic angles are $0^\circ, 72^\circ, 144^\circ, 216^\circ$, and 288° . Astrologers today usually think of 5th harmonic angles as describing talents that the person possesses, but I usually think of them as experience points, and here’s why. If we plot these 5th harmonic angles on a zodiac circle, then one thing that is very obvious is that each one occurs after a 6th harmonic angle. Specifically, the 5th harmonic angles $0^\circ, 72^\circ, 144^\circ, 216^\circ$, and 288° follow the 6th harmonic angles $300^\circ, 60^\circ, 120^\circ, 180^\circ$, and 240° . Thus, in terms of the evolving relationship that the cycle represents, each 5th harmonic angle occurs after the experience of the relative ease of a 6th harmonic aspect, and thus, a 5th harmonic aspect basks in the light and experience of the successful completion of a prior, enjoyable stage in our quest for union.

If we now want to combine the 5th harmonic with the 12th harmonic, then we just multiple the two together to get the 60th harmonic ($6^\circ = \frac{360^\circ}{60}$). Hence, the root 60th harmonic angle is 6° , and an interesting fact is that 6° divides each sign into five equal parts ($5 \times 6^\circ = 30^\circ$), thus echoing the division of our 360°

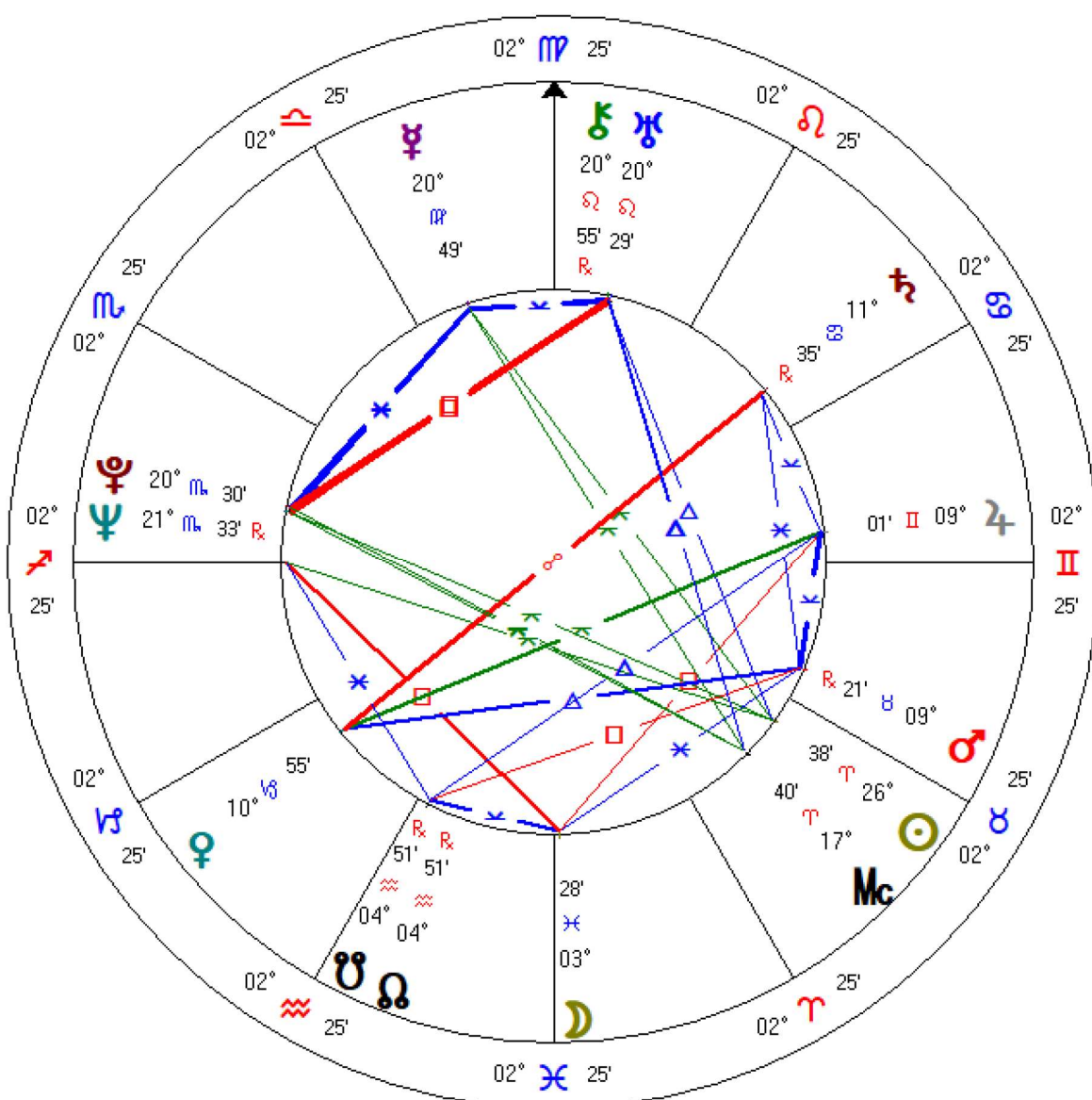
cycle into quintiles (5th harmonic angles). If we now associate the points within each 6° segment with one another, then we can think of each 6° interval as representing a particular stage of development. For example, I am a Gemini, but my Sun is within the first 6° of Gemini, and so, theoretically, one could say that I am a young Gemini and that my mind has a very playful, childlike quality. On the other hand, my brother's Moon is at 21° Gemini and Donald Trump's Sun is at 23° Gemini, and both of these positions fall within the fourth 6° segment of Gemini. Hence, both my brother and Donald Trump exhibit an intellectual process which is less childlike than mine. In that sense they are more mature, but not necessarily more wise as wisdom and righteousness are the result of individual choices and not astrology. In the *Bible* in *Psalms 90:10* we read, "The days of our years are threescore years and ten (70 years)." If we divide this cycle by 5, then we get 5th harmonic "ages" of 14, 28, 42, 56, and 70 years, and these ages correspond roughly to the ages at which we expect either a Saturn return or opposition to its natal position. I say "roughly" because Saturn, like the other planets, will sometimes move faster and sometimes slower, and so things don't always happen at exactly 14 year intervals. Nonetheless, we know that at each of these Saturn periods that we tend to rapidly mature as we assimilate past experiences, and this corresponds well to our understanding of the 5th harmonic as related to talents that result from past experience.

Below is a copy of my 5th harmonic chart, and in that chart there is a close conjunction between Mercury and Saturn, and that suggests that past experience, from whatever lifetime, has resulted in a talent for controlling and regulating my mind, and, indeed, the ability to focus and concentrate has been one of my biggest assets in this lifetime. If we go back to my natal chart, though, the specific angular separation between my Mercury at 14° 00' 14" and Saturn at 8° 00' 28" is 144° 14', and this is very close to an exact biquintile aspect of 144°. Furthermore, since the waxing biquintile comes after the harmonious aspect of 120°, this biquintile represents a stage in which strong harmony between Mercury and Saturn has already occurred, and thus, I can now reap the reward of that experience in terms of enhanced concentration and other mental abilities.



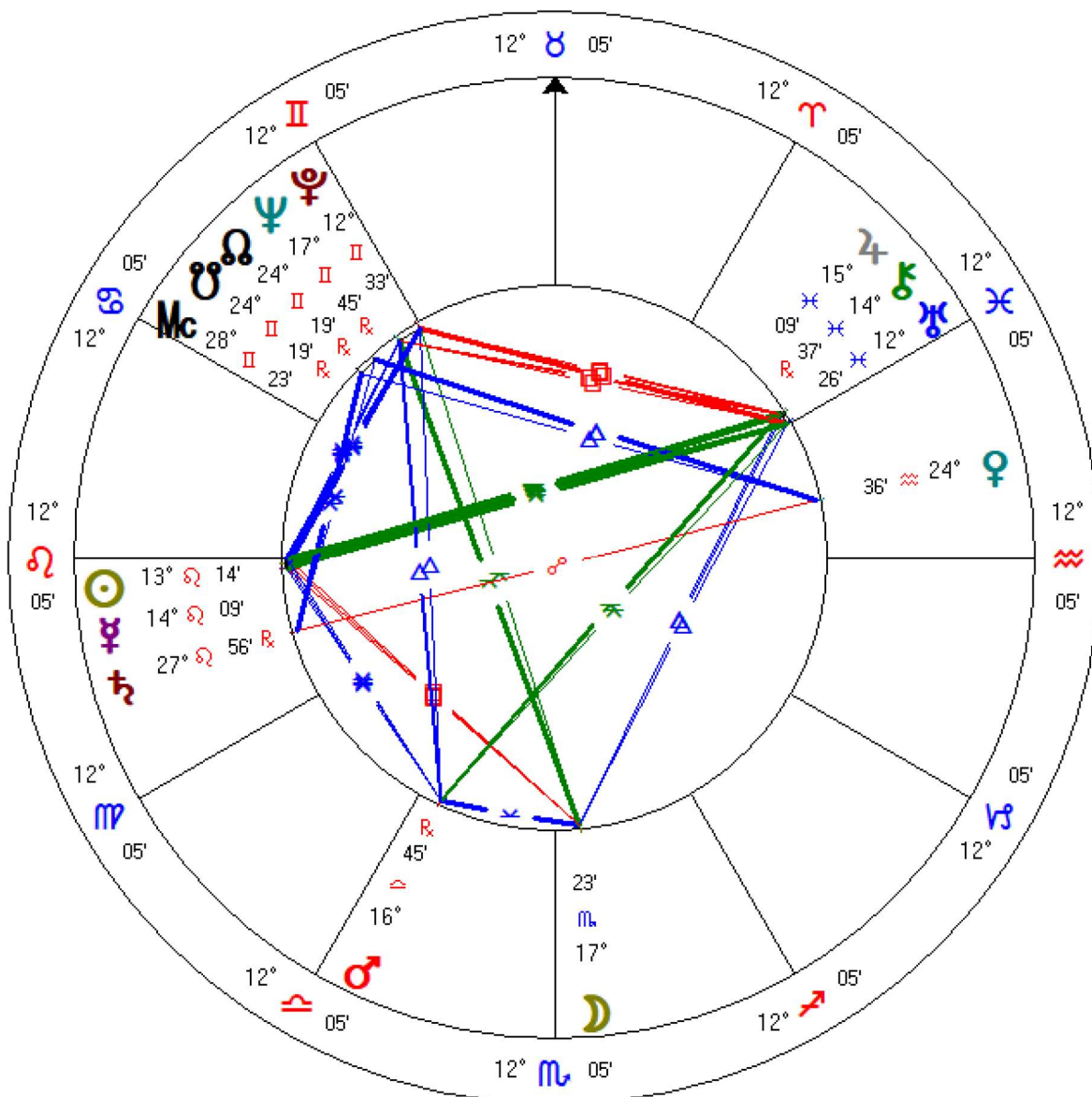
5th Harmonic Chart

In many respects, the 12th harmonic chart represents who we will be once we have successfully integrated the trines and the squares in our chart, and the “common denominator” of these two aspects is the root 12th harmonic angle of 30°. In my 12th harmonic chart below we see Sun conjunct Midheaven, Pluto conjunct Neptune, and Chiron very strongly conjunct Uranus. These represent “unions” that will complete themselves as a result of mastering the lessons of the trines and squares in my birth chart. Hence, when more fully integrated it is natural that I would function more as a leader (Sun conjunct Midheaven) who can wield transcendent forces (Neptune conjunct Pluto) as I find enlightenment in the self (Chiron conjunct Uranus in Leo). Furthermore, with Sagittarius rising in this chart, I am a seeker of truth and am ever expanding my horizons. This gives an overall interpretation of my 12th harmonic chart, but even deeper insights may be derived by considering the other aspects in the chart along with sign and house positions. Thus, since my Pluto/Neptune conjunction is in Scorpio in the 12th house, the facet of me presented in this chart wants to enter seclusion in order to go more deeply into the secrets of reality!



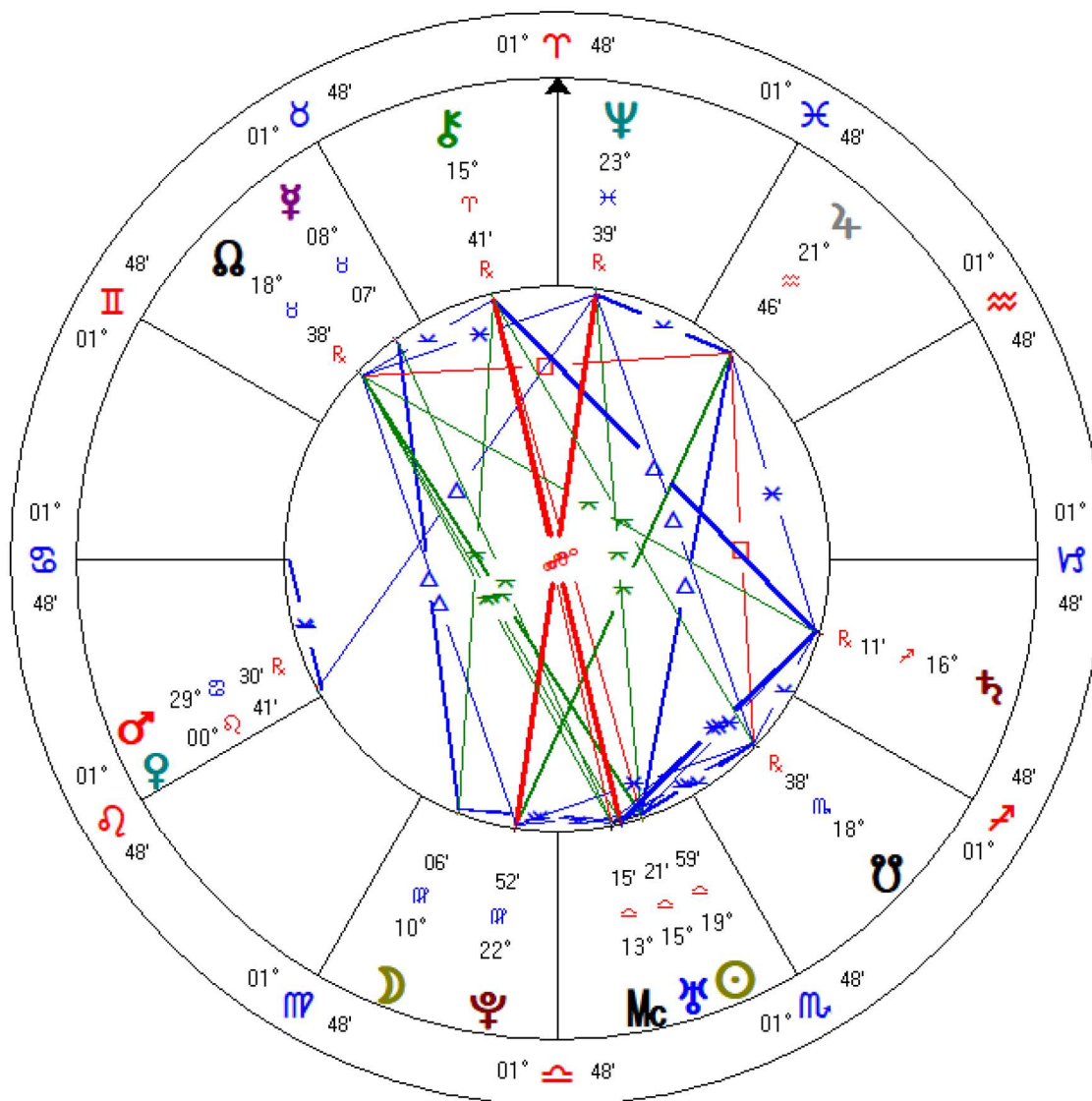
12th Harmonic Chart

Since $360 = 2^3 \cdot 3^2 \cdot 5$, a harmonic chart that also incorporates 5 as well as 3 and 4 would represent an even greater level of integration, and the simplest such harmonic chart would be the 60th harmonic since $60 = 2^2 \cdot 3 \cdot 5$. Below is my 60th harmonic chart, and it says much about my better self that will be present when I manifest this level of integration. In the first house in Leo is a conjunction of Sun, Mercury, and Saturn. *Through focus on the true Self, my left-brain is enlightened.* Trine these planets is the stellium of Jupiter, Chiron, and Uranus in Pisces in the eighth house. *Concentration on the Self (1st house planets) enhances (trine) the depth of my mystical transcendence (Jupiter/Chiron/Uranus conjunct in the 8th house in Pisces).* And finally, there is a Neptune/Pluto conjunction in Gemini in the eleventh house. *Working in groups, my intelligence expresses a higher wisdom.* We can also look at the other aspects present and interpret them in terms of the associated planetary drives as working either in coordination (good aspects) or separately (bad aspects) as each drive fulfills its purpose.

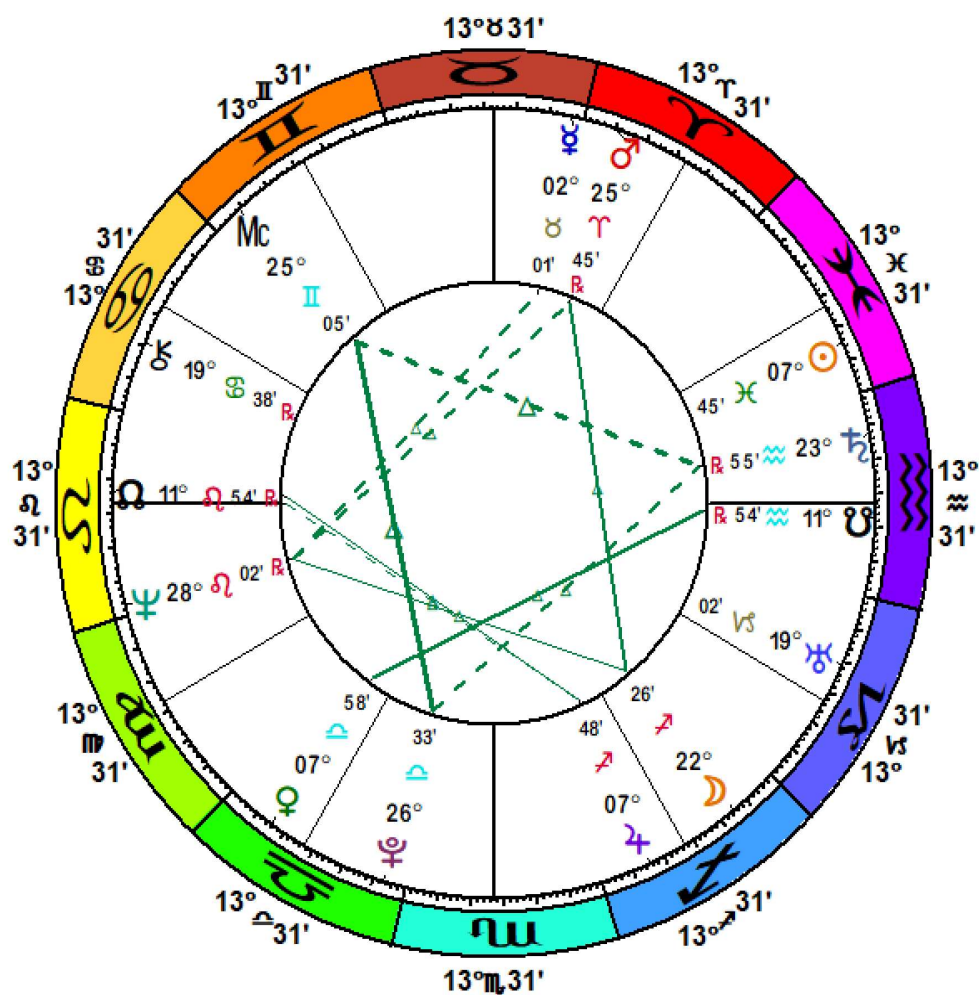


6th Harmonic Chart

When used in ways as illustrated above, harmonic charts can add tremendous depth and nuance to our understanding of the original horoscope, and they do this by dividing out various elements in order to bring other structures into focus. The harmonics that I currently find most useful are 2, 3, 4, 5, 12, 24, and 60. In Vedic astrology, it is customary to also look at what we would call the 9th harmonic chart. If we were to look at a 3rd harmonic chart, then in this chart planets that are trine in the natal chart will appear conjunct. However, in our 3rd harmonic chart we may also see some additional planets that are trine, and if we take the 9th harmonic chart (the 3rd harmonic of the 3rd harmonic), then even these 3rd harmonic trine planets will appear as conjunct. Hence, the 9th harmonic is in some sense the harmony of harmonies. It represents, in a sense, the most relaxed and easy going face of our nature. One small but important factor of my 9th harmonic chart is that I have Midheaven/Sun/Uranus all conjunct in Libra in the 4th house. Hence, reducing tension (9th harmonic) and having harmonious relationships with others (Libra) enhances both my status and my creativity (Midheaven/Sun/Uranus conjunction).



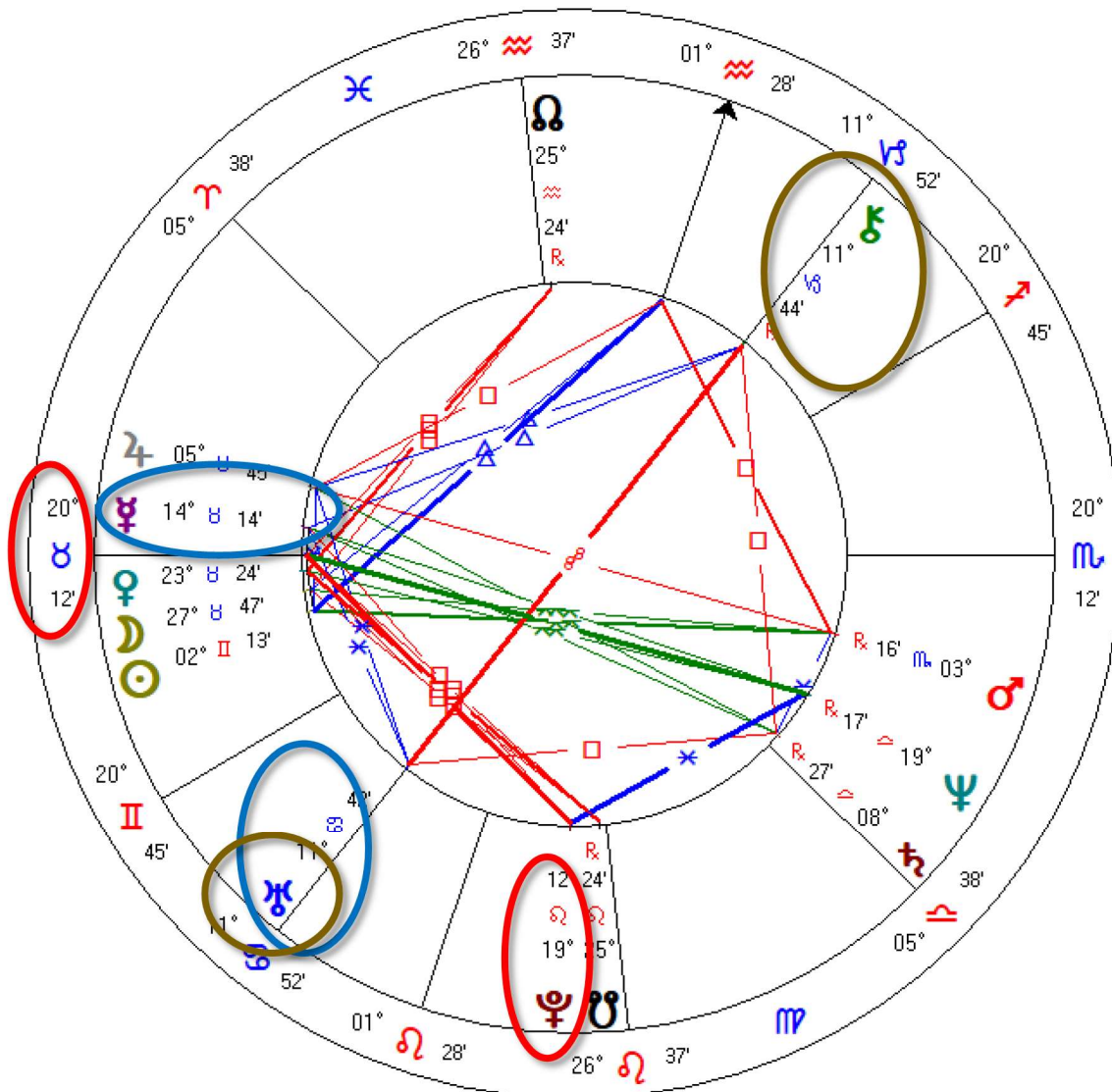
Other harmonic charts that many harmonic and vibrational astrologers will look at are the 8th harmonic which represents the evolutionary outcome of our struggles (since $8 = 2^3$), and the 7th harmonic even though 7 doesn't divide evenly into 360°. In all of these harmonic charts, if you exam enough of them, you will tend to find certain trends and features repeated, and this is because they are all quotients of the birth chart. Hence, each harmonic retains some of the structure of the original natal chart even as it divides out other aspects. Additionally, once we go beyond the 12th harmonic, we begin to obtain root harmonics that are less than 30°, and this creates angles that fall within the sign of Aries. Hence, since Aries rules the head, it is expected that these harmonics will be expressed more mentally than otherwise. To further analyze these higher harmonics, I usually subdivide 30° by 12 to create a secondary zodiac, beginning with Aries, where each sign occupies 2.5°. Thus, for example, let's consider the 17th harmonic. The root harmonic angle for this harmonic is $\approx 21.18^\circ = \frac{260^\circ}{17}$, and using our secondary zodiac we would expect this position to have characteristics of both Aries and Sagittarius. This is a position that denotes individuality (Aries) and an expansive personality that seeks knowledge and truth (Sagittarius). Those who do extensive studies in harmonic astrology note that many people with a strong 17th harmonic chart tend to excel in acting which would certainly be supported by the expansive Sagittarius nature of this harmonic. Hence, given the very harmonious Star of David configuration in my 17th harmonic chart, I'm not surprised since I am not only a seeker of wisdom, but also a past member of Actor's Equity Association!



QUOTIENT STRUCTURES AND ARC TRANSFORM CHARTS

An arc transform chart is another type of harmonic chart, but it seems to be rarely used and even more rarely understood by the majority of astrologers. So what is it? Well, to create an arc transform chart, we factor out not a natural number in order to perceive our chart through the lens of a particular aspect such as a trine or square, but instead we factor out the angular distance between two planets in order to bring them into conjunction. The reason why this type of chart is important, though, goes back to our understanding of all cycles as *cycles of becoming*. Hence, regardless of whether we are talking about a daily cycle or a yearly cycle or the cycle between successive returns of Saturn to its natal position, the aim is always union. Every cycle begins with a vision that, if successful, culminates in the union of self with the realization of that vision, and in an arc transform chart, we simply get a preview of who we will be once that union is complete. When deciding which of the many possible planetary unions to perfect, there are three conditions that usually guide me – (1) If there is an aspect in your birth chart that is very prominent in your life, then that is a union you are trying to complete, (2) if there is an aspect in your chart that is very close, then you are likely trying to complete that aspect, too, and (3) whatever aspect in your chart is most problematic for you is also representative of an aspect that you are trying to complete, albeit with great difficulty. Using these criteria, below are three arc transform charts that each present a different face of my total being.

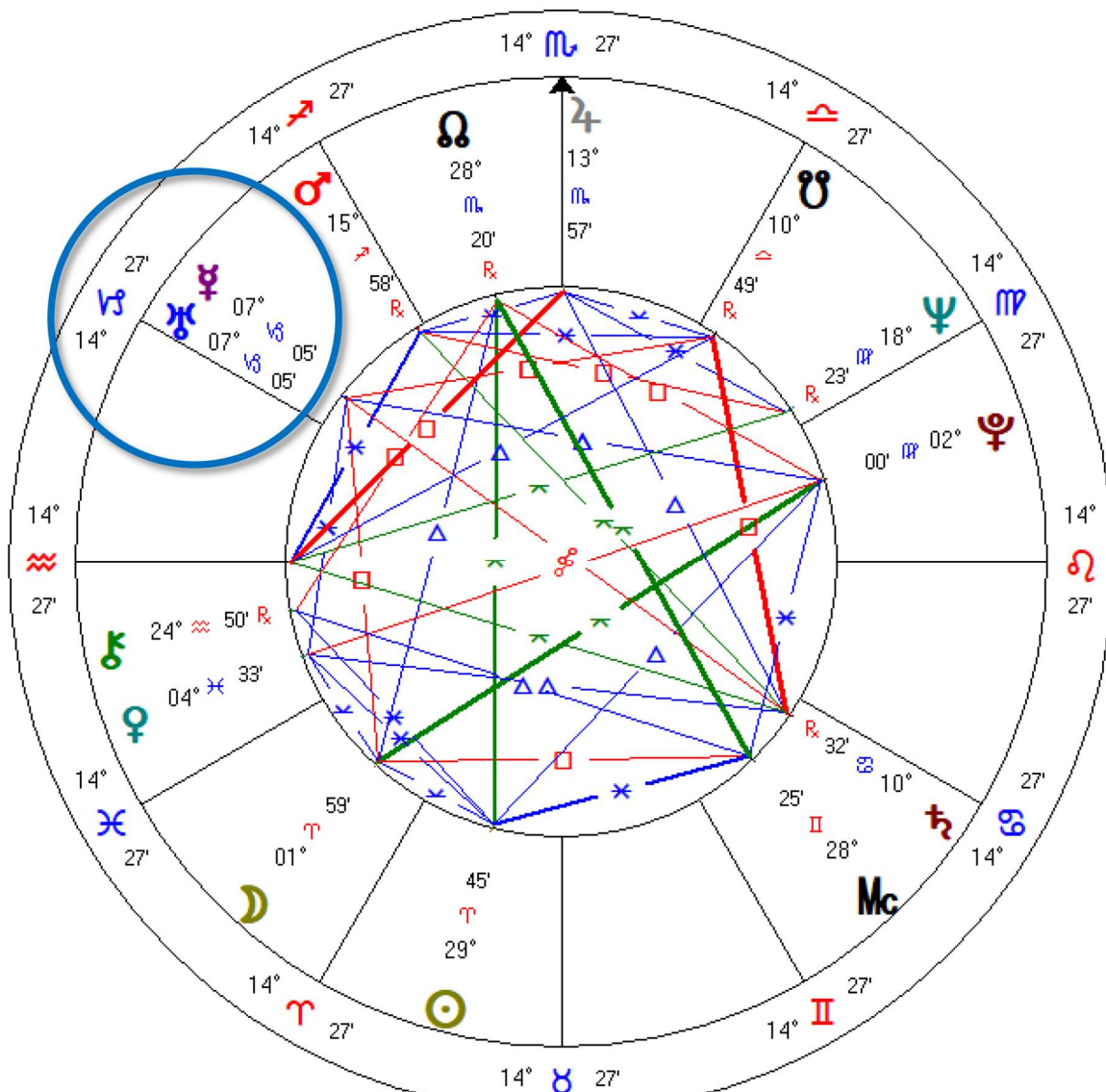
In my birth chart, the sextile between Mercury and my Uranus has been one of the most influential planetary relationships in my life since it bestows creativity upon the mind, and as a PhD mathematician, almost my entire life has focused on mental creativity. Thus, I am, in a sense, always trying to bring Mercury and Uranus into union in my mind. Also, the closest aspect in my birth chart is the opposition between Uranus and Chiron which is within 2 minutes of being exact. Chiron is an interesting heavenly body called a *centaur* that resides between Saturn and Uranus, and consequently, it acts as a bridge between the personal and the impersonal, between what can be seen (Sun through Saturn) and what is unseen (Uranus through Pluto). In my horoscope, though, Chiron has also been present at every major spiritual advance in my life as it constantly urges one to transcend the limitations of personal identity. The third aspect I'll do an arc transform of is the square between Pluto and Ascendant in my birth chart. There are other planets in my chart that Pluto squares, but this is its closest aspect, and as such, the arc transform will reveal additional details about my relationship to the kind of deep power represented by Pluto. And before we look at each of these arc transforms, below for reference is my birth chart with the planets that we will unit highlighted. In particular, Mercury and Uranus are found in blue circles, Uranus and Chiron in brown circles, and Pluto and Ascendant in red circles.



Natal Chart

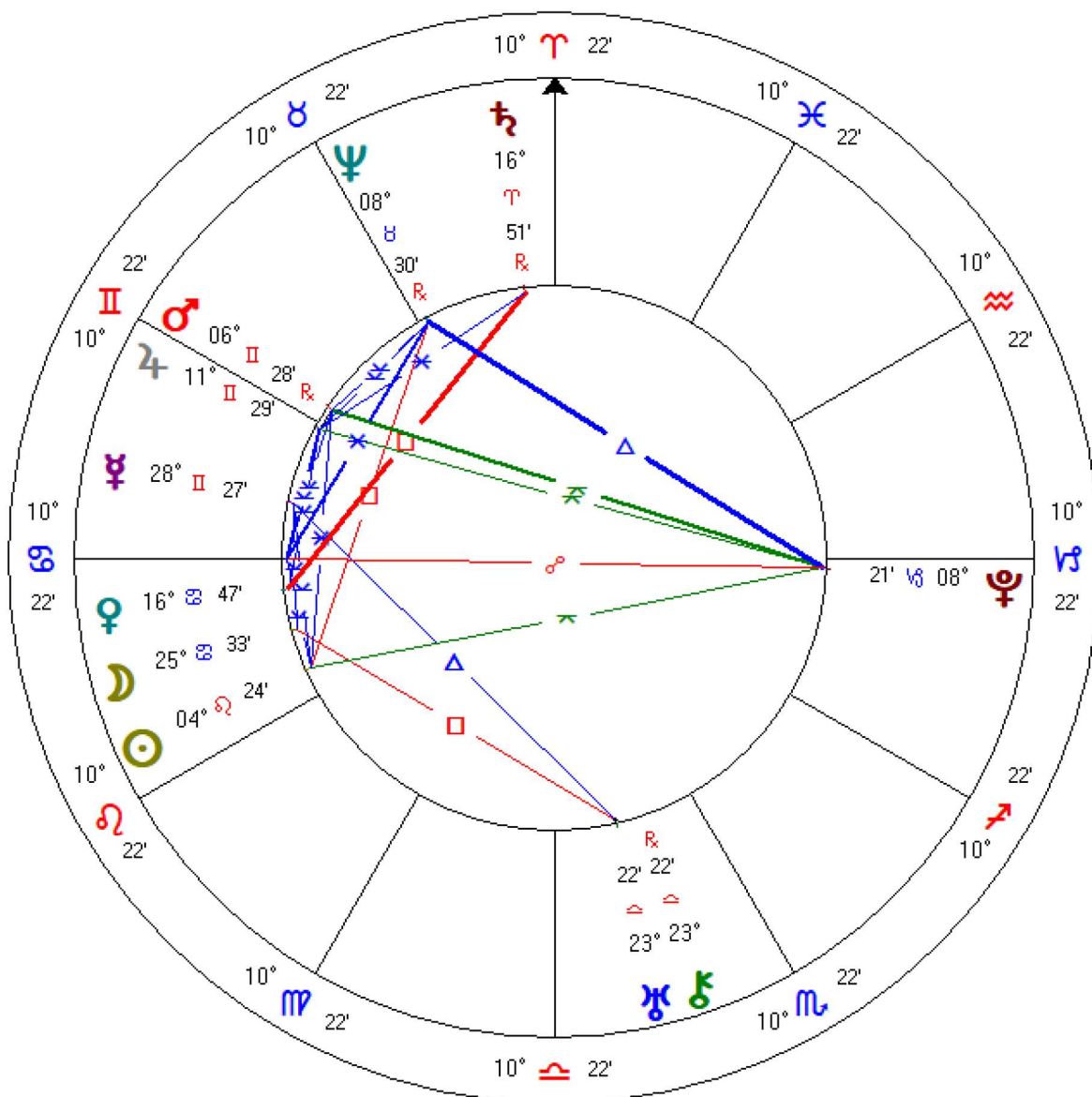
Uranus and Mercury form a sextile with one another in my birth chart, and this is an angular relationship that makes it easy for these two drives to work well together in a coordinated way. Since Mercury rules the left-brain and since Uranus promotes creativity by breaking up the existing pattern and encouraging new and novel arrangements of reality, this aspect greatly enhances creativity. If we now look at the arc transform where Mercury and Uranus are united, then other nuances of my creativity are revealed. For example, the conjunction occurs in Capricorn in the 11th house, but also close to the cusp of the 12th house which has Capricorn on the cusp. This reflects how my creative process sometimes involves working with others (11th house), but most of the time I prefer the joy of doing it all by myself in isolation (12th house). Additionally, the sign of Capricorn describes the disciplined approach I take to creating. Also, with Aquarius rising, the influence of the Uranus/Mercury conjunction is further enhanced. Furthermore, planets that make good aspects to this conjunction will be allies, while planets that make difficult aspects may be obstacles or distractions. For example, the conjunction makes a square to Moon in Aries in the 2nd

house with Aries also on the cusp of the third. Hence, emotions and feelings (Moon) that are aggressive (Aries) can interfere. Similarly, the opposition to the conjunction from Saturn in the 5th house shows the need to integrate even more discipline into the process. Also, personal desires for pleasure (5th house) may be a distraction, but at the same time as Saturn is more integrated into the process, creativity will become its own form of personal pleasure. The conjunction also makes a sextile with Venus in the 1st house and a trine with Pluto in the 7th house. Thus, not only is my creativity enhanced by being comfortable (Venus) and by interacting with others (7th house), it, in turn, has a beneficial effect on any tensions between self (1st house) and others (7th house).



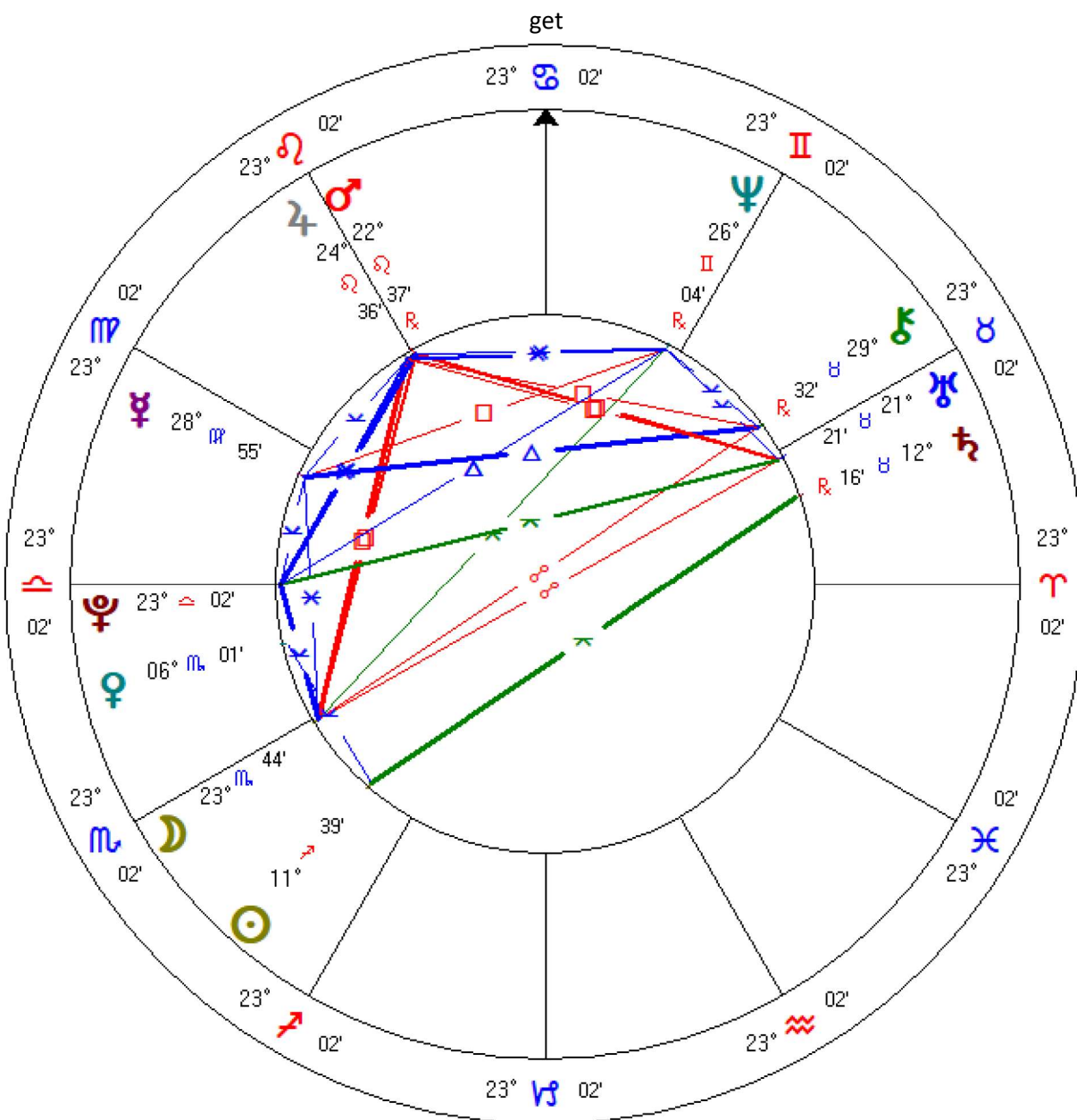
Uranus/Mercury Arc Transform

We'll now look at the arc transform between Uranus and Chiron since their opposition to one another is the strongest aspect in my chart. Recall that in my birth chart Uranus is conjunct the cusp of the 3rd house, and Chiron is conjunct the cusp of the 9th house. The third house rules the personal mind while the 9th house represents the group knowledge of humankind, and Uranus is the drive to break up the existing pattern while Chiron is a drive to extend one's awareness beyond the personal to a more cosmic but also more impersonal perspective. Consequently, I've come to realize that Chiron was there at every deep spiritual experience in my life. In the arc transform of Uranus and Chiron, I am given a mandala that describes how I will function as a more enlightened being. The conjunction is in Libra in the 4th house making a trine to Mercury in Gemini in the 12th house. Consequently, while sitting in my personal environment (4th house), deep analysis of my perceptions (Mercury in Gemini in house 12) allows me to transcend the duality between self and others (Libra).



Uranus/Chiron Arc Transform

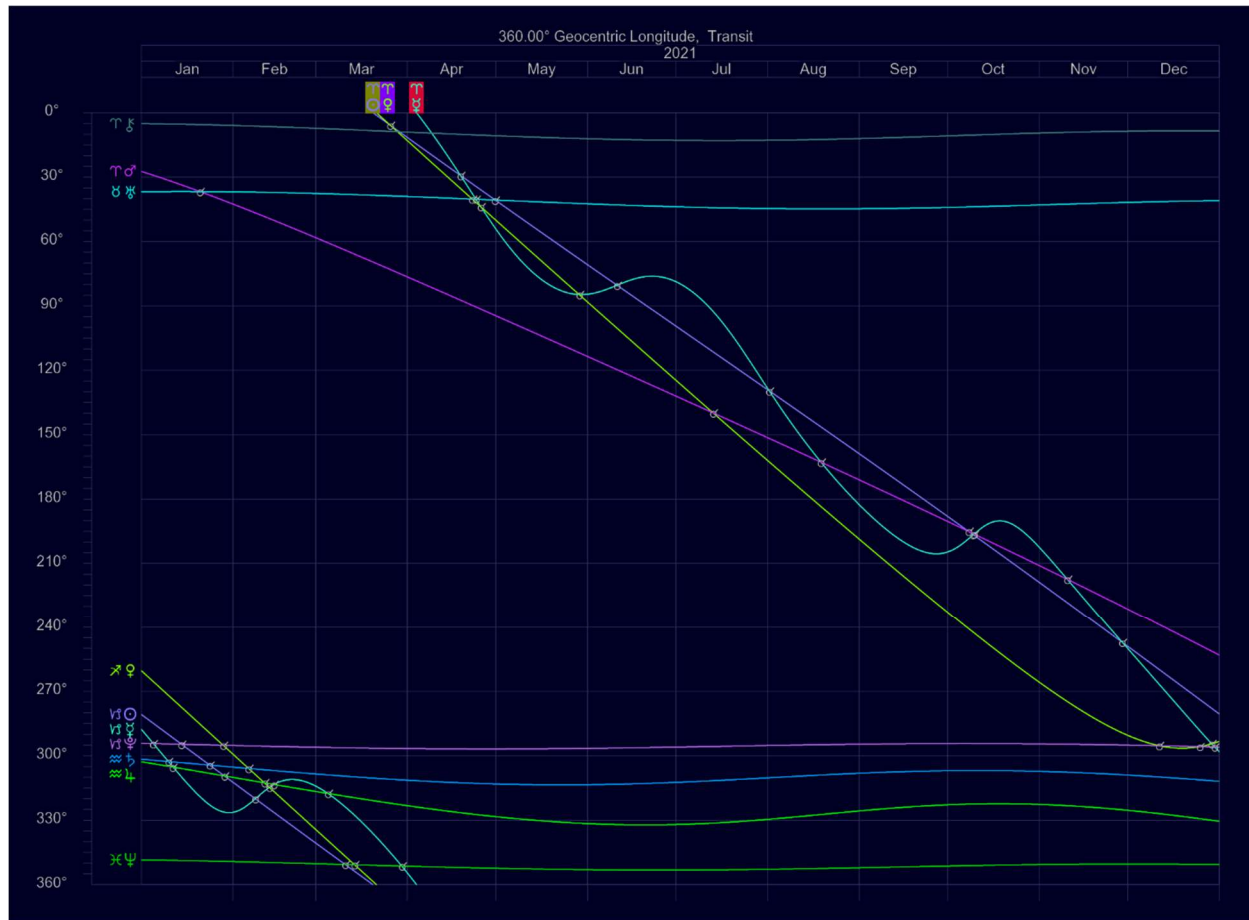
And finally, with the Pluto/Ascendant arc transform, I confront my difficulties with integrating the powerful energies of the planet Pluto, and again, this derived chart is also a guide for achieving this. In this chart, I specifically have Moon, Mercury, Jupiter, Mars, and Neptune as allies. An inconjunct from Uranus, though, speaks to personal adjustments that have to be made in interactions with others. Also, the strong T-square between Moon, Uranus, Jupiter, and Mars suggests that emotional outbursts and sudden strong feelings can be detrimental to the need to integrate the Plutonian energies.



Each of the examples above could be fleshed out with much more detail, but hopefully you get the gist of the process from the above examples. And, of course, there are many more arc transform charts that one could explore, and each one describes a different facet of your being. One simply needs to determine which ones are most relevant to your life, and we began with good criteria for determining which arc transforms will be more important to you. The bottom line, though, is that in every person's life there are cycles that one is trying to complete and unions one wants to perfect. With regard to these, I've found the arc transform to be an extremely useful technique. An arc transform chart can not only describe an important facet of your being, it can also serve as a roadmap for achieving this union. It describes who you will be once the union is achieved, and it describes, as well, those things which will be allies and those that are hinderances. It is an incredible way to understand both who you are and where you are going!

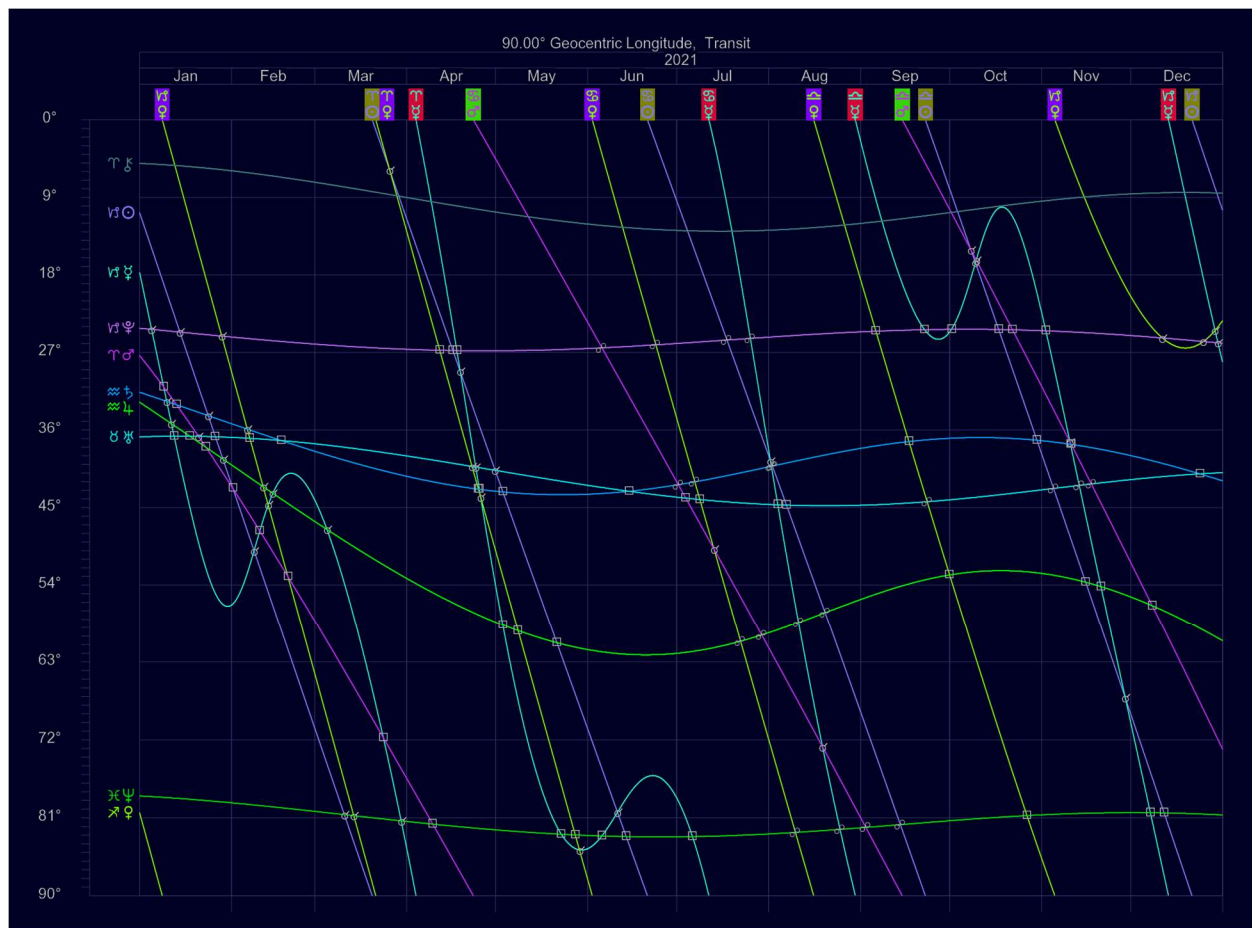
QUOTIENT STRUCTURES AND GRAPHIC EPHERMERIDES

An example of quotient structures that many astrologers are familiar with is the graphic ephemeris. This is basically just a graph of each planet's 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° to 360°, 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.

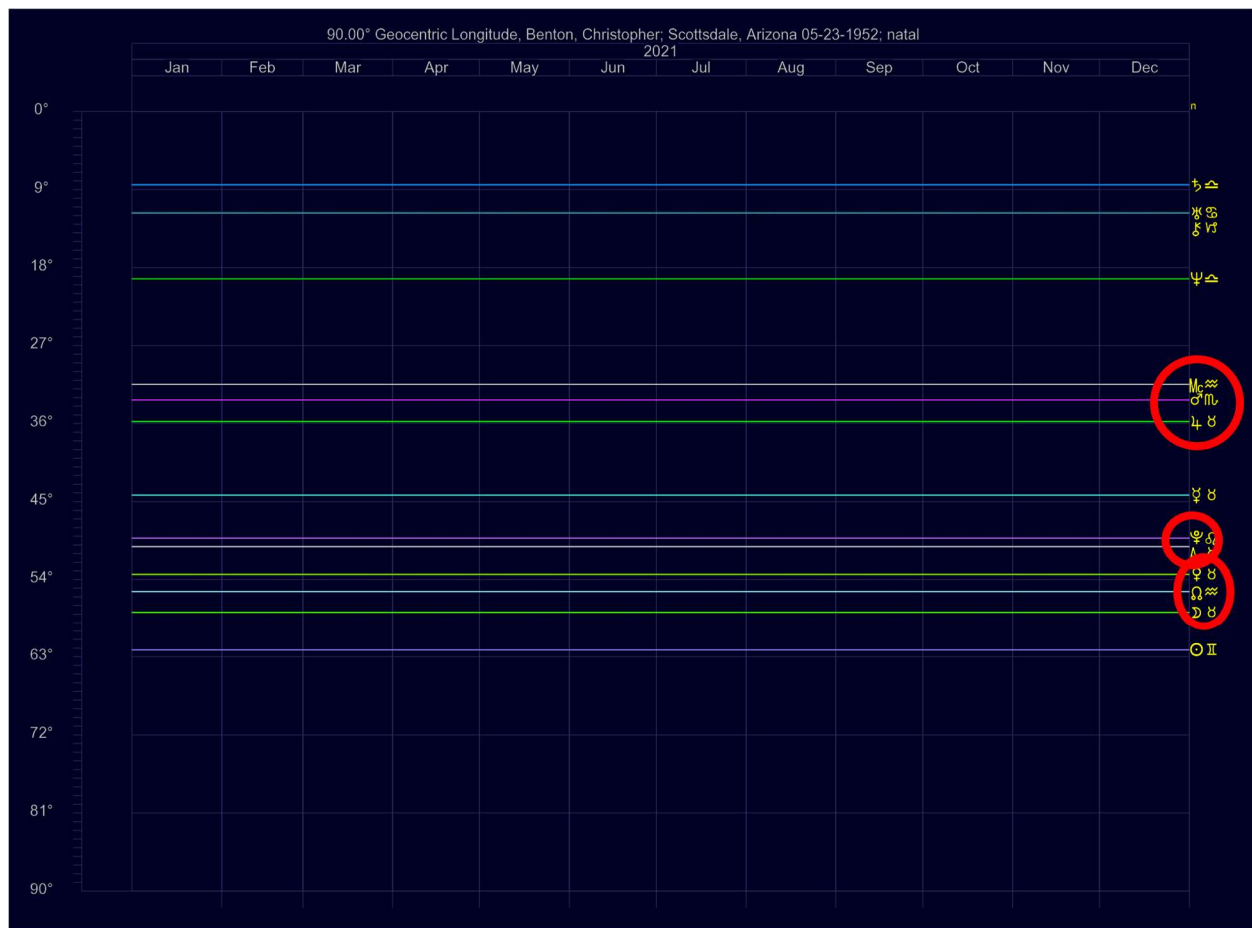


360° Graphic Ephemeris

However, one might like to narrow in specifically on 4th harmonic aspects between the planets, or in other words, we want to readily identify planets that are either 0°, 90°, 180°, or 270° from one another. We can do this quite easily by instructing our program to create a 90° ephemeris for the time period in question. In this type of ephemeris, planets that are separated by a 4th 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°.

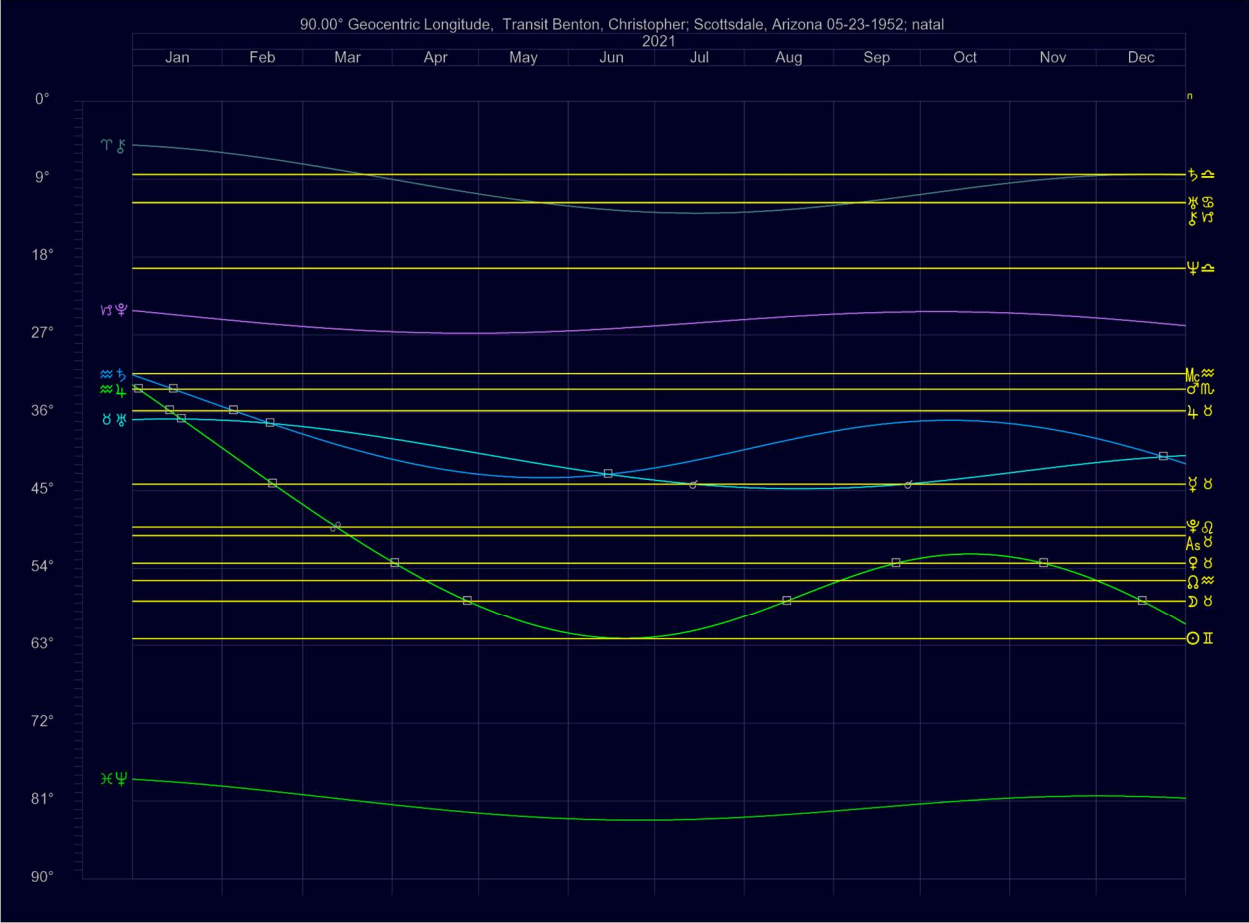


We can also apply this technique to just the birth chart where, in our graph, each planetary position will be represented by a horizontal line. And if we use a 90° graphic ephemeris, then the closer planets are to making a 4th harmonic angle with each other, the closer their positions will be in the 90° 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 4th harmonic relationships with one another.

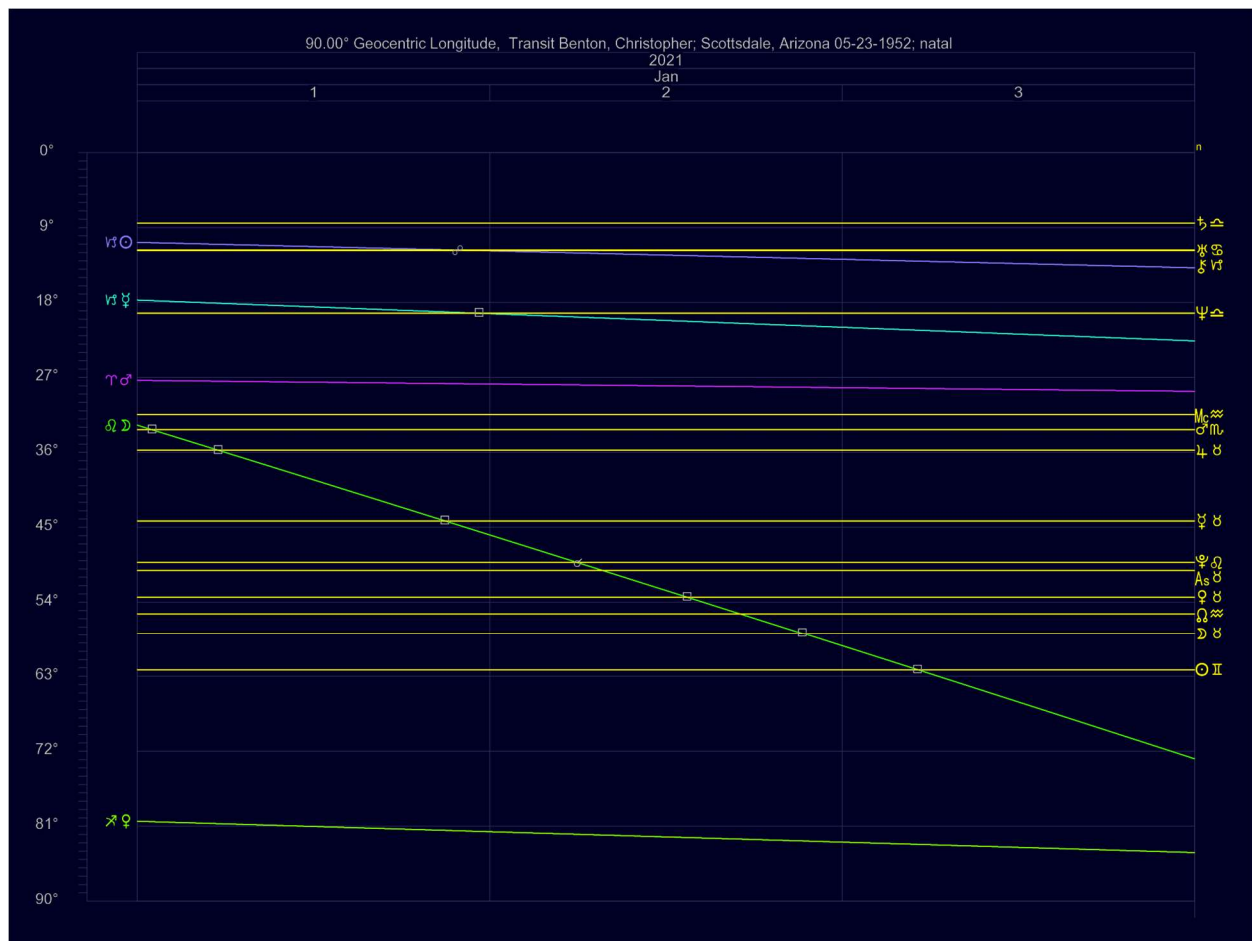


90° Graphic Ephemeris

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.

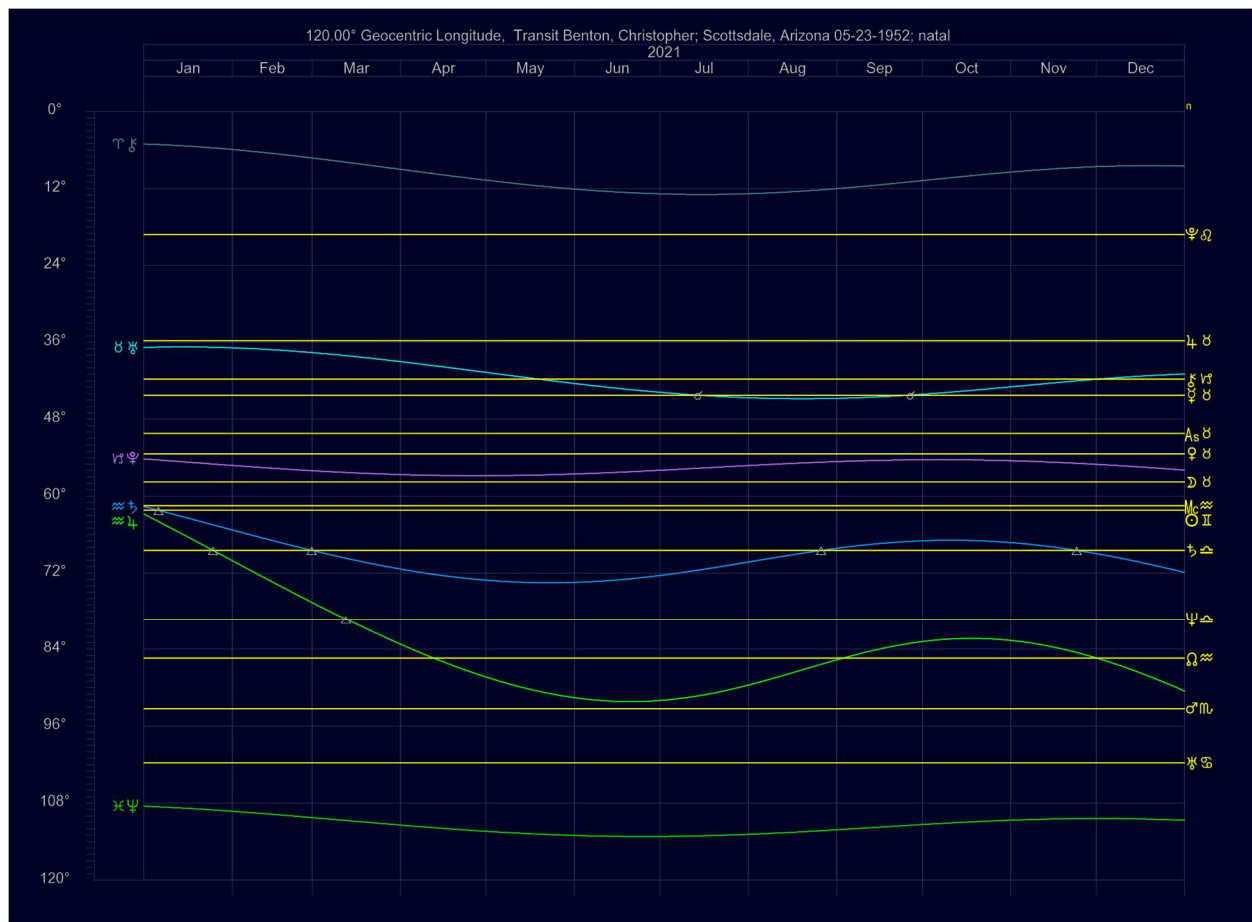


1-year 90° Graphic Ephemeris

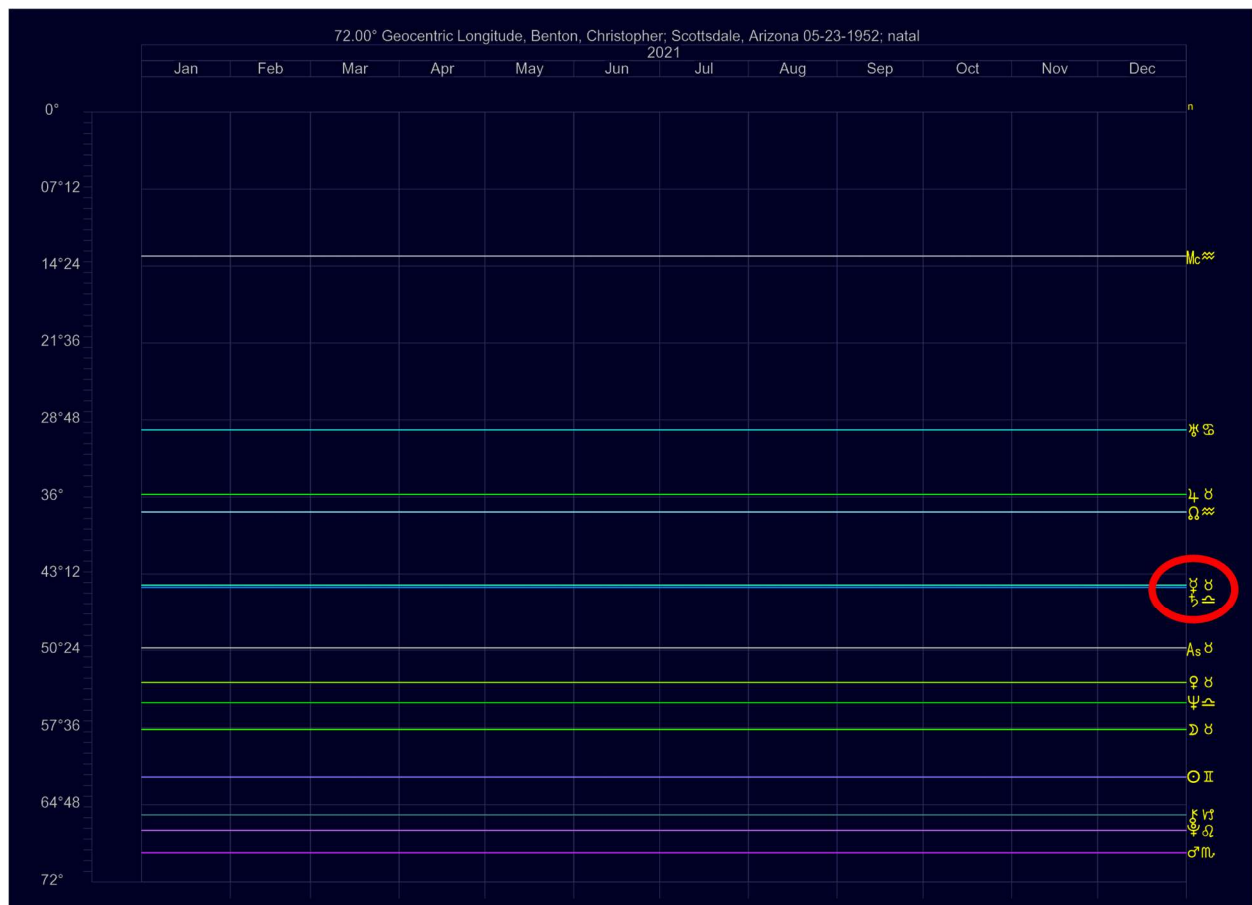


3-day 90° Graphic Ephemeris

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° graphical ephemeris in order to easily identify all outer planets that make a 3rd harmonic angle by transit in the coming year.



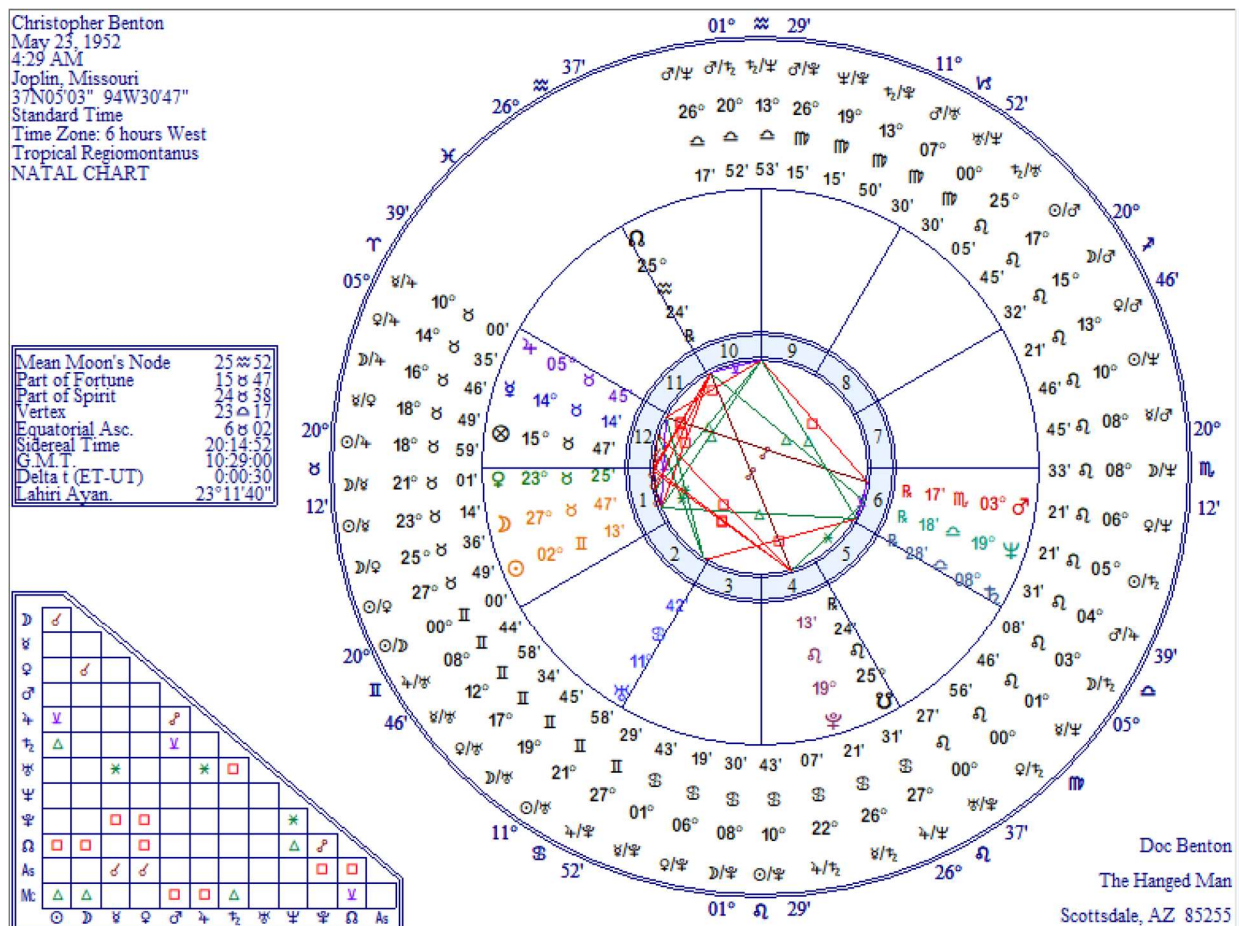
One can also use a graphical ephemeris to help one identify aspects that are generally not so easy to see such as the 5th harmonic aspects or quintiles (0°, 72°, 144°, 216°, and 288°). In the 5th harmonic ephemeris below, the lines for Mercury and Saturn overlap because these two planets are in a strong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



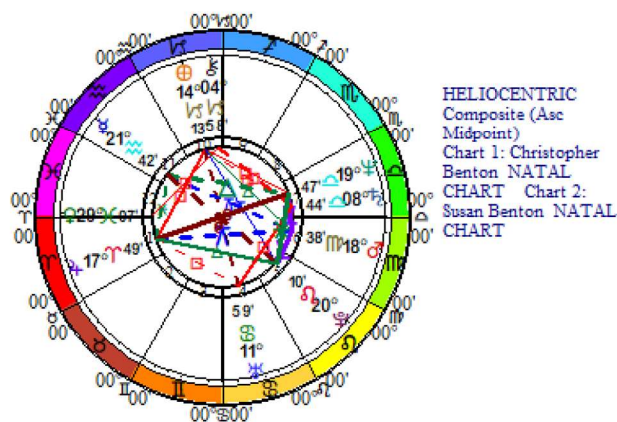
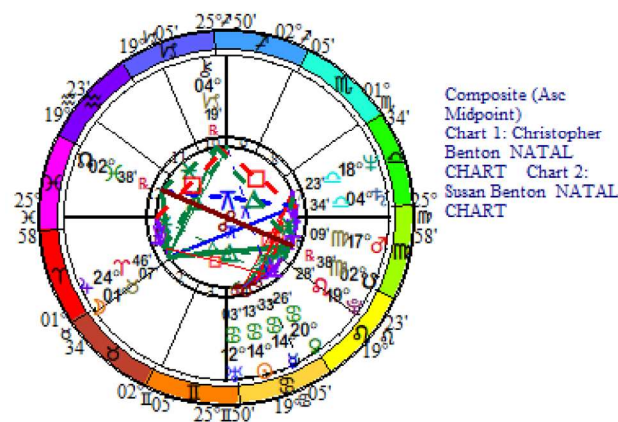
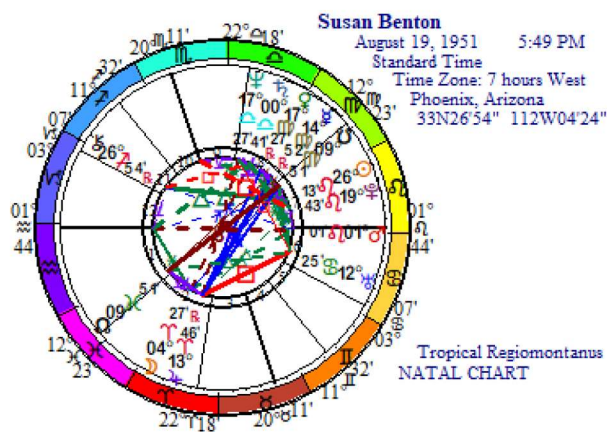
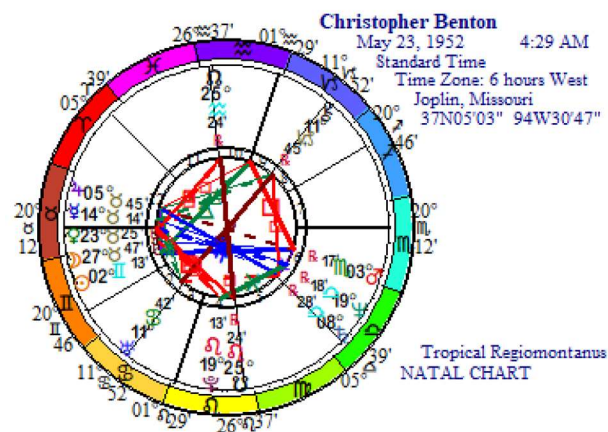
And finally, the graphic ephemeris that I use most often is a 30° graphical ephemeris. The reason I prefer this one is because the aspects that I use most often are the 12th harmonic angles that are based on multiples of $30^\circ = \frac{360^\circ}{12}$. Hence, this ephemeris helps me identify aspects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

QUOTIENT STRUCTURES AND MIDPOINTS

This chapter and the next are little more than short but important footnotes. Namely, that both midpoints and composite charts are examples of quotient structures. In the case of midpoints, every pair of points in the zodiac is identified with the point that is midway between the two in terms of angular distance from 0° Aries. However, every pair of points actually has two midpoints with one midpoint usually being closer to the two points and the other midpoint being 180° away. In that case, we pick the midpoint that is closest to our two points. In another circumstance, though, our two points will be exactly 180° apart in which case they are exactly 90° away from each midpoint. In this case, we'll pick the point with the smaller angle θ as measured on a scale such that $0^\circ \leq \theta < 360^\circ$. This procedure creates a quotient structure in which each pair of points in the zodiac is identified with a particular midpoint, but now we might say that we go one step further and follow this with a 2nd harmonic. In other words, after identifying our initial midpoint, we next create a second quotient structure in which each point is identified with its opposite 180° away. And that is how we create the space of midpoints from a typical zodiac. Below is a copy of my natal chart with all the planetary midpoints highlighted, and in this wheel it is the angular distance between planets that is divided out and replaced by the “average” position of the two heavenly bodies. Yet another way in which quotient structures appear within astrological theory.



QUOTIENT STRUCTURES AND COMPOSITE CHARTS



5

⁵ Well, I said that this chapter would be little more than a footnote, and so it is. Above are both geocentric and heliocentric charts for me and my wife, and since I already interpreted them in a previous chapter, I won't repeat that analysis here. Recall, though, that the composite chart is a chart that many people have found useful for describing certain aspects of a relationship, and it is formed by finding the midpoints between the "like planets" in the two charts, and by "like planets" I mean this. Find the position of the Sun in the composite chart by finding the midpoint of the Suns taken from each individual chart using the rules elucidated in our previous chapter. Next, repeat this procedure for the Moons, the Mercuries, and every other pair of like objects. Since we are constructing planetary midpoints, the result is, of course, yet another quotient structure. When we are comparing two charts, we usually begin with synastry which is an analysis that looks at the aspects that the planets in each chart make with the other, and synastry teaches us a lot about how each individual either coordinates or fails to coordinate with the other. In contrast to this is the composite chart where the two have literally become the one. The composite chart shows how the two function as a single unit, and when this chart has a lot of balance and organization, it can signify a relationship with a depth that goes beyond just the planet to planet comparison. Additionally, it is sometimes not the geocentric composite chart that shows the greatest organization and symmetry, but the heliocentric composite chart, and when this happens the two people can combine at a very deep soul level to create something truly magnificent!

QUOTIENT STRUCTURES AND THE SABIAN SYMBOLS

One of the greatest astrologers of the 20th century was Marc Edmund Jones, PhD (1888 – 1980). Dr. Jones made immense contributions to our understanding of modern astrology and its application, but today he is also known for his part in the creation of the *Sabian symbols*. The Sabian symbols are a collection of psychic interpretations for of the 360° of the zodiac. The name *Sabian* was initially used in connection with a series of classes that Dr. Jones began to teach in 1920, and the name itself was picked by the students. In retrospect it has also been explained as referring to a religious sect mentioned in the *Koran* as being contemporaneous with Christians and Jews, an Aramaic word related to “baptism,” and as a modern version of the Hebrew word for “hosts” as in the appellation “Lord of hosts.” One of the students in this group was a young woman named Elise Wheeler who was confined to a wheelchair due to severe arthritis, but who was also a very talented psychic. Hence, they met one day in 1925 in San Diego’s Balboa Park, and for the next few hours Dr. Jones would place a randomly chosen card face down that had a degree of the zodiac on its unseen down face, and Ms. Wheeler would then give a terse psychic explanation of that degree. After the initial presentation, a few of the degrees were revisited and changes were made, but eventually the final project was published to become what we know today as the Sabian symbols. Also, the Sabian symbols are not the first attempt to find meanings in the individual degrees of the zodiac, for example Chaubel (1826-1908) did his own, but they, the Sabian symbols, are certainly the most popular interpretation of individual degrees and the most widely used today.

The Sabian symbols are important to us because they are, of course, yet another example of quotient structures in astrology. Specifically, they are, of course, a 1st harmonic where every degree that is equivalent *modulo* 360 is seen as the same., and this results in us wrapping back to 0° once we hit 360°. However, there is another important way in which quotient structures appear in these symbols. Namely, in that every fraction of a degree leading up to that degree point is identified with that particular degree. In other words, if θ is an angle such that $0^\circ < \theta \leq 1^\circ$ in any sign, then θ is associated with the Sabian symbol for 1° in that sign. Similarly, if $0^\circ < \theta \leq 2^\circ$ in any sign, then θ is associated with the Sabian symbol for 2° in that sign and so on, and in general if $(n - 1)^\circ < \theta \leq n^\circ$, then the Sabian symbol for θ is the interpretation for n° in the particular zodiac sign. Consequently, the differences between the various angles θ in the interval $(n - 1)^\circ < \theta \leq n^\circ$ are divided out, and all the angles in this interval become equivalent to one another. We could also say that we are modeling the infinite number of points on a circle with this finite sampling of just 360, and then we are assigning an interpretation to each of these 360 points. And that is how quotient structures appear in this construct!

Do the Sabian symbols actually work? Are they anything other than the ramblings of a misguided psychic? Well, what I can say for certain is that they are very intriguing and that they always stimulate thought, and that in itself makes them very worthwhile. As an example, the closest aspect in my chart is Chiron at 12° Capricorn in opposition to my Uranus at 12° Cancer, and the respective Sabian symbols for these points are *Natural wonders are depicted in a lecture on science* and *A Chinese woman nursing a baby haloed by divine light*. It may be just a coincidence brought on by ambiguity, but nonetheless, I find these interpretations very meaningful when applied to my own quest for enlightenment, and, thus, I have to conclude that the Sabian symbols are quite useful even if they do turn out to be nothing more than an arbitrary fiat!

QUOTIENT STRUCTURES AND ENLIGHTENMENT

When I was in elementary school, I began reading books about yoga and meditation and spiritual masters who had attained enlightenment, and that was the beginning of a lifelong quest to achieve the same. But what is enlightenment? What do we mean by that term? There has always seemed to be an assumption by people that enlightenment is associated with terms like ultimate bliss and overcoming the subject-object dichotomy, but these terms also need clarification. Also, both these terms seem to be more descriptive of the non-verbal, right-brain than they are of the language dominated left-brain. However, it seems that “enlightenment” should also have a left-brain component because, otherwise, if there is no change in the left-brain, then one might return from these ecstatic experiences with all the same prejudices and misconceptions as before. And, indeed, there are many spiritual giants who say that enlightenment depends entirely on how our left-brain interprets things, and one could argue that this is the whole thrust of *jnana yoga*, the branch of yoga that attempts to achieve enlightenment entirely through logic and reasoning. Also when I was young, gurus and other spiritual practitioners seemed to place great emphasis on the experience of happiness and bliss, but in the process this makes pain and unhappiness the enemy, and it is difficult to attain oneness when one is surrounded by enemies. Thus, in my eyes, the pursuit of greater happiness is not always the same as the pursuit of enlightenment, but, nonetheless, the two still seem intertwined in some way, and, hence, there is still much to reconcile and to explore.

The prayer of the religious mystic is often something like, “Make me one with everything!” This prayer, however, raises two very important questions. Namely, what do we mean by everything, and what do we mean by oneness? We can address both of those questions by appealing to mathematics. In mathematics we usually use the term *set* as a synonym for *collection*, and this, for example, is the intent when we talk about something like a set of china, i.e. a collection of china, and when we speak of the union of two sets, what is meant is simply that we combine one collection with another. Thus, we could characterize every object, every perception, as a set consisting of just that one object, and then *everything* could be understood as the union of all such sets or objects. Furthermore, if each set can also be thought of as an object of perception, then we can conceive of everything as being synonymous with the union of every possible set, and we might even call it the *set of all sets*. However, when mathematicians did this at the divide between the 19th and 20th centuries, they quickly ran into problems. For example, given any set we have a well-defined way of constructing another set that is larger, and this holds true for even infinite sets, and the consequence of this is that in mathematics we actually have an infinite number of infinities of different sizes. If we can find a rule that establishes a one-to-one correspondence between the members of two sets, then we say that they are of the same size, but on the other hand, if we can show that such a correspondence does not exist, then we conclude that one of the sets is larger than the others. For example, the natural numbers, $\mathbb{N} = \{1, 2, 3, \dots\}$, represents an infinity that has the same size as the set of even natural numbers, $2\mathbb{N} = \{2, 4, 6, \dots\}$, since the rule $n \mapsto 2n$ establishes the sought after one-to-one correspondence. On the other hand, we can mathematically prove that the natural numbers cannot be put into one-to-one correspondence with the set of real numbers \mathbb{R} (the infinite continuum of numbers defined by the number line), and, therefore, the two sets represent infinities of different sizes. However, since every natural number is also contained in the set of real numbers, it follows that the real numbers correspond to the larger infinity. In mathematical symbolism we can write this as $|\mathbb{R}| > |\mathbb{N}|$. Thus, in mathematics there exist infinities of different sizes. But let’s get back now to the problem

associated with the *set of all sets*. The problem is that there are ways in which it is paradoxical and self-contradictory, and perhaps the paradox that is easiest to understand is the one known as *Cantor's paradox*. In a nutshell, this paradox boils down to the fact that if the set of all sets is really a set, then nothing should be larger than it since it contains everything including all other sets. But on the other hand, as explained above, we have a well-defined procedure for constructing a larger set from any given set. But how could any set possibly be larger than everything? That is the problem and the paradox, and at the very least it tells us that the set of all sets is not a set after all since it doesn't follow the same rules that sets follow. Hence, in mathematics, we refer to this union of all possible sets as a *class* in order to emphasize that it is different in some ways from whatever a *set* is. If we now take set theory and use it as a model for perception, then in this model every possible perception will be thought of as a set and vice-versa. However, if this is the case, then the union of all things will fail to be a perception since it is paradoxical. Hence, mathematics suggests that the union or totality of all things must be intrinsically unknowable and never an object of perception in the same way that a chair or even an idea are objects of perception. The totality of all things certainly contains all things, but at the same time it is fundamentally different in ways that are beyond perception. Interestingly, this is a truth that was intuited centuries before mathematics clarified it. For example, we have the concept of the *Great Mystery* that some Native American tribes have used to refer to divinity, and in the *Tao te Ching* we read, "*The Tao that can be named is not the Tao.*" Likewise, almost two thousand years ago the Talmudic sage Rav Huna stated, "*Whatever things you see are but parts of the ways of the Holy One, blessed be He,*" the implication being that *God*, as the totality of all things, is a whole that is unknowable even though we can perceive the parts that are contained within that whole. Thus, from a mathematical perspective, we can conclude that what we think of as *God* is something that is intrinsically unknowable, and thus, to paraphrase the *Tao te Ching*, "*The God that can be named is not THE God.*"

There is another way in which we can think of the concept of union, however, both within and without the discipline of mathematics, and this other concept is implied by *Genesis 2:24*, "*Therefore shall a man leave his father and his mother, and shall cleave to his wife; and they shall be one flesh.*" Similarly, in *Matthew 19:5-6* we read, "*Therefore a man shall leave his father and his mother and hold fast to his wife, and the two shall become one flesh, so they are no longer two but one flesh.*" In mathematics if two become one, then that means that the difference between the two objects has been divided out. In other words, we are talking about a quotient structure. Hence, instead of *union* meaning to combine one collection with another in order to get a larger collection, its usual meaning within set theory, the *two becomes one* form of union always refers to forming a quotient structure. But given this notion of union, then how are we to interpret the *union of all things*? Simple! The union of all things, as a quotient that removes the differences between things, is a state in which all differences between all things have been divided out. Hence, all distinctions between all things have been removed as a result of this union. Additionally, for clarification we will use U_S to denote the usual union of sets, and U_Q to denote union as a quotient structure. Thus, we might say that $\{tree_1\} U_S \{tree_2\} = \{tree_1, tree_2\}$, but $tree_1 U_Q tree_2 = forest$, and we'll call the former the *set union* and the latter the *quotient union*.

As a model for awareness, the quotient union U_Q creates a quotient structure in which the difference between two or more perceptions has been divided out, and in terms of perception, the quotient union of all things results in a state in which all distinctions have been removed including the subject-object dichotomy, what many would characterize as *pure awareness* or *consciousness-without-an-object*. If we explore this further, then we might conclude that awareness acts like the number 0 in addition or the null

set \emptyset under traditional set union. In other words, just as $0 + 1 = 1$ and $\emptyset \cup_S A = A$, so does *awareness* \cup_Q *object* = *object*. Hence, every perception can be thought of as a *quotient union* between awareness and the object, and the *quotient union* of all things is a state of *pure awareness* or *consciousness-without-an-object* since the distinctions between all objects have been removed. In symbols we could write this as *awareness* \cup_Q (*all objects*) = *awareness* \cup_Q *awareness* = *awareness*. Furthermore, there is a definite aspect of nullity to the quotient union of all objects, \cup_Q (*all objects*), since in this state no distinctions exist between anything, thus making it the ultimate unknowable. However, nullity is also implied by the union of all sets, \cup_S (*all sets*), since the paradoxes involved with this concept imply that it is also unknowable as any sort of collection. Hence, we might also represent these conclusions by the equations *awareness* = \emptyset and $\emptyset = U$. In other words, in the province of the mind there is no distinction between awareness, the Void, and the union of all things (both \cup_S and \cup_Q).

Within the Void there is no separation between things, and, hence, it represents the ultimate oneness or non-duality. Likewise, it is natural to equate *love* with *oneness* as it implies the phrase *two become one* in the Biblical verses quoted above. Hence, there is also a sense that as we perform *quotient unions* of more and more things, we also experience more and more love and oneness. It is for this reason that states of consciousness that exhibit more love and oneness are frequently characterized as *spiritual* while states at the opposite end of the spectrum are not. However, this incremental approach to *oneness* can also be a trap. In other words, by making a distinction between so-called spiritual states and non-spiritual states we are also setting up one to be *good* and the other to be *bad*, and this results in a less-than-enlightened quest to exalt one and suppress the other. Consequently, eating from the *Tree of good and evil* brings about not enlightenment, but instead an ongoing battle between good and evil that leads to an inevitable fall into duality. However, consider also *Isaiah 45:7*, “*I form the light, and create darkness; I make peace, and create evil; I the Lord do all these things.*” If we can understand that *light* and *dark* come from the same source, then we have a chance to escape duality by focusing on that source.

We are now in a position to provide at least somewhat of an answer to the questions that we posed at the top as to what enlightenment is. In particular, is it a right-brain experience, or is it a left-brain understanding? In my estimation, it has to be both! In other words, so-called *enlightenment* should be both a state of absolute oneness that is experienced and a state that is properly understood by the intellect. Otherwise, it is incomplete, and that is where the majority seem to be. In other words, the majority seem to be caught up in the noble struggle of good versus evil, but that very struggle itself simply perpetuates the conflict. To me, a path that leads away from this duality is found by considering more deeply the equation *awareness* \cup_Q *object* = *object*. The interpretation of this equation is simply that when we turn our awareness to some object, we perceive that object. However, since the *quotient union* removes the distinction between the objects being united, it makes just as much sense to write *awareness* \cup_Q *object* = *awareness*. Written this way our equation is a statement that every act of perception is also a uniting of awareness with an object, and each object perceived both points back to and disappears into awareness at the moment of perception. Thus, when fully understood, nothing is an obstacle to *enlightenment* or the *awareness of awareness* since every perception, both good or bad, points us back to that oneness. Hence, rather than engaging in the eternal struggle of good versus evil and dwelling in a state of near-but-not-complete enlightenment, I find it better to let every perception lead me back to that *oneness*. A similar technique has been described by Ramana Maharshi who urged people to focus on finding an answer to the question, “Who am I,” and by the Zen Buddhist masters who asked

the question, “What was your face before you were born?” Both questions urge a person to redirect awareness back upon itself, and, again, this focus on self may be summed up in the equation $awareness \cup_Q awareness = awareness$. In summary, the enlightened will see both good and evil as distractions from oneness. As the author of *Ecclesiastes* says (in more literal translations), “*Vapor of vapors, all is vapor!*” All perception is, indeed, nothing but vapor or hot air, but nonetheless, it is through our perceptions that we learn about various things, and learning defines a purpose for perception. Furthermore, even if *good* and *evil* are, in the long run, both empty experiences, good is nonetheless more pleasant than evil, and its pursuit brings one, in a sense, closer to enlightenment even if it, too, is ultimately just another addiction to be overcome. Thus, all things being both equal and equally empty, there is nothing lost and something gained by always choosing good over evil.

People often look upon enlightenment in a *discrete* or *binary* fashion. In other words, you’re either enlightened or you aren’t, and enlightenment comes in a flash! However, quantum physics has taught us that everything is characterized by paradoxical opposites, and thus, we can also think of enlightenment as a process that proceeds along a *continuum* that is *non-binary*. Looked at in this fashion, we can further analyze enlightenment through our *cycle of becoming* as described in a previous chapter. Through the lens of this cycle, enlightenment is a process that unfolds through stages that begin with an initial vision and that culminates in the inevitable union. Additionally, when viewed as a process, we might say that the moment of *enlightenment* corresponds to the full moon phase of this process. In other words, the “Aha!” moment of illumination signifies the end of only the first half of our journey! Remaining is the assimilation of this epiphany and its consequences into our lives. And so who is enlightened, and am I enlightened? I believe the correct answer to these questions is everyone and no one, and yes and no. Everything is perfect and in a state of oneness if we but realize it, and as William Blake wrote, “If the doors of perception were cleansed everything would appear to man as it is, infinite.” If we can but see the divinity contained within awareness and realize that there is no part of our experience that is not permeated by that awareness, then we are probably enlightened enough. Furthermore, this is the whole purpose of both life and astrology, to create greater and greater wholes by forming more and more quotient structures via quotient unions, and by doing so, we achieve our purpose for being here, and that is when we finally partake of the *Tree of Life*.

In summary,

- *God* or the *totality of all things* is essentially unknowable in the usual sense, and for that reason it makes just as much sense to say that *God* is evil as it does to say that *God* is good, and to say that *God* does not exist is just as truthful as the statement that *God* does exist!
- While *good* can bring us, in a sense, closer to enlightenment, ultimately both *good* and *evil* can be distractions or obstacles to a final awareness of the *self*.
- Nonetheless, *good* is preferred over *evil* simply because it makes the journey easier for everyone.
- If you experience *good*, then ask yourself who experiences good? If you experience *happiness*, then ask yourself who is happy? And even if you experience *unhappiness*, then still ask yourself who is unhappy? Inquiries such as these can eventually lead you back to your true self.
- Every quotient structure, every “Aha” moment, is a creative act in which the many unite to become the one. However, most of us get caught up in living a life where we are constantly reacting to the various things around us, and this just reinforces our bondage. Instead, focus on being creative. We are here not to be constantly reacting out of fear or desire to our various

perceptions, but to learn and to grow, and each level of growth is punctuated by a moment of “Aha!” Thus, focus not on those fears and distracting desires, but instead focus on what you are here to create. That is what matters the most, and if you do this for yourself, then you will also simultaneously be helping others, too.

- The *cycle of becoming* describes the process of union, and the moment of “Aha” or enlightenment is only the halfway point of this cycle. It is only the point at which we become the *hanged man* as in the tarot card where a man hanging upside down is suddenly seeing the world from a very different perspective. However, following this change of perspective is a process of assimilation that also has to occur.
- And who is enlightened? Ultimately and paradoxically, everyone and no one. Enlightenment is not an object of perception, but rather a correct understanding of perception. And while states of happiness and oneness will invariably be experienced along the way, the correct understanding of perception transcends all states of being.
- Enlightenment is not oneness, but the correct understanding of oneness. Nonetheless, one must experience oneness before one can understand it.
- The *union of all thing* can be understood with objects present or without objects present, and it can be known for either what we call an extended period of time or just for an instant. It can be accompanied by an aura of light and wisdom, or it can come with no such external clues. If an enlightened person perceives happiness, then that happiness is to them just a revelation of the joy of enlightenment, and if, instead, they perceive evil, then to them that evil is just a passing phase that has no substance, and then they will let even that perception of evil point them back to the unity found within awareness.
- The equation $awareness = awareness \cup_o object = object$ is just a formal way of saying something that is quite profound when experienced. Namely, that once one realizes the impossibility of separating, at the moment of perception, the perceiving awareness from the object perceived, then one begins to realize that unity and diversity are just two sides of the same inconceivable coin, and at this point it matters not which side of the coin one is focused on. Regardless of whether one is perceiving oneness or multiplicity, one still understands the underlying “coin,” the true nature of things.
- In the aftermath of enlightenment, one’s awareness will continue to occupy the sock puppet known as the body until that bundle of energy has run its course. However, perceptions, both good and bad, will then be like scenes in a movie. They will all be observed and all point back to the observer, but they won’t be so strongly identified with as they were before. If the perception is joyous, then one will revel in the joy of it, and if it is not so joyous, then one will simply observe its passing, nudge it toward joy if possible, and always let even it redirect one’s self back toward *self-awareness*.
- And am I enlightened? Well, again the truth is that I am neither more enlightened nor less enlightened than anyone else. I know what I know, and I seek to keep knowing. Even for the so-called enlightened, there is still no end to what one may learn while incarnated within this *world of separation*. And even while I perceive what is often seen as the current sad state of the world, I also know that each perception is actually just another face of the whole since nothing ever occurs separate from the wholeness of consciousness. Thus, even though I am no different from anyone else, still feel free to call me *Grumpy Buddha* if it pleases you!

Questing

Astrology

QUESTING ASTROLOGY

Typically, people go to an astrologer to learn more about three things – will I be healthy, will I be successful, and will I find love? Those are the things that people seem to be most interested in. However, concerns miss the deeper meanings of both life and astrology. Hence, instead of focusing on these concerns, I suggest that instead people should focus on discovering why they are here, what they have to learn, and what path should they be following in life. In other words, life is a quest for knowledge and experience, and the horoscope can help one understand the quest that one is on and how to complete it successfully. Each person's life and each horoscope is a "hero's quest," and our task is to illuminate that quest. To accomplish this, I recommend the following guidelines for chart and life interpretation:

- The first thing to realize is that, as humans, we are all more alike than not alike. Hence, the differences between us are in many ways very subtle. One person may be a little more extraverted while another tends toward introversion, or one person may focus more on things that are concrete while another is more abstract. Thus, interpreting their horoscope well is in many respects just a matter of figuring out what their particular orientation is.
- Also, keep in mind that we want to find the person in the horoscope. By that I mean rather than saying things that sound like "you are this" or "you are that," focus, instead, on helping both you and them discover how they are manifesting the various eases and tensions suggested by the horoscope. In this regard, I often find it best to first ask a person to tell me about their experiences in a particular area of their life, and then I'll tell them what their horoscope suggests that their experience might be. In other words, the focus should always be on the person's actual life and not what we think their life should be based upon their horoscope.
- When interpreting either my chart or someone else's, I find it better to focus on general, underlying principles first, and then I may list a few common ways for some particular configuration to manifest in their lives and then, lastly, I may ask how they relate to that and what specific things have occurred in their life that they don't mind sharing with me. In particular, neither say categorically that this or that will happen, and don't be fatalistic. Remember that people have free will and that they can always turn lemons into lemonade (or vice-versa!) if they wish to. A good example of this comes from the chart of a good friend of mine who has his natal Jupiter within 27 minutes of being exactly conjunct his Midheaven. Jupiter is our drive to grow and expand, and the 10th house is traditionally connected with honors and status in society. Hence, the usual off-the-cuff interpretation would be that there is no way that this person could fail to be successful! However, the reality of his life is just the opposite. He is intelligent, but poor and hasn't had a sustained career. So how could this possibly be? Well, first of all, there are many astrologers who tend to overinterpret a chart, in my opinion, by making grand pronouncements of what will or won't happen because they "saw" it in the chart. Hence, let's go back and see what's really going on. First of all, the 10th house represents our social space or environment just as the 4th house represents our personal space or environment, and in both environments our brains automatically establish a hierarchy of what's important to notice and what we can ignore. For this reason, the 10th house tells us what people will honor us for, not whether we will be famous or not. Hence, with Jupiter strongly conjunct the cusp of the 10th house, this tells me that

my friend will experience his most growth through interactions with others in the social environment. Furthermore, people will tend to honor him for qualities related to Jupiter. This includes things like his philosophical and spiritual interests and his friendliness and positive, jovial nature. Also, Jupiter rules Sagittarius which is on the cusp of his 5th house of personal creativity, and this suggests that people will honor him for his personal creations as well as the recreation that he brings into other people's lives. That is what the horoscope says in general terms, but as for the particulars, we can only get that from the person themselves, and in my friend's case, while he has always been poor and without an ongoing career, he does indeed project warmth and friendliness, and people have always honored him for his intense interests in spirituality and spiritual growth. Furthermore, he is a singer/songwriter, and people have also always honored him for his music, both vocals and guitar. Hence, there are many ways in which we can see Jupiter conjunct Midheaven manifesting in his life in spite of him not being rich or even middle class. Still, even after we find this person in his chart, we also should ponder why this particular individual didn't experience the type of success that we often associate with such a placement of Jupiter, and in my friend's case I believe this is because he also has Neptune (dissolution) conjunct Saturn (structure) on the cusp of his 3rd house (the mind). Neptune represents a drive to dissolve or blur the boundaries between things, and as such, it helps us let go of the old so that we can embrace the new, and the energies of Neptune are often expressed as "spiritual." Saturn, on the other hand, is our drive to control or regulate ourselves, and we often associate it with the sort of well-defined boundaries that make something concrete. With these two planets conjunct the 3rd house cusp, it appears that the intent was to enter this world with an inspired mind. In that regard, my friend has been only partially successful. What has actually happened is that he has a mind that is always channeling this and that from spiritual realms, and while that is good, the conjunction of Neptune with his Saturn on the cusp of his 3rd house seems to have also had the effect of making his thinking sometimes scattered and unfocused. And I think this has hindered his ability to succeed at least in material sense. From a spiritual or personal evolution point of view, only he can assess whether he has achieved his goals or not in this life. From my point of view, however, he is a success. He is musically talented, spiritually inspired, and gives joy to his friends. These are accomplishments that I think are more meaningful than things like the size of one's bank account. Keep in mind, though, that we never know for certain what a person has come into this life to accomplish, and without knowing that for certain, we also can't know how successful their incarnation has been in achieving their goals. But, nonetheless, if we understand both their chart and their life well, then we might be able to help them reach the next level of their evolution.

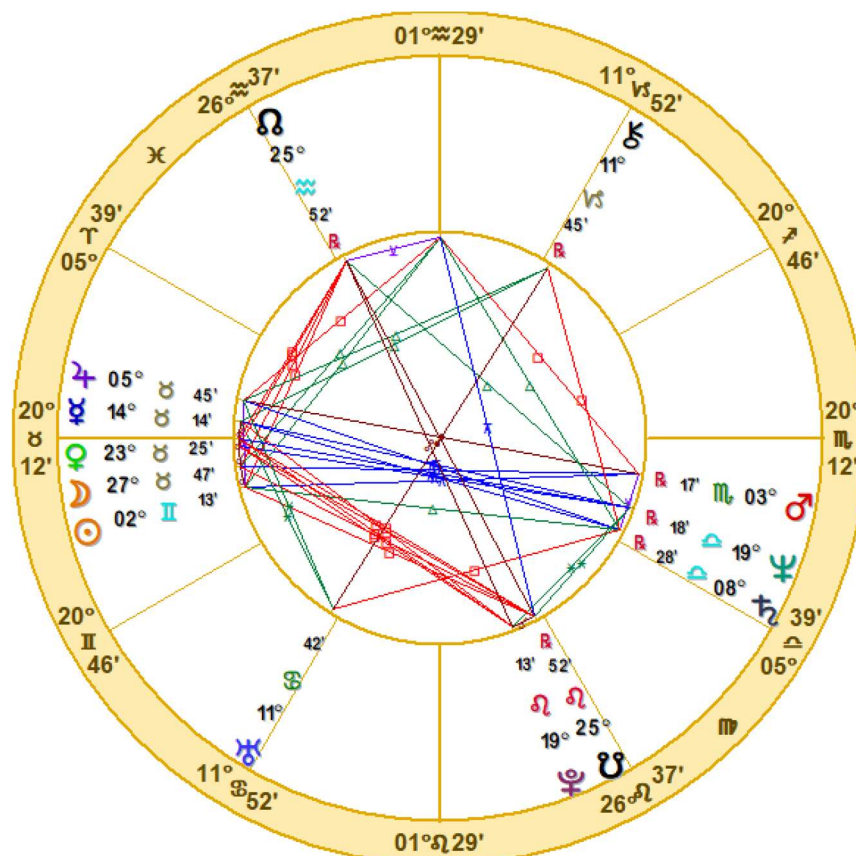
- When looking at any horoscope, one wants to zero in on where the focus is. Much of the initial focus is shown by the positions of the Sun, Moon, and Ascendant, and the aspects made to each of these points. In particular, notice which aspects in the chart are strongest because these are the ones that are usually most likely to influence a person's life for good or bad. Also, aspects like sextiles and trines indicate allies for a particular planet while squares tell us when two planetary drives will have difficulty in expressing themselves simultaneously in a well coordinated manner.
- Pay attention also to patterns that seem to be prevalent in a chart. For example, a person may have most of their planets all crowded together in a single house, and that puts a special emphasis on those house activities. Or, a person's chart may be dominated by several oppositions or a grand trine. In the former case, this suggests a person who will spend a lifetime trying to integrate the

drives at opposite poles of the opposition, and in the latter the grand trine represents a very stable structure that the person will tend to return to time and time again.

- As an aid to determining the strength of various indications in a birth chart, one can employ what are known as astrodynes or cosmodynes. These are an attempt to objectively measure the strength of various elements in a chart, and I tend to find them pretty accurate. Of the three major astrological programs I own (Solar Fire, Sirius, and Win*Star), only Solar Fire appears to calculate astrodynes, but one may also be able to find astrodyne reports for sale online. However, whether one uses astrodynes or just eyeballs the chart, the goal is the same – to understand the particular astrological emphasis that has made this person the way they are.
- In analyzing a horoscope, there is no single, correct way to proceed. Nonetheless, I usually begin by looking at the Sun, Moon, and Ascendant as well as the aspects associated with them. Then I usually move on to the other personal planets (Sun through Mars) and then follow this with the outer, non-personal planets (Jupiter through Pluto including Chiron). Along the way, I endeavor to relate each planet to the sign and house that it occupies or rules in order to add additional nuance to my interpretation. Furthermore, DO NOT OVERINTERPRET! As usual, I recommend beginning with broad statements about the fundamental meaning of the particular planetary placements, suggest a few ways in which influences like this typically manifest, and then ask the person whose horoscope it is to fill in the remaining blanks. Always keep in mind that the goal is not to dazzle someone else with your mastery of the stars and your ability to make incredibly specific predictions whether they come to pass or not. Instead, your job is to help the other person find themselves within the chart, to understand the various cycles that influence their lives, and to realize the quest that is defining their lives.
- After analyzing all the details seen in the birth chart, I usually like to look next at some arc transform charts. Recall that every horoscope consists of cycles trying to achieve a state of union, and the arc transform charts that you will want to create represent those planetary combinations whose union the person is most eager to achieve, and these particular combinations may be determined by looking at those aspects in the chart that are closest and strongest and most prominent and by also simply asking the person what planetary influences feel strongest in their lives.
- After the arc transform charts, there are often a few harmonic charts that I want to look at, but not that many since my experience in that area of astrology is still somewhat limited. The two that I am most interested in are the 12th harmonic chart and the 60th harmonic chart. Since $30^\circ = \frac{360^\circ}{12}$, all aspects that are exact multiples of 30° (the conjunction, semisextile, sextile, square, trine, and opposition) are converted into exact conjunctions. Thus, this chart highlights the structure that remains once the major 12th harmonic unions are completed. In the 60th harmonic chart the quintile aspect is added to the list, and thus, the 60th harmonic chart represents who one will be after an even more thorough integration has occurred.
- And finally, I like to look at the heliocentric chart which puts the Sun at the center instead of the Earth. This chart is generally represented without the Moon (since from the Sun's perspective, it occupies the same position as the Earth) and without an Ascendant, Midheaven, or houses (since, again, these points are only defined with respect to a geocentric chart). Instead, we are presented just with signs from the Sun's perspective and aspects between the planets. In interpreting the heliocentric chart, it is generally felt that the geocentric birth chart is more representative of the personality and all the issues it has become involved with through incarnating on Earth while the

heliocentric chart represents the motivations of a level of the soul that is beyond individual karma and identity. Hence, by looking at the heliocentric chart we can get a much better idea of what abilities we came into this life with (beneficial aspects) and what planetary unions are still a work in progress (difficult aspects). And that's it! That's the end of the first step of understanding who you are. The next step is to analyze and understand the cycles you are engaged with in order to understand who you might become. But that analysis is a different story for a different time!

And now it's time to apply the above to my own horoscope, and let's begin first with a description of who I am. I was born in 1952 in Joplin, Missouri, but within six months we had moved to Texas, first to San Antonio and then to Baytown outside of Houston where my dad worked as a chemical engineer at the enormous Exxon refinery. Growing up I was always attracted to both mathematics and mysticism. I easily found joy in solving the puzzles of mathematical homework, and as an adult I went on to complete a PhD in mathematics specializing in group theory which I usually describe as the mathematics of permutations and symmetry. I was also very attracted to psychology for the same reasons that I was also attracted to astrology and other forms of divination as a child. Namely, I wanted to know who I am and what my purpose in life is, and psychology and astrology both seemed to be addressing that need. Growing up I was uncoordinated, and I felt far from popular, and I eventually took ballet in order to improve my coordination. That activity bore fruit as I eventually wound up with dance scholarships from the Houston Ballet Foundation, Harkness Foundation, and the American Ballet Theatre School, and I wound up dancing in musicals with Barbara Eden and Ginger Rogers. Back injuries, however, eventually took their toll on my dance career, and so eventually I had no choice but to get a PhD in mathematics instead. And now let's look at what my horoscope might say about me!

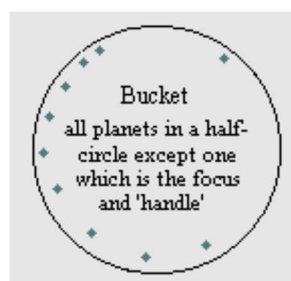


In looking at any horoscope the trick is always to figure out what makes that person unique and different from other people, and I often find it helpful to make a list of those things that stand out. So, here is my list of things that I notice immediately when I look at my own chart.

- Sun in Gemini in the 1st house
- Moon in Taurus in the 1st house
- Taurus rising
- Several planets in earth signs
- Several planets in fixed signs
- Jupiter and Mercury in the 12th house
- Conjunction between Sun and Moon
- Conjunction between Moon and Venus
- Grand trine involving Sun, Midheaven, and Saturn
- Uranus sextile Mercury
- Chiron opposite Uranus
- Jupiter opposite Mars
- Lunar nodal axis conjunct cusps of 5th and 11th houses
- Pluto square Mercury, Ascendant, and Moon
- Uranus square Saturn

Chart Type and Elemental Balance

Marc Edmund Jones was one of the most influential astrologers of the 20th century, and in addition to his role in developing the Sabian symbols, he also emphasized the importance of understanding the general meaning of how the planets in someone's horoscope are distributed. In my case the distribution conforms to what Jones called a "Bucket" pattern. In other words, all of the planets are contained within one half of the chart except for one, and this distribution invokes the image of a bucket with a handle, and in my chart the handle is the planet Chiron. Whatever planet is the handle will also be a major influence in your life, and with Chiron as my handle this suggests that "transcendence" will be a major theme in my life. This is indeed the case. From mid-elementary school on, personal enlightenment and spiritual evolution have been my primary goal even as I went on to other achievements at the same time. Also, as we proceed with this chart analysis, we'll come back to Chiron again to add more details.



Now let's look at the elemental balance in my chart. This information and more is found in the series of graphs below. From them we can see that most of my planets are in earth and air signs. Hence, my approach to things is almost always thinking oriented rather than feeling oriented. In other words, I reflect

more upon what I think about something rather than how I feel about it. Furthermore, earth signs tend to be more introverted in their thinking. More likely to stew or reflect inwardly about things. In contrast to this, air signs represent a more extroverted expression of thoughts, and in my case I have both tendencies though I tend a bit more toward introversion and inward contemplation since so many of my personal planets are in earth signs.

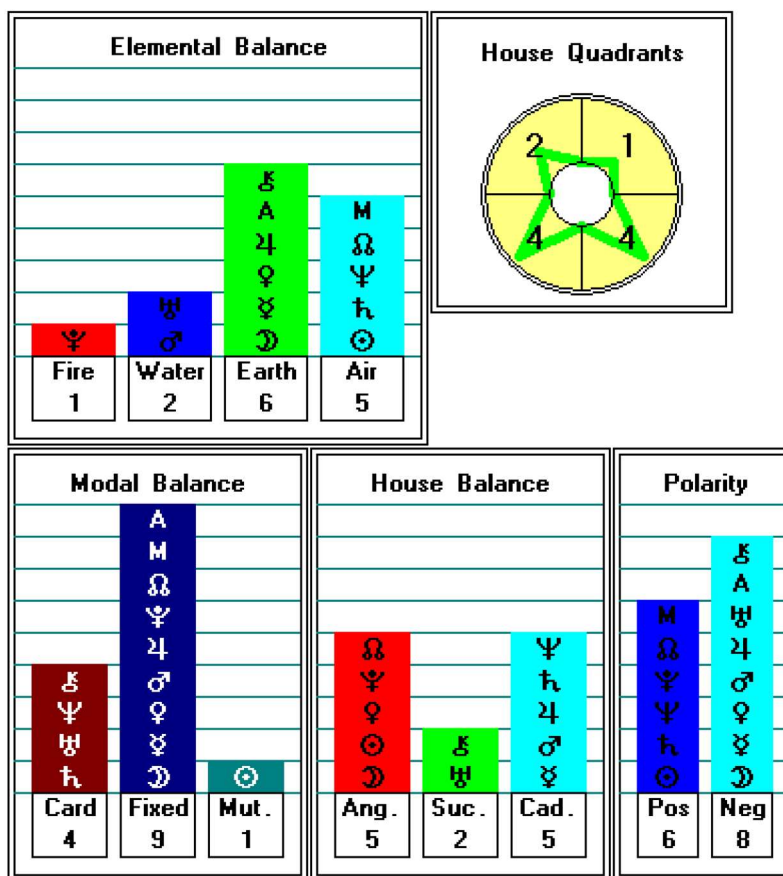
The distribution by house quadrant below shows that I have 8 planets in the bottom half of the chart (the personal environment) and only 3 above (the social environment), and also 6 planets on the left side of the chart (the self) versus 5 planets on the right side of the chart (others). This suggests that I like to be by myself more than with others and to prefer my personal environment over social environments. Once again, this is very much the case, and the fact that most of my personal planets are on the left side of my chart emphasizes my comfortableness with isolation and being by myself.

The modal balance shows 9 planets in fixed signs, 4 planets in cardinal signs, and only 1 planet in a mutable sign. The fixed signs have a temperament that is inclined toward enduring. Many will see this as stubbornness, and to that I say that persevering is a valuable trait that results in goals being reached rather than discarded, and that is very, very true of my life. People with planets in cardinal signs tend to initiate things, and in my case not only do I have only 4 planets in cardinal signs, but they are also all outer planets, Saturn and beyond, and not the more personal planets. Hence, with so many of my planets in fixed signs I would much rather help maintain the initiatives of others rather than start them myself. And finally I have but one planet in a mutable sign, but it is an important one, the Sun. The mutable signs are feedback signs which analyze how the maintenance of initiatives is coming along, and then they can respond with whatever adjustments are needed. Hence, in my case, I am mostly stubborn and persevering, but I can also bend and adjust when I need to. It just takes a little time.

Next let's look at the house balance below. Whereas the astrological signs reveal the temperament or mode of expression that a planetary drive will prefer, the astrological houses reveal actual activities without regard to temperament. In my horoscope I have 5 planets in angular houses, 2 in succedent houses, and 5 planets in cadent houses. The angular houses start activities, the succedent houses engage in support activities, and the cadent houses make adjustments. Most of my angular planets are personal planets in the 1st house, and so most of the actions I initiate are centered around things that pertain primarily to myself. Second to this are my cadent house planets which are all in either my 6th or 12th houses. This shows that my activities will focus secondarily on adjustments that have to be made with respect to either self (6th house) or society (12th house). We'll add more details to this below when we talk about planets in houses. Lastly, I have two planets in succedent houses, which normally engage in support activities, but in my case the planets are Uranus and Chiron and they are each within just a few minutes of being exactly conjunct the cusps of the 3rd and 9th houses, and thus, they function more as planets in cadent houses instead of succedent houses. The bottom line, though, is that with this kind of house distribution I tend to initiate lots of actions that pertain to myself, and then I analyze the results of those actions.

And lastly regarding polarity, I have 6 planets in masculine signs and 8 planets in feminine signs. Masculine signs tend to be more assertive while feminine signs are more passive and receptive. The masculine signs are also the air and fire signs which are more extroverted while the feminine signs are the earth and water signs which are more introverted. Hence, I tend toward introversion with the exception that I do like to

periodically interrupt my introversion with an occasional extroverted display of my thoughts on a subject, just as my Sun in Gemini (air sign) suggests.



Planets in Signs

The signs represents the personality or mode of expression that a planetary drive will gravitate to when expressing itself. Below we give a terse interpretation of the sign placement of each planet in our horoscope.

Sun in Gemini

With my Sun in Gemini, my left-brain and abstract thought are emphasized. It is natural for me to try to analyze things to see what makes them tick. Some Geminis excel in abstraction and scientific exploration while others do not properly discipline their brains and are more like chattering monkeys. I tend to be like the former. Also, my Sun is within the first 6 degrees of Gemini (the 1st fifth, like a waxing quintile) and, thus, at my core I witness everything with a childlike innocence.

Moon in Taurus

The Moon is our persona, the mask we put on for interacting with the world, and with my Moon in Taurus I appear much more reserved and quieter than my Gemini Sun would suggest. I tend to appear as grounded, practical, enduring, and somewhat stoic, but those that I let see what's behind the mask also

get to experience my playfulness and intellectual glee. Additionally, my Moon is in the last 6 degrees of Taurus (the last fifth, like a waning quintile), and consequently, my persona likely expresses the most mature aspects of Taurus, i.e. the perseverance, vision, and steadiness of an adult in old age rather than the stubbornness of a child.

Mercury in Taurus

Mercury corresponds to the functions of the left-brain, and with my Mercury in Taurus, I like stability and my thoughts about something tend toward consistency and endurance. Similarly, I've solved many a problem just through sheer persistence. Furthermore, at 14° 14' my Mercury is in the 3rd fifth of that sign. Hence, my capacity for left-brain thought is like that of a mature adult in their prime.

Venus in Taurus

Venus is the *pleasure principle*, the drive to reduce tensions. However, in the process of determining what reduces and what creates tension, we automatically create a map or worldview of what we like and what we don't like, and this in turn results in value judgements regarding what we consider good and what we don't consider good. This non-verbal set of values, in turn, is related to our right-brain, non-verbal perception of reality, and with Venus in Taurus I want reality to feel stable and nurturing. I also have the traditional Taurus desire for comfort, and with Venus in Taurus my affections for people are enduring over time. I am not fickle or constantly changing in that regard. Also, since my Venus is at 23° 25', it is in the 4th fifth of the sign and its sense of pleasure and relaxation is more refined like that of an adult who has recently become an elder.

Mars in Scorpio

Scorpio is a sign that is introverted, feeling oriented, and fixed, and it tends toward deep, enduring feelings. In its opposite Taurus it is thought that tends to endure whereas in Scorpio it is the feelings that one has that tend to persist. With my Mars in Scorpio, I tend to have strong feelings and passions about many things, and consequently, it is important not to let my passion for something or a position turn into uncontrollable anger that is based on feelings that overwhelm rational thought. Because Mars is retrograde, many of these tendencies will be experienced more subjectively rather than objectively. Furthermore, Mars is within the 1st fifth of the sign, and, thus, my mastery of aggression is more like that of a child.

Jupiter in Taurus

Jupiter is our drive to grow and expand our horizons, and with my Jupiter in Taurus I learn best in an environment that is both stable and thinking oriented. Additionally, since my Jupiter is in the 1st fifth of this sign, growth is a marvel and a delight to my inner child.

Saturn in Libra

Saturn is our drive to regulate and control ourselves, and the end result of such control can be balance and justice. In the sign of Libra, Saturn seeks balance in relationships with others. Libra is also a thinking oriented sign, and so relationships with others through this sign are also cerebral and based upon how you think about the other person. Additionally, since Venus is the natural ruler of Libra, I want harmonious relationships that are both rational and balanced. Also, since Saturn is retrograde, there is within me more

of a focus on inner rather than just outer discipline, and since my Saturn is in the 2nd fifth of Libra at 8° ♎ 28', I embrace discipline with all the strength and enthusiasm of a teenager or young adult.

Chiron in Capricorn

Chiron represents our drive to transcend and go from the personal and individual to the nonpersonal and cosmic. In many people, though, this planet functions more on a subconscious level than a conscious level. Also, with my Chiron in Capricorn, I am drawn to ancient wisdom when it comes to spirituality and enlightenment. I was born in 1952, and Chiron was in Capricorn from about 1952 through 1954. This is a generation that will find enlightenment through studying ancient ways and disciplines. Furthermore, my Chiron is retrograde, and so it is inner discipline and enlightenment that I seek. Furthermore, my Chiron is at 11° ♐ 45' which puts it in the 2nd fifth of Capricorn. Hence, I approach enlightenment with all the zeal of a teenager that has reached puberty.

Uranus in Cancer

Uranus is our drive to break up the existing pattern and rearrange the pieces in novel ways. It represents both genius and creativity and also the hyperactive state of mind that is needed for both. With Uranus in Cancer my creativity stems from my feelings about things. For instance, my creativity is guided more by what feels like the proper thing to me rather than letting rational thought guide the process. Also, I am at my creative best when I feel secure within my own personal environment. Additionally, Uranus is in the 2nd fifth of the sign at 11° ♋ 42', and this indicates that my creativity is maturing and strong like a young adult.

Neptune in Libra

Neptune is a drive to dissolve the boundaries between things, and it can help us heal and move on by helping us forget the past. In Libra, Neptune focuses on ideal relationships, and this position was common around the year of my birth. Specifically, most people born between 1943 and 1956 have Neptune in Libra, and we were also the flower children of the sixties. In my chart, Neptune is at the beginning of the 4th fifth of the sign at 19° ♎ 18', and this indicates a level of maturity with respect to all things Neptune. Furthermore, my Neptune is retrograde, and that suggests that inward contemplation and visions tend to take precedence over outer expressions of art and beauty.

Pluto in Leo

Pluto is the planet of death and transformation, and when it is in Leo it is the very self that seeks to be transformed. Its sojourn through Leo took place from about 1938 to 1957, and this denotes a generation that sought to change and transform itself. Additionally, with Pluto at 19° ♌ 13', it is in the 3rd fifth of the sign, and so its expression is like that of an adult in their prime.

South Node in Leo

With the lunar nodal axis in Leo/Aquarius there is an emphasis on creativity, both personal creativity and group creativity. Also, the South Node represents old karma and old patterns that are easy to fall into, and for that reason it is also known as the path of least resistance. With the South Node in Leo, there is a focus on the individual self, personal creativity, and personal recreation. Also, with the South Node at 25° ♌ 24', it is in the last fifth of Leo and this suggests that with regard to personal creativity that one is like an old, retired elder.

North Node in Aquarius

In Vedic astrology the lunar nodal axis is characterized as a snake with the South Node being the tail and the North Node being the head. Furthermore, the head also represents a mouth with a voracious appetite. Hence, the North Node represents what we are still hungry for, and with my North Node in Aquarius I am hungry for friends, working with others, group harmony, and creative collaborations with others. Furthermore, with the North Node in the last fifth of Aquarius at $25^{\circ} \approx 24'$, I am hungry to function as a wise elder in the realm of friendships and creative collaborations.

Signs in Houses

Now we'll look at the meanings of the signs on the cusps of each house.

Taurus on the 1st House

I see myself as practical, grounded, thinking oriented, enduring, and steady in all things.

Gemini on the 2nd House

I use my wits and my abilities for abstract thought and the identification of patterns to help me survive.

Cancer on the 3rd House

In analyzing something I am guided by how it makes me feel and my own need to feel secure.

Leo on the 4th House

My home is my castle and the place where I can feel most myself.

Leo on the 5th House

When engaged in personal creativity and recreation, it is natural for me to focus most on myself and my own creative process.

Virgo intercepted in the 5th House

A secondary influence on personal creativity is that joy can be found in attention to the details and in serving others.

Libra on the 6th House

I gravitate toward developing relationships with others at work as I focus on bringing myself and my personal environment into balance.

Scorpio on the 7th House

Relationships are particularly intense for me and are full of desires.

Sagittarius on the 8th House

Group wisdom, philosophy, education, and religion all help me to maintain relationships while expanding my horizons.

Capricorn on the 8th House

I gravitate toward ancient wisdom.

Aquarius on the 10th House

I am honored for my creativity and progressive views as well as my ability to work with others. I understand the power of the group as a force for good.

Aquarius on the 11th House

Feedback and help from others can greatly assist me in my creative projects and in achieving my goals.

Pisces intercepted in the 11th House

The sign of Pisces is wholly contained within my 11th house, and this indicates a strong secondary tendency to experience group mysticism. That is, I will likely work with particular groups in order to achieve mystical or artistic goals.

Aries on the 12th House

I take the initiative when it comes to 12th house activities like solitary reflection and seclusion.

Planets in Signs and Houses

We'll now flesh things out a bit more by looking at the influence of each planet by sign and house,

House 1

Sun in Gemini in the 1st House

I strongly feel my Gemini nature toward thinking and cleverness, and I feel most like myself when I am by myself.

Moon in Taurus in the 1st House

I see myself as steady, persevering, practical, and thinking oriented, and, again, I feel most like myself when I am by myself.

Venus in Taurus in the 1st House

I greatly enjoy whatever I have an appetite for, and I seek peace and harmony and see myself as a kind person. I love the arts, and I generally seek to reduce tensions rather than increase them.

Venus as ruler of House 1

The ruler of the 1st house is in the 1st house, and, consequently, my identification of myself with kindness, the arts, reduction of tension, and perceiving things through my nonverbal, right-brain is even stronger than usual.

House 2

Mercury as ruler of House 2

The ruler of the 2nd house is in the 12th house. Hence, 12th house activities such as meditation, isolation, and withdrawal from society help me survive.

House 3

Uranus conjunct cusp of 3rd House

Technically, when using Regiomontanus cusps, the planet Uranus in Cancer is in my 2nd house, but only by about 10 minutes of arc. Hence, it is going to affect my 3rd house much more strongly, and it suggests a mind that is brilliant in its creativity while being well guided by intuition.

Moon as ruler of House 3

The ruler of the 3rd house is the Moon, and it is placed in my 1st house. Hence, I like to constantly examine and analyze myself based on how things make me feel. I also identify myself greatly with the creativity shown by Uranus in Cancer conjunct the cusp of the 3rd house.

House 4

Pluto in Leo in House 4

The personal or home environment is the arena in which transformation of myself will take place.

Sun as ruler of House 4

With the Sun in Gemini in the 1st house, my mind and myself are my personal environment.

House 5

Sun as ruler of House 5

With the Sun in Gemini in the 1st house, personal creative thought is what I enjoy most.

Virgo intercepted in House 5

The sign of Virgo is wholly contained in the 5th house and does not appear on the cusp of any of the houses. Hence, it's influence is present, but more subtle and harder to perceive. In my case, I like a neat and orderly environment, but not so much that I will go out of my way to create one. It never quite manifests as strongly as those around me would like!

House 6

Saturn in Libra in House 6

Saturn is in the first third of the 6th house, and so its influence will be strong. This position suggests that I will use my powers of concentration and my capacity for self-discipline to help me make whatever adjustments are needed in my personal life. I like tasks that bring structure and discipline to my life and that allow me to meet other people. Since Saturn rules my 9th house,

professions involving religion, philosophy, higher education, or traveling in order to lift up the mind are the most desirable.

Neptune in Libra in House 6

Neptune is in the first third of my 6th house, but only barely. Plus, being further from the Sun than Saturn, it's influence on career, health, and personal adjustments that need to be made is naturally less than that of Saturn. Hence, it's influence on House 6 is there, but definitely not as strong as the influence of Saturn on these affairs. Nonetheless, with Neptune in Libra in the 6th house, I am drawn toward working in areas that are related to both Neptune and to working with others (Libra). This includes things like psychology, mysticism, and the arts, and I have been involved in all of those things. Nonetheless, Saturn is stronger, and so I ultimately gravitated toward occupations that involved both science and great discipline.

Mars in Scorpio in House 6

My Mars is near the end of the second third of the 6th house and in the same sign as that on the cusp of the 7th house. Hence, Mars has a mild influence on 6th house activities while also mildly relating to the 7th house. By itself, Mars suggests a profession that is physical and passionate. My brief dance career combined all of the influence of my 6th house – physical activity (Mars), passion, performing with others (7th house), artistry (Neptune in Libra), and discipline (Saturn). However, the weakness of the position of Mars suggests that this career would not be sustained, and it wasn't. As is often the case, stronger influences prevailed.

Venus as ruler of House 6

Venus as ruler of Libra on the cusp of the 6th house but placed in the 1st house suggests an occupation that is artistic and involves working with others, but also one that puts the focus back on myself. Dancing satisfied some of those needs, but so also did teaching math. As a teacher, I was the center of focus of every class I taught, and I approached each lecture as an example of performance art.

House 7

Pluto and Mars as rulers of House 7

The ruler of the 7th house is in the 4th house, but relatively close to the cusp of the 5th house and the North Node. This suggests that things that happen in the arenas of the home, sexuality, and personal creativity are what will transform me, and such is the case though the details are personal and belong entirely to me. One of my astrological colleagues likes to describe Pluto as the spiritual ruler of Scorpio, and I find that a good way to look at it. On a more mundane and less intense level we also have Mars as a co-ruler of Scorpio, and its placement in the 6th house suggests that the work environment will be my prime arena for interacting with others, and that has indeed been the case.

House 8

Jupiter as ruler of House 8

Sagittarius is on the cusp of the 7th house, and this suggests two things – that I will have an intense desire to explore the secrets of the universe through expanding my mind, and that I will maintain my relationships by, again, expanding my perspective. With Jupiter in my 12th house, these activities will be assisted through my tendencies toward seclusion, meditation, and journeying to other realms in my mind.

House 9

Chiron conjunct cusp of 9th House

Technically, Chiron is in the 8th house under the Regiomontanus house system, but since conjunction with the cusp of the 9th house is within 7' of being exact, it acts as though it is in the 9th house. Furthermore, since Chiron is also in Capricorn, this suggests that I'll seek transcendence through the study of ancient wisdom, and that, indeed, has been very much the case in my life where I have consistently turned to the ancient wisdom of philosophy, astrology, religion, and mathematics.

Saturn as ruler of House 9

The ruler of my 9th house is in my 6th house, and this suggests an occupation involving the collective knowledge of humankind. My life as a mathematics teacher certainly fits the bill.

House 10

Uranus and Saturn as rulers of House 10

The ruler of the 10th house shows what people will honor you for, and in my case the 10th house has two rulers. The ancient or mundane ruler of Aquarius is Saturn, and the modern or spiritual ruler is Uranus. With my Saturn in Libra in the 6th house, this shows that people will honor me for my hard work and for trying to establish harmonious relationships with others. Additionally, with my Uranus conjunct the cusp of my 3rd house, people have always honored me for my creative intellect.

House 11

North Node conjunct cusp of 11th House

The North Node represents unfinished desires and business that we have an appetite for. Technically, my North Node is in the 10th house, but once again it is so close to the cusp of the 11th house (within one degree) that it will likely function more as an 11th house planet, and since the 11th house represents friendships and working creatively with others, this suggests a person who has all their lives just longed to have a friend. And that is certainly true of me. When I was little, my parents moved us into a neighborhood with few kids to play with, and all my life I've felt that lack of close friendship.

Uranus and Saturn as rulers of House 11

As mentioned above, the ancient or mundane ruler of Aquarius is Saturn, and the modern or spiritual ruler is Uranus. With my Saturn in Libra in the 6th house, this shows that I will primarily find friends and collaborators through work. Additionally, with my Uranus conjunct the cusp of my 3rd house, my creative endeavors will guide me in finding likeminded friends.

Pisces intercepted in House 11

The sign of Pisces is wholly contained in the 11th house and does not appear on the cusp of any of the houses. Hence, it's influence is present, but more subtle and harder to perceive. In my case, this points to mystical aspirations and desires for enlightenment. However, since Pisces is never on the cusp of any of the houses, this urge manifests more as an advocacy than a vocation.

House 12

Jupiter in Taurus in House 12

My 12th house is rather large as it encompasses about 45 degrees, and Jupiter is in the last third of the house which means that it is also looking to the 1st house. As a 12th house planet, Jupiter suggests retreating into isolation in order to grow and expand, and its presence in Taurus suggests sustained effort in this direction. Nonetheless, because it is much closer to the 1st house cusp than the 12th house cusp, the need to isolate for growth will likely be seen as a fundamental characteristic of oneself. And that is, indeed, a truism about me.

Mercury in Taurus in House 12

At 14° 8' 14", Mercury is even closer to the cusp of the 1st house than Jupiter, about 6 degrees from exact. Hence, like Jupiter, Mercury casts a glance to the first house. What all this suggests is that, much as is the case with Jupiter, I will do my best thinking when I isolate myself with just my own thoughts, and I see this as an intrinsic characteristic of myself.

Mars as ruler of House 12

The ruler of the 12th house is in Scorpio in the 6th house but will also have influence by sign on the 7th house. This influence is likely minor compared to that of the planets in the 12th house, but nonetheless, it suggests an occupation that allows for isolation while also working with others. In my case, engaging in the solitary enterprise of mathematical research and then teaching my epiphanies to students fits the bill. Also suggested are physical forms of spirituality like hatha yoga and Tai Chi Chuan, both of which I practiced in my youth. Additionally, the 12th house / 7th house connections suggest that there is an urge to find a spiritual partner.

Planets in Aspect

It's generally felt these days that the angles or aspects formed by planets are much stronger and more impactful than either the house or sign placements. Thus, we'll next look at these aspects, and we'll group them by type.

Conjunctions

A conjunction represents the union of two planetary drives, and whether this conjunction is waxing or waning will indicate whether this conjunction represents the first or the final phase of the vision of oneness.

Sun/Moon waning conjunction

Body and soul, feelings and self, are well united within me. Additionally, it is difficult for me to engage in any sort of deception or subterfuge. In other words, what you see is what you get! At a higher level, this waning conjunction can signify one who has realized that the world (Moon) is nothing other than the pure consciousness of the Self (Sun).

Moon/Venus waxing conjunction

Kindness is an important part of my persona and one that I want to carry with me as I go forth into the world.

Ascendant/Venus waxing conjunction

This aspect reiterates the core value of kindness and a desire for art and harmony that resides within me, and since this aspect is waxing, it is a characteristic that I want to carry out into the world.

Ascendant/Mercury waning conjunction

Logical and rational thought are an integral part of my being, and I am basking in the light of what I've already developed as opposed to being in the process of developing something new. In particular, the hidden or occult wisdom (12th house) of the ages is an integral part of my being.

Pluto/South Node waning conjunction

Since my South Node is conjunct the cusp of my 5th house, both my creative and sexual tendencies are intensified, and since Pluto is also the ruler of my 7th house, the urge to merge is particularly strong.

Semisextiles

The semisextile is a major 12th harmonic aspect, but it is not the most noticeable one. I liken it to a first encounter with another person, and now you need to decide whether or not you want to pursue either a romance or friendship. It is in many respects a first step in the relationship between the two drives.

Sun/Jupiter waxing semisextile

The Sun and Jupiter are just beginning their relationship of discovery with each other. This waxing semisextile represents the beginning of an urge to keep growing and expanding one's mind.

Saturn/Mars waxing semisextile

This, too, is the beginning of a relationship between these two planets, and this semisextile represents an urge to combine discipline with physical activity such as in dance or sports.

Midheaven/North Node waning semisextile

It is likely that I will become more prominent in the social environment as this semisextile progresses toward conjunction.

Sextiles

The sextile is like a first date and, as a 6th harmonic angle, it involves both ease and a desire to integrate, as indicated mathematically by the prime factorization of 6 into 2 (opposition) times 3 (trine).

Mercury/Uranus waning sextile

This aspect represents an ease of functioning and good coordination between the left-brain and creativity. Furthermore, since this is a waning sextile heading back toward conjunction, the creative skills represented by this aspect have already been developed and are functioning in a fully mature manner.

Jupiter/Uranus waning sextile

Like the Mercury/Uranus waning sextile, this one represents an expansive and creative perspective on things, and since it is waning and heading toward conjunction, these are mature skills that are well developed.

Neptune/Pluto waxing sextile

This aspect is quite exact, and it is present in all people born close to my birthday. Pluto represents transformation while Neptune rules spiritual states characterized by oneness, and so this aspect represents a higher form of spiritual oneness that is transformative for the world, and there is always a generation that will be characterized by this relationship.

Neptune/South Node waxing sextile

The South Node represents past karma and skills that you bring with you into this life, and with my Neptune making a waxing sextile to it, this can represent past mystical and meditative skills that are readily available to me in this life.

Squares

A square is an aspect in which the two planetary drive involved have difficulty working together in coordination, and a square is, thus, a point at which one may question the entire relationship. Whether to continue or whether to end it. A waxing square asks this question as the relationship is developing, whereas a waning square is more like a midlife crisis. It's one last time to question the viability of the relationship, but if one has made it this far, then I hope the answer is yes!

Moon strongly square both North and South Nodes

In some ways this signifies a rejection of the strong lunar energies represented by the lunar nodal axis. However, that energy exists and cannot be repressed forever. Consequently, this will eventually result in very intense feelings related to the placement of the nodal axis, and since my nodes are conjunct the 5th and 11th houses, this instills in me an intense desire toward creativity in all its forms.

Sun mildly square both North and South Nodes

As it is for the Moon, this aspect will intensify creative and sexual urges that are presented to the self (Sun), but this time the square is mild and about 6 degrees from exact. Hence, it is not too overpowering.

Ascendant moderately square both North and South Nodes

This moderate square to my Ascendant just reinforces the above regarding how powerful, creative energies in my life cannot be ignored, and I must eventually focus on whatever I am here to create.

Ascendant very strongly waning square Pluto

Since the Ascendant always refers to our own self and since Pluto represents death and transformation, and since this aspect is within 1 degree of being exact, this aspect is very important. It suggests severe trauma in my life related to the home environment (4th house) or even to the misuse of powerful creative energies (Pluto near the lunar nodal axis that is conjunct the 5th and 11th houses.). The best path forward, however, involves integrating these energies into my being rather than rejecting them.

Mercury moderately waning square Pluto

As above, trauma and overwhelming creative energies will shape my thinking.

Venus moderately waning square Pluto

Again as above, trauma and overwhelming creative energies will shape my feelings.

Mars strongly waning square Midheaven

There is a tendency for authority figures to trigger anxiety or anger within me, but integration of Mars traits over time has lessened this reaction.

Jupiter moderately waxing square Midheaven

There are times when my expansive thought and personality will clash with those that are in positions of authority. Hence, some revelations I'll have to keep to myself.

Saturn strongly waxing square Uranus

With Uranus in Cancer conjunct the cusp of my 3rd house and Saturn in Libra near the cusp of my 6th house, I have frequently felt outrage (Uranus in Cancer) upon witnessing injustice (Saturn in Libra), and I've felt a personal responsibility to do something about it (Saturn in 6th house).

Saturn moderately waning square Chiron

This aspect is basically a call to use one's discipline (Saturn) in service of achieving transcendence (Chiron), and since it is a waning aspect, one already knows how to do this.

Trines

A trine aspect represents a high level of coordination between the two planetary drives involved. Consequently, they blend their meanings in a very constructive and harmonious way.

Moon moderately waxing trine Midheaven

Even though there are some aspects in my chart that indicate tension with those in power, others such as this trine indicate that at other times authority figures will be very helpful. Hence, both sides of the coin will be experienced.

Sun very strongly waxing trine Midheaven

In spite of other influences that indicate trouble with others and that push me towards isolation, there is, nonetheless, something regal about me that shines through from time to time. There is something good in me that will hopefully shine through more and more as time goes by.

Sun mildly waning trine Saturn

Even though this particular trine is not strong, it nonetheless, promotes a good ability to concentrate, and since this is a waning trine, this is a skill that has already been developed.

Saturn mildly waning trine Midheaven

Even though this trine is mild in strength, it, nonetheless, suggests that discipline and hard work will result in recognition and professional advancement.

Mercury moderately strong waxing trine Chiron

This aspect suggests a fairly strong drive to transcend the human condition.

Jupiter moderately waxing trine Chiron

As with Mercury, so does Jupiter trine Chiron, and once again this shows an easy drift towards the urge to transcend and to develop a more enlightened state.

Neptune mildly waning trine North Node

Even though this trine is mild in strength, it, nonetheless, bolsters other indications of an appetite for mystical experience.

Inconjuncts

The inconjunct is an aspect that requires adjustments in the relationship between the two planets. If it is a waxing inconjunct, then it is something like a 6th house aspect, and it can signal personal adjustments that have to be made before the opposition is reached. Furthermore, these personal adjustments could manifest in terms of traditional 6th house issues of health and employment, but not necessarily. All we can say for certain is that adjustments of an individual nature have to be made before the relationship can be perfected. If instead, however, it is a waning inconjunct, then that is more like the relationship between the 1st house and the 8th house, and that requires adjustments that must be made to preserve the relationship following its flowering moment at the opposition. Additionally, traditional 8th house topics of death or other people's money could be involved, but again, not necessarily. The situation is like that of a

relationship that has experienced its flowering culmination and now adjustments need to be made to maintain it and keep it going forward. However, what exactly those adjustments should be is, without additional and probably non-astrological information, anyone's guess. Also, note that an inconjunct is neither as much discord as a square nor as much harmony as a trine or sextile. Thus, it's generally not bad, but it does point to areas where adjustments and compromises frequently need to be made.

Moon moderately waning inconjunct Mars

With the Moon in the 1st house and Mars in the 6th house, this suggests adjustments that have to be made between the personality and feelings of aggression that arise at work. Since the Moon is in Taurus, holding one's tongue when necessary is not too difficult, but with Mars in Scorpio, feelings can be strong. Also, since Scorpio is on the cusp of the 7th house, this could also manifest as adjustments to relationships that occasionally have to be made in order to maintain harmony.

Sun strongly waning inconjunct Mars

This aspect reiterates much of what is seen with the Moon inconjunct Mars. Once again, aggressive emotions may arise at work or in relationships, and since my Sun is in Gemini, there is a tendency to view these strong emotions as intellectually justified. The bottom line, though, is to just observe what is taking place without letting it upset you. In other words, control those things that are within your control, but just observe without reacting to or being upset by those things that are beyond your control.

Mercury moderately waning inconjunct Saturn

Mercury is in the 12th house and conjunct the Ascendant as it makes a moderate and waning inconjunct to Saturn. Being in the 12th house, Mercury wants isolation while Saturn in Libra in the 6th house pertains to the work discipline and professional relationships with others. Hence, these two needs, isolation versus socialization, require periodic adjustments in my life and self-reminders not to become too absorbed in my own thoughts.

Mercury moderately waning inconjunct Neptune

As is the case with the previous aspect (Mercury inconjunct Saturn), my mind that likes to work in isolation will have to make adjustments in order to work well with Neptune. Whereas Saturn represents control and discipline, Neptune is connected with states of consciousness that are characterized by weakened or nonexistent boundaries, and in the work environment my brain will have to constantly adjust between boundaries that are too rigid and those that are too loose.

Venus moderately waning inconjunct Neptune

Venus represents not only the drive to reduce tensions and create peace, but also the right-brain and non-verbal ways of perceiving the world. With Venus in the 1st house, it also represents a certain kindness that I identify with. Being inconjunct with Neptune, however, suggests adjustments having to frequently be made to my right-brain worldview as a result of less structured and more mystical perceptions. And since Venus is in Taurus, these adjustments will be made slowly and in their own time. Also, since this is a waning inconjunct, this is all for the sake of preserving a mystical vision that has already occurred (on some level).

Jupiter moderately waning inconjunct Saturn

Jupiter in the 12th house wants to be like a cloistered monk expanding the mind through meditation, but this inconjunct is a reminder that adjustments involving regulation and discipline are also needed from time to time. Furthermore, since Saturn is in the 6th house, these will be personal adjustments that are required. However, since it is a waning inconjunct, the peak of the relationship (opposition) between Jupiter and Saturn has already been experienced at some point.

Midheaven mildly waxing inconjunct South Node

This aspect suggests mild adjustments that have to be made regarding past habits that one incarnates with (South Node) and one's life in the social environment. Since the South Node is in Leo while the Midheaven is in Aquarius, this suggests that a shift in focus from just one's self to the needs of others may have to be made in order to flourish in society. Similarly, since the South Node is strongly conjunct the cusp of the 5th house, adjustments related to personal creativity or sexuality might need to be made. In particular, avoid subjects, sexual or otherwise, that may be upsetting to others.

Ascendant very strongly waxing inconjunct Neptune

This aspect is within a degree of being exact, and so it is quite strong. Furthermore, like all inconjuncts, it points to adjustments that have to be made. In this instance, adjustments have to be made so that the self (Ascendant) can properly coordinate with the artistic or mystical vision that Neptune wishes to realize. That has certainly been my experience in the past. Additionally, since this aspect is waxing, the peak of enlightenment is still a work in progress. Something like this could also manifest as mysterious or nebulous illnesses (6th house) that require personal adjustment, but aside from the fuzziness of past allergies, that doesn't currently seem to be the case.

Oppositions

The opposition of two planets is an extraordinary event in astrology. Regardless of the planets involved, it is like the Full Moon during which there may be a simultaneous awareness of both the Moon's separation from the Sun and its intimate connection to the Sun. Likewise with any opposition there is a flowering of what was only a promise at the conjunction and a simultaneous awareness of both union and individuality. At the opposition or "Full Moon" phase of the two planets things are in full bloom and there is an attempt to integrate the meanings of the two planetary drives together. That, in my opinion, is what the opposition is all about – integration.

Mars strongly waxing opposition Jupiter

Mars is strengthened by being in Scorpio, one of the signs that it rules, but it is otherwise weakly placed. It doesn't make any sextiles or trines to other planets, and with Jupiter so close to the Ascendant and in proximity to Sun, Moon, Mercury, and Venus, its energy will tend to be superseded by that of Jupiter. Thus, there is a need to integrate Martian drives for energy and activity in with the drive to expand and grow, but because of Mars's isolation, such assertion is not always easy or successful. Nonetheless, it is necessary, and much integration has occurred over

the years. Also, since Mars is a co-ruler of the sign on the cusp of the 7th house, relationships with others are impacted, too.

Chiron very strongly waxing opposition Uranus

With only 2 minutes of separation from exact, this is the strongest and most dominant aspect in my chart. Many people speak of Chiron in terms of its mythological representation as a wounded healer, but I see its primary role as based upon its celestial placement in between Saturn and Uranus. This placement suggests that Chiron is the bridge from the personal to the transpersonal in our lives, and it pushes us to be more than what is defined by our personality. Wounding is, in turn, just part of the process of this spiritual liberation. In my life, the quest for truth has dominated everything else since mid-elementary school, and this extremely strong aspect shows why. Uranus is on the cusp of my 3rd house (the mind) while Chiron is in Capricorn on the cusp of the 9th house (ancient wisdom), and the quest for illumination (Chiron) and that flash of enlightenment (Uranus) has been the most constant theme of my existence. Just as astrology predicts.

Pluto mildly waxing opposition North Node

This opposition is not very strong, but it is, nevertheless, meaningful in the context of my chart. As mentioned previously, the North Node is conjunct the cusp of the 11th house in my horoscope, and this has created a longing for a friend all my life. With the involvement of Pluto, this longing is intensified, and with Pluto also being a co-ruler of my 7th house, a spouse who is my best friend as well as my mate is what is most desired.

Planets in Minor Aspect

As I have explained elsewhere, I prefer to use 24th harmonic aspects that are based on multiples of $15^\circ = \frac{360^\circ}{24}$. Those that are specifically multiples of 30° comprise what consider my major aspects, and these include 0° (conjunction), 30° (semisextile), 60° (sextile), 90° (square), 120° (trine), 150° (inconjunct), and 180° (opposition). These major aspects are way stations along the way to a more perfect union between the two planets, and they represent different levels of cooperation and coordination between the two planetary drives as a perfect understanding and blending is sought. They are also the relationships between planetary drives that we are most conscious of. In contrast to these are the remaining 24th harmonic aspects of 15° (1/24 or quattuorvigintile), 45° (semisquare), 75° (5/24 or squile), 105° (7/24 or squine), 135° (sesquiquadrate), and 165° (quindecile). These aspects operate on a more subconscious level, and they indicate energy in motion from one way station to the next.

Quattuorvigintile

If the waxing sextile (60°) is like a first date and the waxing semisextile (30°) is like when two people first say hello, then the waxing quattuorvigintile (15°) is analogous to when you simply see someone across a room and want to go talk to them for the first time. It is the very beginning of something which may or may not pan out, and its movement is toward the semisextile, simply wanting to say, "Hello." In contrast to this, the waning quattuorvigintile is like the last hello before individuality disappears altogether within

that final union. That is the direction of the waning quattuorvigintile. Always moving toward that ultimate oneness.

Mars strongly waxing quattuorvigintile Neptune

In relationship terms, Mars wants to say hello to Neptune and possibly begin a relationship. This would be a combining of physicality or energy (Mars) with artistic or mystical inspiration (Neptune), and since both of these planets are in my 6th house, this relationship may manifest in terms of an occupation. And that is exactly what happened as a young man when I discovered ballet, modern dance, tap, and musicals. The waxing quattuorvigintile always shows the very beginning of what might be a relationship that either endures or doesn't, and in my case it endured long enough to make some important impacts on my life.

Mercury mildly waxing quattuorvigintile Jupiter

Mercury and Jupiter, through, their connections to all the other personal planets I have in Taurus, are already in a fairly good relationship with one another, and this waxing quattuorvigintile holds the promise of good coordination between these two drives of mental activity.

Sun strong waning quattuorvigintile Mercury

The left-brain (Mercury) and the self (Sun) are merging into union. Spiritually, the goal is for thought to merge back into awareness, and that is where I am now. With Mercury in Taurus in the 12th house, it all begins with meditation while in seclusion, but with Sun in early Gemini in the 1st house, the end of the process is like the revelation that Walt Whitman portrays in his epic poem "Song of Myself."

Sun mildly waning quattuorvigintile Venus

This is also a separating aspect and since the absolute distance between the planets is only 8° 49', it is very close to that transition from quattuorvigintile to conjunction. Consequently, the perceptions of the right-brain (Venus) are also being absorbed back into the self (Sun) as is also the case with Mercury.

Moon strongly waxing quattuorvigintile Mercury

Since this aspect is waxing, it is like the very beginning of a relationship, and in this case it signifies learning to express oneself and one's thoughts through the physical body and emotions. Yet another urge that dance helped to realize in my life. This waxing aspect also suggests that a need to publicly express one's thoughts is something that will be felt throughout my life.

Jupiter very strongly waning quattuorvigintile Ascendant

Since this is a waning quattuorvigintile, it represents the coming final union of Jupiter and the Ascendant. In my horoscope, Jupiter rules the 8th house, and as such it represents expansive knowledge of the mysteries of life and death, and all this knowledge is being assimilated by the self as it functions in this world through Taurus rising.

Venus strongly waxing quattuorvigintile Jupiter

Again, since this is a waxing quattuorvigintile, it is the very beginning of a possible relationship between Venus and Jupiter. In particular, this suggests that seclusion and meditation (Jupiter in 12th house) and knowledge of the eternal mysteries (Jupiter rules 8th house) will result in an expansion of art and kindness (Venus in 1st house).

Saturn moderately waning quattuorvigintile Neptune

This waning quattuorvigintile indicates that the merger of the discipline of Saturn with the mysticism of Neptune is almost complete, and since this is in the 6th house it is also likely that this influence may manifest in terms of occupation. And in my life, this has happened in several ways. For example, Saturn/Neptune in Libra in the 6th house is supported by dance (art and discipline), desires I had at one point to become a psychologist (Neptune in Libra), and my ultimate career as a professor of mathematics (Saturn in Libra in 6th house while also the ruler of the 9th house of higher education) who has long viewed mathematics as a spiritual tool (Neptune) for deep understanding.

Sun strongly waxing quattuorvigintile Ascendant

This aspect literally represents the start of my hero's journey through this world, and, thus, even as I go forward with my Gemini nature, I also carry my Taurus Ascendant with me. This aspect in the 1st house represents me quite well as a newborn emerging into this world of union and separation.

Mercury moderate waning quattuorvigintile Venus

This waning aspect indicates the imminent merger of my left-brain (Mercury) with my right-brain (Venus), and as usual, waning quattuorvigintiles always indicate a merger that is almost complete.

Midheaven moderate waxing quattuorvigintile Chiron

This waxing aspect suggests that my quest for transcendence (Chiron) and knowledge (Chiron conjunct 9th house cusp) will ultimately enhance my status in the social environment (Midheaven). However, since most people are not that consciously aware of the influence of Chiron in their lives, they will also likely and often be unaware of what it is doing in my life, too.

Semisquare

The semisquare is an aspect of 45°, half of that of a square. Also, it lies midway between a semisextile and a sextile ($30^\circ < 45^\circ < 60^\circ$), and if we double each angle, then we get a square that is midway between a sextile and a trine ($60^\circ < 90^\circ < 120^\circ$). This suggests that just as a sextile is like a trine but less intense (and likewise to some extent for the semisextile and the sextile), so is the semisquare like a less intense version of the square. It is halfway between the semisextile and the sextile, and if the semisextile represents the first conversation with a romantic interest and the sextile represents the first date, then the semisquare is a point of decision as to whether to pursue that first date or not. And every point of decision is also a point during which energy is in motion. However, as usual, a waxing semisquare will be interpreted differently from a waning semisquare as the former pertains to the early beginnings of a relationship while the latter is a movement of energy in preparation for that final union of opposites.

Saturn moderately waxing semisquare Pluto

Generally in an aspect it is often best to think of the action flowing from the slower moving planet to the faster one. Thus, in this case we'll think first in terms of Pluto's effect on Saturn, and since Pluto is in the 4th house and rules the 7th house and since Saturn is in the 6th house, this suggests that family and relationships could create a degree of frustration that impacts both health and employment. Similarly, my decisions related to regulation and control (Saturn) may often be at odds with 4th and 7th house matters. However, remember that the semisquare is not nearly as strong as the square. Nonetheless, it can add to already existing tensions.

Saturn strongly waxing semisquare South Node

The nodal axis is conjunct the cusps of the 5th and 11th houses of personal and group creativity, and activities in these areas could cause some minor tension in health, employment, and personal adjustments in general.

Uranus mildly waxing semisquare Ascendant

Again I find it best to think of the semisquare as just a slight movement or nudge as compared to a square. I resist the temptation to think of it as being as strong as a square. Hence, with Uranus making a waxing semisquare to my Ascendant, there will always come a moment when I want to do something creative and shake things up a bit, and this will happen in spite of all the planets I have in Taurus that encourage me to maintain the status quo.

Uranus strongly waning semisquare South Node

This aspect results in an intensification of creative energies, and since it is a waning semisquare, there is already an established relationship between the nodes and Uranus. Also, recall that the South Node refers to skills and experiences acquired during past incarnations. Hence, this aspect suggests reveling in creative skills developed in the past as one approaches the union of the creative urge with this lunar intensification. In this case, the South Node is a well of energy and experience that can be drawn upon by my creative urges.

Sun moderately waning semisquare Uranus

Just as with the semisquare between Uranus and Ascendant, this one promises that the need to shake things up and be creative is constant. And since this is a waning semisquare, the creativity within me is not something new, but skills that were already developed. Furthermore, the final merger of self with the creative impulse is in progress and only a matter of time.

Chiron strongly waning semisquare North Node

Just as the waning semisquare of Uranus to the South Node represents past experience with creativity, the waning semisquare of Chiron to the North Node represents a transcendence and enlightenment that is being perfected in this lifetime. As usual, these minor 24th harmonic aspects represent the movement of energy below the surface as we proceed from one way station to the next, and in this case there is a nudge toward an amplification of this energy for transcendence.

Venus moderately waning semisquare Uranus

This waning semisquare suggests a well-developed urge for novelty in both right-brain perception of the world (in general) and in art and romance (in particular).

Moon strongly waning semisquare Uranus

As a waning semisquare, this suggests a well-developed need for new experiences and perceptions and images that are fresh and novel to the brain. Also, this is the fifth semisquare we've seen involving Uranus, and this suggests significant ongoing engagement with the creative process.

Squile

The squile is an aspect of 75° that stands between the sextile and the square. If it is waxing, then it is taking the talent and experienced developed during the sextile and moving toward a time of decision as represented by the square, but if it is waning, then it has experienced the square and is moving toward that the greater harmony of the sextile.

Sun strongly waning squile Pluto

Since the movement is toward a sextile, difficulties with family (Pluto in 4th house) and relationships (Pluto rules 7th house) will likely improve over time.

Moon mildly waning squile Pluto

As is the case with the Sun, this aspect is moving towards a sextile, and feelings about family (Pluto in 4th house) and relationships (Pluto rules 7th house) will, again, likely improve over time.

Mercury moderately waxing squile North Node

Since the relationship is headed toward a square, my deep thoughts (Mercury in 12th house) may eventually arrive at a moment of intense conflict with society and others (North Node in 10th house conjunct cusp of 11th house).

Mars very strongly waxing squile Pluto

Since this is heading toward a square, explosive anger is something one has to learn to deal with over time. However, I also have the talents and experience gained during the sextile as tools to help me. Thus, my physicality and passion can be an asset if used correctly.

Mars very mildly waxing squile South Node

Since this is headed toward a square, past karma (South Node) involving family (4th house), creativity (5th house), health and occupation (6th house), and relationships (7th house) will all eventually have to be dealt with.

Jupiter moderately waxing squile North Node

The movement is toward a square, and, as is the case with my Mercury squile North Node, this is an indication of an eventual showdown between my thirsts for social recognition and working with others versus my desire to grow and meditate in isolation.

Squine

The squine is an aspect of 105° , and consequently, it stands between the square and the trine. If it is waxing, then it takes the experience gained during the square and moves on toward the more favorable trine, but if it is waning, then it has experienced the trine and is moving toward that final square of the relationship. Either way, like all the minor 24^{th} harmonic aspects, it indicates movement now that will result in some sort of harvest later. Thus, one needs to pay attention to one's actions now in order to produce a better future later on.

Mercury strongly waxing squine Midheaven

Since this squine is waxing, it promises honor and recognition for thoughts and mental abilities later on.

Mercury moderately waning squine South Node

Mercury will eventually progress to a square with the South Node which will result in an intensification of mental activity.

Venus mildly waxing squine Midheaven

Venus and the Midheaven are headed toward a trine. This suggests that honor for one's worldview and one's kindness will increase over time.

Mars mildly waxing squine Uranus

Since Uranus is on the cusp of the 3^{rd} house, this suggests that my mental abilities and creativity will increase over my lifetime, as indeed they have.

Mars mildly waning squine North Node

The relationship is moving toward a square which could result in an intensification of desires over time.

Jupiter strongly waning squine Pluto

Things are headed toward a square, and since Pluto is in the 4^{th} house and rules the 7^{th} house, both family and relationships are impacted by this movement towards a powerful confrontation.

Jupiter moderately waning squine South Node

As Jupiter moves from squine to square, thought processes will greatly intensify resulting in quite an expansion of consciousness and worldview.

Uranus very mildly waning squine Neptune

This aspect is headed toward a square, and, thus, my spontaneous mental creativity (Uranus conjunct 3^{rd} house cusp) will eventually disrupt with flashes of enlightenment any sustained, meditative endeavors.

Neptune strongly waning squine Midheaven

As Neptune approaches a square with my Midheaven, my mystical trends will be at odds with the social environment. Hence, not all of my spiritual endeavors will be met with acclaim by society.

Ascendant moderately waning squine Midheaven

Things are headed toward a square, but I don't see this as too serious since the individual is naturally at odds with the other houses on the angles (houses 1, 4, 7, and 10).

Sesquiquadrate

The sesquiquadrate is an angle of 135° that lies between the trine and the inconjunct. Hence, if a planet were to make a sesquiquadrate to, for example, the North Node, then it would form a semisquare with the South Node. This suggests that the sesquiquadrate and the semisquare should have similar meanings, and that is how this aspect is often interpreted. If it is waxing, then things are headed toward the adjustments desired by the inconjunct, but if it is waning, then one is headed back to the ease of the trine.

Sun strongly waning sesquiquadrate Neptune

As a waning sesquiquadrate, this is heading back toward a trine, and it speaks of the artistry and mystical awareness that has grown within me over time.

Sun moderately waxing sesquiquadrate Chiron

The self will make adjustments to both enlightenment and higher wisdom as I age.

Moon moderately waning sesquiquadrate Saturn

Again, it is fortunate that things are moving back toward a trine, and this is a promise that life and control of one's self will improve as one ages.

Moon mildly waning sesquiquadrate Neptune

As is the case with the Sun, the Moon is moving toward a waning trine with Neptune, and this reiterates the mystical oneness and artistic sensibility that will emerge over time.

Moon strongly waxing sesquiquadrate Chiron

As I age, my body and sensations will make adjustments to accommodate higher wisdom and enlightenment.

Venus very strongly waning sesquiquadrate Saturn

Since this aspect is waning, it is moving back toward a trine, and this suggests that as life progresses that I'll find more enduring happiness in relationships. And that is exactly what has happened!

Venus moderately waxing sesquiquadrate Chiron

As I age, enlightenment and higher education will require some adjustments to my worldview.

Saturn strongly waning sesquiquadrate North Node

Since the sesquiquadrate is waning, it is moving back toward a trine, and this suggests great progress towards one's goals and life mission as Saturn progresses to a trine with the North Node.

Saturn moderately waxing sesquiquadrate Ascendant

As Saturn moves toward the inconjunct, it promises that I will have to make adjustments to health, occupation, and my sense of who I am as life progresses.

Uranus strongly waxing sesquiquadrate North Node

As I age, I have to make adjustments involving my creativity and my sense of karma and destiny.

Chiron mildly waxing sesquiquadrate Ascendant

As other aspects involving Chiron have indicated, I will adjust as enlightenment and higher wisdom unfold over time.

Chiron strongly waxing sesquiquadrate South Node

Intensification of enlightenment and higher wisdom will require adjustments as I age.

Quindecile

The quindecile is an aspect of 165° that is close to the opposition which is the "Full Moon" moment in the relationship between the two planets. If it is a waxing quindecile, then there is something in the individual that wants to move to the opposition as quickly as possible. In a waxing quindecile, one is driven to acquire knowledge and understanding of the two planets involved. By contrast, the waning quindecile basks in the light of the opposition that has recently occurred.

Pluto strongly waning quindecile Midheaven

Things are moving back towards an inconjunct. Thus, as I age I will have to make adjustments from time to time regarding my personal power and my status in society.

Mars strongly waxing quindecile Ascendant

I am driven to accomplish something of a physical or assertive nature that is related to Mars.

Uranus moderately waxing quindecile Midheaven

I am driven to accomplish something creative in the social environment.

Mercury moderately waning quindecile Mars

Adjustments involving tension or aggression will have to be made over time.

Jupiter strongly waning quindecile Neptune

Mystical awareness and artistic inspiration will require adjustments to my broader view of things as life progresses.

Venus moderately waning quindecile Mars

Adjustments will be made throughout life between the drive to reduce tension and the drive to increase tension.

Midpoints

Given any two planets in a horoscope, there are always two midpoints between them. One is closer to each of the two planets, and the other is 180° away. Some astrologers will also consider squares or other aspects to these midpoints, but for now I only consider those that are either conjunct or in opposition to the nearest midpoint. The general meaning ascribed to planets at these midpoints is that they function as a conjunction of the three entities involved. More specifically, the planet at the midpoint is the drive through which the other two can best be harmonized. However, I believe one should also take into account the actual aspect between the two planets. For example, if we have two planets trine with a third planet making a sextile to each, then the blending is quite harmonious. However, if our original two planets are in opposition with the third planet square each one, then it is going to be a more dynamic and contentious union. The bottom line is that one should always consider things in context. Below are my main midpoints using a 2° orb for each.

Neptune/Chiron = Sun

The Sun makes a waxing sesquiquadrate with Chiron and a waning sesquiquadrate with Neptune. Thus, it is moving toward an inconjunct with Chiron and a trine with Saturn. Meanwhile, Neptune and Chiron are 82° 27' apart, close to that transition from a squile to a mild square, and Neptune and Chiron are certainly square each other by sign. Hence, Neptune and Chiron don't coordinate their respective functions together all that well, but through the Sun they will find common ground. Neptune corresponds to states of consciousness that are characterized by perceptions of oneness and a lack of well-defined boundaries while Chiron is connected more with the shedding of personal identity in order to become more aware of one's cosmic identity. Both planets represent higher forms of spirituality that are, nonetheless, different from each other in significant ways. Furthermore, since Chiron is conjunct the cusp of my 9th house, it also symbolizes ancient wisdom in my chart while Neptune in Libra in the 6th house points to adjustments I'll make in order to experience oneness with others. Over time as this sesquiquadrate progresses toward a trine, the Neptune influence will increase while additional adjustments will have to be made with respect to Chiron's urge toward transcendence since the sesquiquadrate between Chiron and the Sun is progressing toward an inconjunct. Nonetheless, both spiritual urges will be funneled through my Sun in the 1st house, and it is likely that the Neptune drive will be explored and assimilated first followed by the lessons of Chiron.

Sun/Venus = Moon

The Sun and Venus in my 1st house make a mild quattuorvigintile with each other and with the Moon right in between them. Overall, this functions like a very strong conjunction between my Sun, Moon, and Venus, and it infuses my persona with a strong sense of beauty and artistic harmony.

Venus/Jupiter = Mercury

Venus makes a strong quattuorvigintile with my Jupiter with both planets in Taurus but in the 1st and 12th houses, respectively, and then 12th house Mercury is right in the middle. Thus, kindness and harmony are combined with a more private, expansive state of mind, and all of this is privately (12th house) funneled through the lens of my Mercury (left-brain) in Taurus. The end result is my core self being even more strongly colored by kindness.

Sun/Mercury = Venus

The 1st house Sun and the 12th house Mercury make a strong quattuorvigintile with each other with Venus in between, and this is yet another sign of the blending of self (Sun), mind (Mercury), and kindness (Venus) within my chart.

Pluto/North Node = Venus

Pluto and the North Node are mildly opposition one another, and Venus squares them both. These two planets, Pluto and the North Node, each represent very intense energies, and these intense feelings are lessons that Venus is going to have to assimilate over time. However, it won't be easy.

Saturn/Chiron = Venus

Saturn and Chiron square one another while Venus makes a waning sesquiquadrate with Saturn and a waxing sesquiquadrate with Chiron. Thus, the relationship of Venus to Saturn is heading toward a trine while Venus and Chiron are headed toward an inconjunct. Hence, mystical states of consciousness will likely be integrated with my right-brain (Venus) before the more impersonal states represented by Chiron become a part of my being. Either way, this is the third time we've seen Venus at the midpoint between two planets, and this elevates the importance of Venus within my chart.

Uranus/North Node = Mars

The Uranus and North Node make a waxing sesquiquadrate with one another, and Uranus makes a waxing squine with Mars while the North Node and Mars make an aspect that is a mildly waning squine. However, recall that Mars is not that strongly placed in my chart when compared to my Jupiter which is in opposition to Mars. Additionally, Jupiter is within about 12 minutes of arc from being within orb of the midpoint, but this is also the midpoint that is closest to both Uranus and the North Node. Thus, it is likely that the creative energy of Uranus and the intense appetite of the North Node will be funneled primarily through my 12th house Jupiter in Taurus and secondarily through my 6th house Mars in Scorpio, and this will result in a mind that has a hunger for creative expansion while also being stimulated to action by Mars. And that is how I experience this configuration. Also, the waxing sesquiquadrate between Uranus and the North Node is edging toward an inconjunct, and so the interplay between my creative mind (Uranus conjunct cusp of 3rd house) and creative collaborations with others (North Node conjunct cusp of 11th house) will need adjustments and attending to over time.

Venus/North Node = Saturn

Venus and the North Node are square one another, and their closest midpoint is moderately conjunct the cusp of the 12th house while the furthest midpoint (180° away) is strongly conjunct Saturn. This creates an appetite and a love of study of things that are hidden and involve seclusion from society. In particular, this includes solitary research of all kinds.

Sun/Pluto = Uranus

My Sun and Pluto make a strong waning square with one another that is heading toward a sextile, and Uranus is strongly conjunct their nearest midpoint which is also conjunct the cusp of the 3rd house. Consequently, the urge to transform myself is funneled through my creative mental process.

Sun/Pluto = Chiron

As mentioned above, the closest midpoint between Sun and Pluto is in Cancer and conjunct Uranus, but Chiron strongly conjuncts the other midpoint which is 180° away. Thus, while this transformative urge is funneled primarily through Uranus, it will also be funneled more and more through Chiron as time goes by. And this is exactly what has happened as I have gotten older and learned to move more from the personal to the transpersonal (Chiron). The cusp of my 9th house in Capricorn is also conjunct this midpoint, and ancient wisdom has been an integral part of the transformation of my Self.

Saturn/Mars = Neptune

Saturn, Neptune, and Mars are all in my 6th house of personal adjustments with Saturn and Neptune in Libra and Mars in Scorpio. Also, Saturn and Mars make a semisextile with one another, and they both make a quattuorvigintile to Neptune. The end result is like one big conjunction of Saturn, Neptune, and Mars, and this also supports any career that involves discipline (Saturn), physical energy (Mars), and artistic sensitivity (Neptune in Libra). Is it any wonder that I was a dancer when I was younger?

Sun/Mars = Pluto

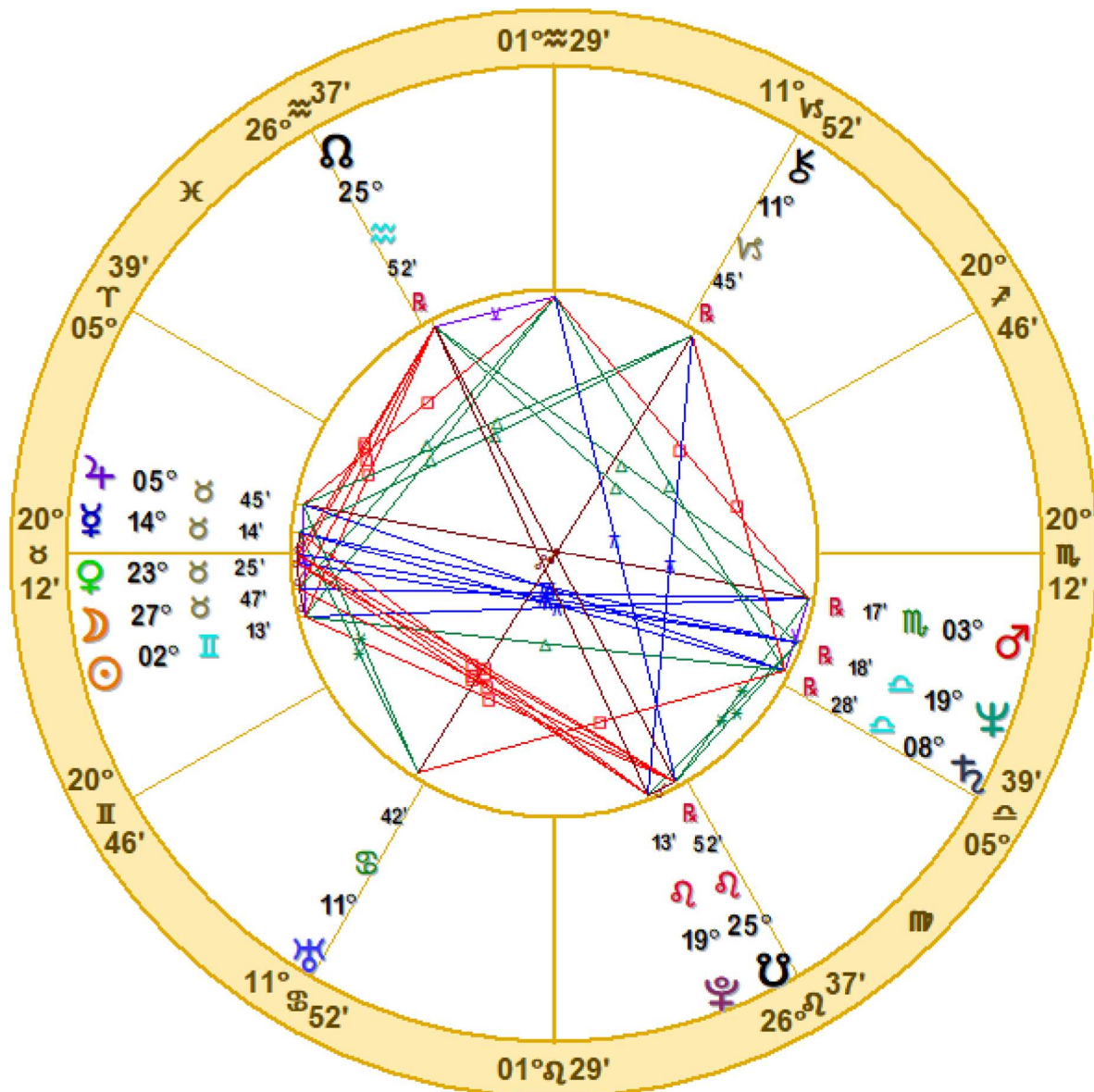
Neither Mars nor Pluto are without challenges in my chart, and so this midpoint will likely also come with difficulties. Sun and Mars are inconjunct in my birth chart, and both planets are square Pluto, but the relationship between Sun and Pluto is headed back toward a sextile while that between Mars and Pluto is moving toward a square. Thus, Sun/Pluto will tend to flourish over time while Mars/Pluto will languish. However, since Pluto is conjunct the Sun/Mars midpoint and since Pluto also rules the 7th house, issues related to self and masculine energy will be funneled through the lens of relationships. The lessons to be learned won't necessarily come easily and automatically, but they will unfold over time.

Saturn/Uranus = North Node & South Node

I find this one quite interesting as the nodal axis tends to intensify whatever it touches just as it does to the Sun and the Moon during eclipses. Thus, when my discipline (Saturn) is combined with my creativity (Uranus), it intertwines with both the karma and the personal aspirations that I

entered into this life with. Additionally, since the nodes are conjunct the cusps of my 5th and 11th houses, my life as I get older centers more and more around what I can create.

Major Aspect Planetary Patterns



We've already talked about the "bucket" pattern with Chiron at the handle, but before we do the chart synthesis there are a few other patterns worth mentioning.

Stellium in (mostly) Taurus

In particular, we should mention my stellium of planets, mostly in Taurus, that extends from Jupiter to the Sun. This functions as essentially one big conjunction involving Jupiter, Mercury, the Ascendant, Venus,

Moon, and the Sun, and this stellium represents my core sense of who I am. In particular, I see myself as a thinking-oriented (Taurus and Gemini), and rather introverted (Taurus) person who is even tempered (Taurus) and intellectually curious (Gemini) as well as kind (Venus) and wanting to always expand my horizons (Jupiter).

Grand Trine of Sun, Saturn, and Midheaven

A grand trine is a very stable configuration that illustrates what will become an enduring behavior pattern. In this case the self (Sun), discipline and self-regulation (Saturn), and the desire for status (Midheaven) all work together in a coordinated way. The end result is likely a disciplined individual who is somewhat driven to achieve.

Mercury, Venus, and Ascendant square Pluto

This is the most difficult aspect in my chart as three personal planets are squaring away against the planet of death and transformation, and since Pluto is in the 4th house (family) and rules the 7th house (relationships), there will likely be several sorrows expressed in these areas.

Uranus opposite Chiron with both square Saturn

This configuration is called a T-square, and the planet making the square is also at the midpoint of the opposition. In this case, the creativity and transcendence represented by Uranus and Chiron are funneled by me into concrete action (Saturn). Furthermore, since Uranus is conjunct my 3rd house cusp while Chiron is conjunct my 9th house cusp, writing is one way to make my illuminations more concrete.

Sun, Moon, Venus, and Ascendant square the Lunar Nodes

The Lunar Nodes tend to intensify energies and feelings, and with my Nodes conjunct the cusps of the 5th and 11th houses, creative energy is involved. Hence, either strong sexual energies that are unwelcomed or pressure from groups can be problematical at times resulting in additional self-isolation.

The Inconjuncts

There are several inconjuncts involving 6th house planets and the more personal planets found in the 1st and 12th houses. In particular, I have Sun/Moon inconjunct Mars, Mercury/Jupiter inconjunct Saturn, and Mercury/Venus/Ascendant inconjunct Neptune. Since so many personal planets in the 1st and 12th houses are involved, this shows that adjustments will have to be made to those things represented by Mars, Saturn, and Neptune as I mature, and that has, indeed, been the case. I had to work to develop discipline (Saturn), physical skills (Mars), and mystical states of consciousness (Neptune). These were not skills that came without effort, but they also were not too difficult to develop. Progress came readily once I applied myself to the task.

Mercury inconjunct Saturn, Mercury sextile Uranus, and Uranus square Saturn

This pattern makes me chuckle a bit because of what it results in. Namely, I am often presented with a choice – pursue some mental endeavor (Mercury) in a disciplined fashion (Saturn) or just let creativity (Uranus) run rampant. I often initially choose the latter because it's more fun, but then eventually I will also see the need for developing the former.

Uranus opposite Chiron, Jupiter/Mercury sextile Uranus, and Jupiter/Mercury trine Chiron

As mentioned previously, Uranus and Chiron are conjunct my 3rd and 9th houses, and, thus, they are intimately involved with my personal mental processes and my pursuit of the collective wisdom of humankind. Additionally, the tension of the opposition finds release in those mental activities (Mercury and Jupiter) that I pursue in seclusion (12th house).

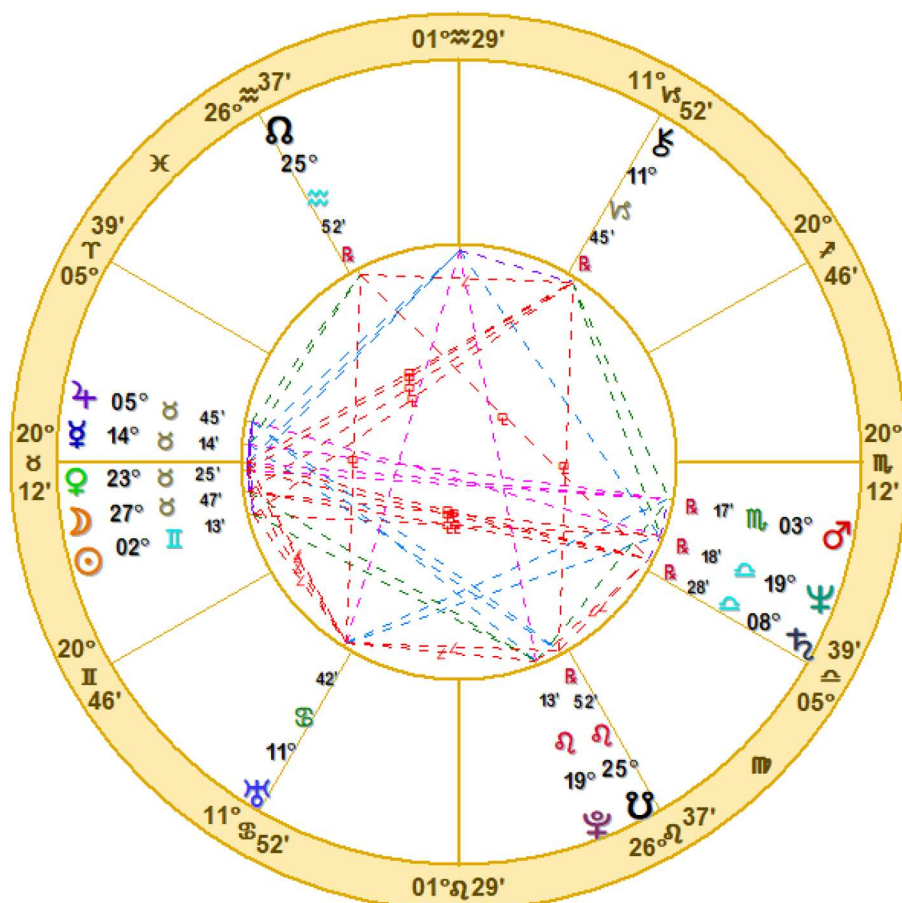
Sun/Moon inconjunct Mars, Sun/Moon trine Midheaven, and Midheaven square Mars

When I am seriously at odds with someone else (Sun/Moon inconjunct Mars), I often appeal to those in charge (Midheaven) to resolve things in my favor (Sun/Moon trine Midheaven) and against the other party (Midheaven square Mars).

Chiron trine Mercury square Pluto inconjunct Chiron

There is difficulty between Mercury and Pluto and a need for adjustments between Pluto and Chiron, but great harmony between Chiron and Mercury. The result of this pattern is that I am pushed in the face of other problems to focus instead on spiritual transcendence as an escape. Also, this is not so much a case of ignoring other problems as it is using tensions or problems in one area as a motivation for developing skills in another.

Minor Aspect Planetary Patterns



Recall that I call those 24th harmonic aspects that are not also 12th harmonic aspects my minor aspects, and they indicate energy in motion on a more subconscious level while, in contrast, my major aspects are the 12th harmonic aspects, and they represent stopping points or way stations for energy that we tend to be more conscious of. Furthermore, if three or more planets are involved in a series of my minor aspects, then they represent a bundle of ever shifting energies. Below are some of the interesting patterns I see in my own chart.

Chrion semisquare North Node sesquiquadrate Uranus semisquare South Node sesquiquadrate Chiron

This creates a very dynamic rectangle of shifting energies where creativity and transcendence (Uraunus/Chiron) is constantly interacting with the past karma and future desires that drive one (North and South Nodes).

Ascendant semisquare Uranus semisquare Pluto semisquare Saturn sesquiquadrate Ascendant

There is a constant tension and interplay between what I identify as me (Ascendant), creative thought (Uranus conjunct cusp of 3rd house), family and relationship demands (Pluto in 4th house and ruling 7th), and work and health (Saturn in 6th house).

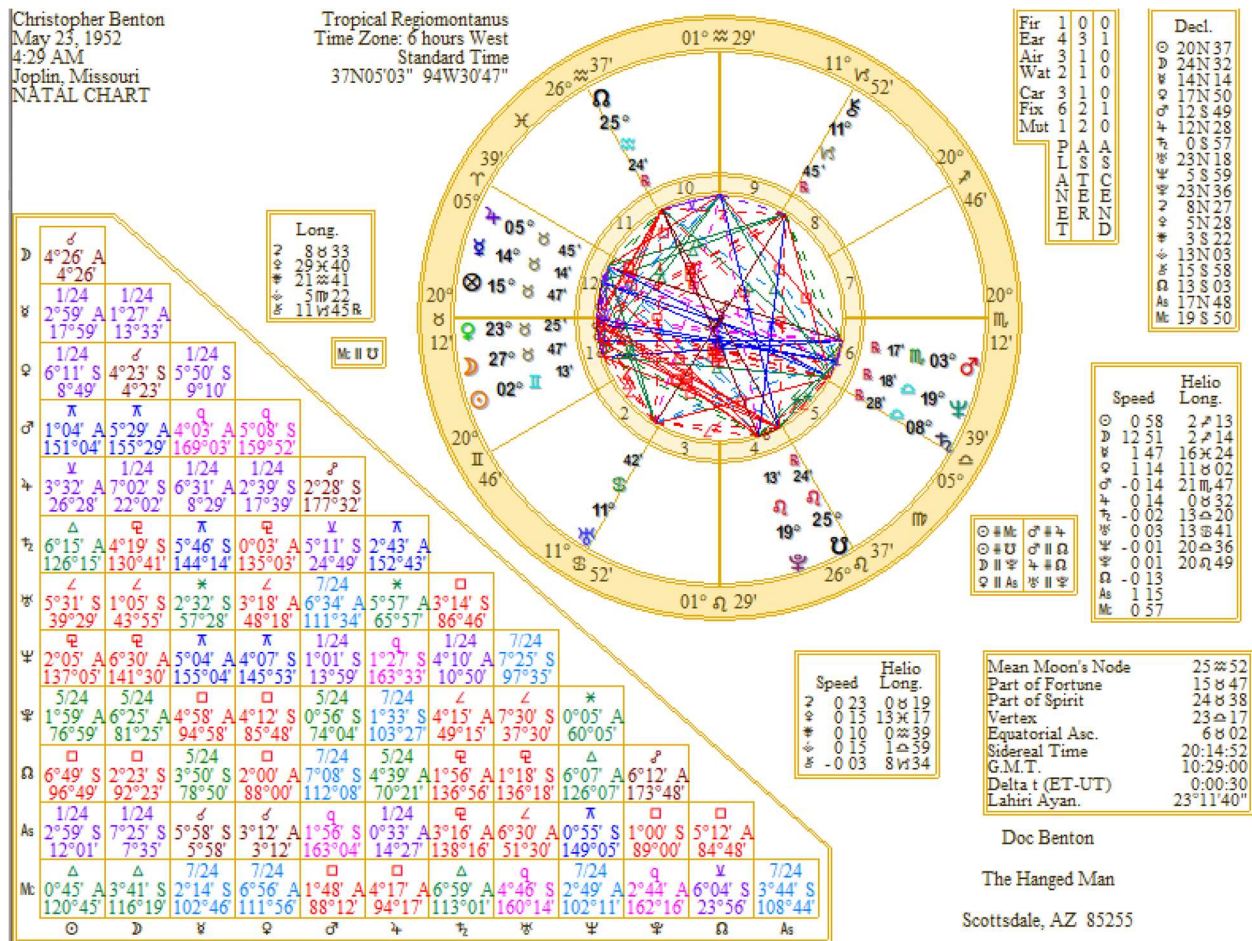
Uranus semisquare South Node semisquare Saturn sesquiquadrate North Node sesquiquadrate Uranus

Once again there is a constant interaction between creativity (Uranus), discipline and concrete manifestation (Saturn), and past karma and desires (the Lunar Nodes).

Sun semisquare Uranus squine Neptune sesquiquadrate Sun

Again, there is a constant flux and flow of energy between self (Sun), creativity (Uranus), and mystical states of consciousness (Neptune).

Mixed Aspect Patterns



By mixed aspect patterns I mean patterns involving three or more planets and both major and minor aspects. Here are a few that I see in my horoscope.

Saturn sesquiquadrate North Node sesquiquadrate Uranus square Saturn

To this we could also add *Uranus semisquare South Node semisquare Saturn square Uranus*, and in each instance the square between Uranus and Saturn will be accompanied by a constant movement of energy between Uranus/Saturn and the Lunar Nodal axis as a response to the Uranus/Saturn tension. And since the nodes are conjunct the cusps of the 5th and 11th houses, this tension will likely be released along creative and sexual lines.

Sun inconjunct Mars squile Chiron sesquiquadrate Sun

The inconjunct between the Sun and Mars in my chart indicates that physical ability and coordination is something that needs to be developed in my life. However, the minor aspects that each one makes with Chiron suggests that the urge to move from the personal to the transpersonal is always lurking in the background of this aspect, and as such, Chiron creates movement that can result in the resolution of tension.

Moon/Ascendant sesquiquadrate Saturn square Chiron sesquiquadrate Moon/Ascendant

There is a tension between the demands of one's work life (Saturn in the 6th house) and one's quest for ancient knowledge that will transform one's Self (Chiron in Capricorn conjunct 9th house cusp), and this tension is accompanied by energy movement in the personal sphere (Moon and Ascendant). Consequently, shifts and movements within personality will help determine the outcome of the square between Saturn and Chiron, and because Taurus is involved, stability and endurance in the face of this adversity is a choice that I often make.

Planetary Strengths

There exists a technique of assessing the strength of various astrological elements that is referred to as either astrodynes or cosmodynes, and in my experience these scorings aren't perfect, but they do work fairly well. Thus, for reference, below is an astrodyne analysis of my chart.

Christopher Benton
Male Chart
 May 23 1952, Fri
 4:29 am CST +6:00
 Joplin, Missouri
 37°N05'03" 094°W30'47"
Geocentric
Tropical
Regiomontanus
True Node

| Pnt | Power | % | H/D |
|-----|--------|-------|--------|
| ☾ | 69.27 | 12.9% | +7.64 |
| ♈ | 64.73 | 12.0% | -6.49 |
| ☾ | 63.52 | 11.8% | +11.30 |
| ☾ | 62.17 | 11.6% | +10.23 |
| ♈ | 56.82 | 10.6% | +10.39 |
| ♈ | 52.80 | 9.8% | -13.01 |
| ♈ | 32.10 | 6.0% | -10.69 |
| ♈ | 30.06 | 5.6% | -0.64 |
| ♈ | 29.24 | 5.4% | -8.99 |
| ♈ | 28.53 | 5.3% | -11.89 |
| ♈ | 28.24 | 5.3% | -2.69 |
| ♈ | 20.19 | 3.8% | +2.58 |
| | 537.67 | | -12.28 |

| P1 | Asp | P2 | Score |
|----|-----|----|-------|
| ☾ | ♈ | ♈ | 20.47 |
| ☾ | ♈ | ♈ | 14.64 |
| ☾ | ♈ | ♈ | 10.66 |
| ☾ | ♈ | ♈ | 10.62 |
| ☾ | ♈ | ♈ | 10.57 |
| ☾ | ♈ | ♈ | 09.01 |
| ☾ | ♈ | ♈ | 08.32 |
| ☾ | ♈ | ♈ | 08.31 |
| ☾ | ♈ | ♈ | 08.19 |

| P1 | Asp | P2 | H/D |
|----|-----|----|--------|
| ☾ | ♈ | ♈ | +11.25 |
| ☾ | ♈ | ♈ | +8.32 |
| ☾ | ♈ | ♈ | +6.91 |
| ☾ | ♈ | ♈ | +5.12 |
| ☾ | ♈ | ♈ | +3.47 |
| ☾ | ♈ | ♈ | +2.88 |
| ☾ | ♈ | ♈ | +2.66 |
| ☾ | ♈ | ♈ | +2.42 |
| ☾ | ♈ | ♈ | +1.55 |

| P1 | Asp | P2 | H/D |
|----|-----|----|--------|
| ♈ | ♈ | ♈ | -10.24 |
| ♈ | ♈ | ♈ | -9.01 |
| ♈ | ♈ | ♈ | -7.14 |
| ♈ | ♈ | ♈ | -6.18 |
| ♈ | ♈ | ♈ | -5.03 |
| ♈ | ♈ | ♈ | -4.92 |
| ♈ | ♈ | ♈ | -4.35 |
| ♈ | ♈ | ♈ | -3.92 |
| ♈ | ♈ | ♈ | -3.42 |

| Sign | Power | % | H/D |
|------|--------|-------|--------|
| ♈ | 290.46 | 35.3% | +12.92 |
| ♈ | 114.96 | 14.0% | -2.77 |
| ♈ | 87.49 | 10.6% | +0.55 |
| ♈ | 84.06 | 10.2% | -2.60 |
| ♈ | 77.20 | 9.4% | +9.91 |
| ♈ | 63.86 | 7.8% | -5.04 |
| ♈ | 48.87 | 5.9% | -18.12 |
| ♈ | 14.62 | 1.8% | -4.50 |
| ♈ | 14.27 | 1.7% | -5.95 |
| ♈ | 14.12 | 1.7% | -1.35 |
| ♈ | 07.51 | 0.9% | -0.16 |
| ♈ | 06.05 | 0.7% | -0.01 |
| | 823.48 | | -17.11 |

| Type | Power | % | H/D |
|-----------|--------|-------|--------|
| Fire | 143.35 | 17.4% | -10.06 |
| Earth | 312.59 | 38.0% | +8.27 |
| Air | 248.75 | 30.2% | +7.86 |
| Water | 118.78 | 14.4% | -23.17 |
| Cardinal | 176.81 | 21.5% | -18.08 |
| Fixed | 541.78 | 65.8% | -7.42 |
| Mutable | 104.89 | 12.7% | +8.39 |
| Masculine | 392.10 | 47.6% | -2.20 |
| Feminine | 431.38 | 52.4% | -14.91 |
| | 823.48 | | -17.11 |

| Hse | Power | % | H/D |
|-----|--------|-------|--------|
| H1 | 294.33 | 35.7% | +26.49 |
| H6 | 112.60 | 13.7% | -14.49 |
| H4 | 83.88 | 10.2% | -7.89 |
| H12 | 72.57 | 8.8% | -9.28 |
| H10 | 72.15 | 8.8% | +5.47 |
| H2 | 47.13 | 5.7% | -11.01 |
| H5 | 38.60 | 4.7% | +4.96 |
| H3 | 31.76 | 3.9% | +5.65 |
| H11 | 21.39 | 2.6% | -4.94 |
| H7 | 20.33 | 2.5% | -6.22 |
| H9 | 14.62 | 1.8% | -4.50 |
| H8 | 14.12 | 1.7% | -1.35 |
| | 823.48 | | -17.11 |

| Type | Power | % | H/D |
|------------|--------|-------|--------|
| Angular | 470.69 | 57.2% | +17.85 |
| Succedent | 121.24 | 14.7% | -12.34 |
| Cadent | 231.54 | 28.1% | -22.62 |
| Vitality | 347.55 | 42.2% | +26.95 |
| Success | 231.88 | 28.2% | -20.03 |
| Relating | 73.48 | 8.9% | -5.51 |
| Intuition | 170.57 | 20.7% | -18.52 |
| Private | 445.79 | 54.1% | +11.85 |
| Friendship | 255.41 | 31.0% | -23.65 |
| Community | 122.28 | 14.8% | -5.31 |
| Below | 608.30 | 73.9% | +3.71 |
| Above | 215.18 | 26.1% | -20.82 |
| East | 539.33 | 65.5% | +12.38 |
| West | 284.15 | 34.5% | -23.49 |
| | 823.48 | | -17.11 |

astrodyne_all.pag

Synthesis

When you think about it, human beings are more alike than we are different from one another, and it's conceivable that an alien species from another planet could have great difficulty in telling us apart. Hence, our differences that we often find so appalling would probably appear only slight to a non-human visitor. Thus, when it comes to the astrology of a person, the goal is to discover what makes them different and unique when compared to other people. This is the synthesis that every reader of a birth chart must do. They must find the person in the chart, and sometimes the best way to do this is to let the person themselves describe for you who you are, and then you can show them the astrological etiology behind

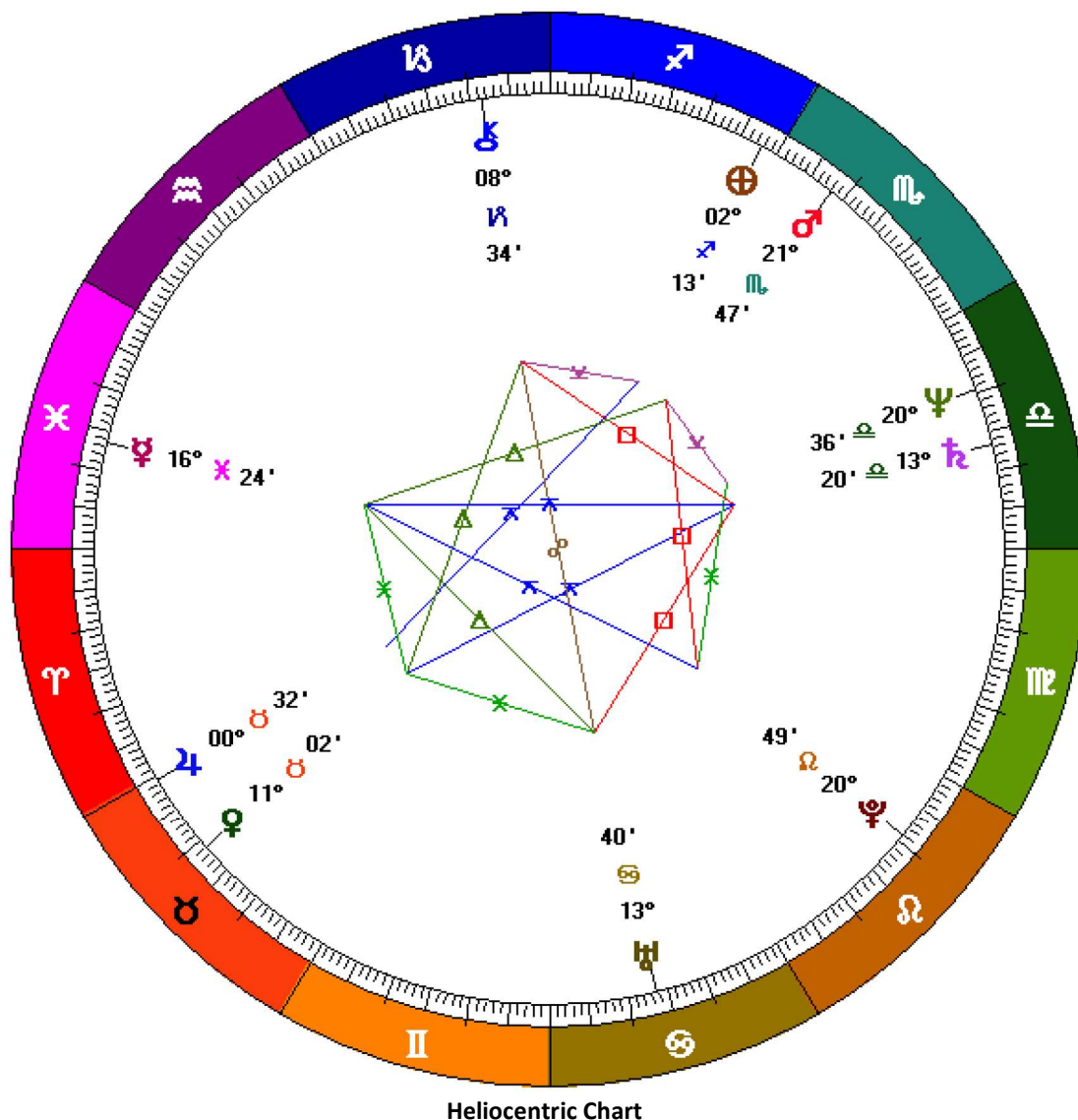
those traits. Hence, that is what you will find below where I've listed some of my more prominent traits along with their astrological causes. Enjoy this discussion of who I am!

1. I've always seen myself as a thinking-oriented rather than feeling-oriented person (preponderance of planets in Earth and Air signs). In other words, when experiencing something I always tend to ponder more what I think about it instead of how I feel about it.
2. My temperament is mostly quiet and introverted (several personally planets in Taurus), but I am much more animated and extraverted when I am intellectually excited about something (Sun in Gemini).
3. I have always been a loner, though not always by choice. It has always been a mix of me wanting to be alone and others not wanting me to join them (Sun/Moon/Venus in the 1st house, Mercury/Jupiter in the 12th house, and Pluto, ruler of the 7th house, squaring most of this).
4. I have been very creative in mathematics and thought throughout my life (Mercury sextile Uranus; Uranus conjunct the cusp of the 3rd house).
5. The quest for enlightenment has dominated my life since mid- elementary school (the Uranus/Chiron opposition that is conjunct the 3rd and 9th house cusps is my closest aspect within 2 minutes of being exact, and Chiron is the bucket handle in my planets' bucket formation).
6. I have always longed for a friend to talk with and share with (North Node conjunct the cusp of the 11th house).
7. My home life was very stressful growing up, and most people and women rejected me (Pluto in the 4th house squaring 1st and 12th house planets, and Pluto is also the ruler of the 7th house).
8. I've always been honored by others for my intellectual and mathematical creativity (Uranus rules the 10th house and is conjunct the cusp of the 3rd house).
9. I was uncoordinated as a child, but always knew that I would someday be a ballet dancer (Mars inconjunct Sun and Moon; Saturn, Neptune, and Mars in the 6th house with Saturn and Neptune in Libra; Saturn semisextile Mars in the 6th house with Neptune in Libra at the Saturn/Mars midpoint).
10. I am emotionally outraged when I see injustice, and I feel a responsibility to personally fix it (Uranus in Cancer conjunct the cusp of the 3rd house square Saturn in Libra in the 6th house).
11. I became a college professor (Saturn rules the 9th house and is in the 6th house moderately strongly conjunct its cusp).
12. Expressing anger has never worked out well for me (Jupiter in 12th house opposition Mars; Pluto square Ascendant and several personal planets while also ruling the 7th house).

13. I've always seen myself as a person who is basically kind (Venus in 1st house conjunct Moon and Ascendant).
14. I've always been constant in my feelings for friends and other people, and even if I haven't seen someone for years, I still tend to pick up the conversation wherever I left off (Moon, Mercury, Venus, and Jupiter in Taurus with Taurus rising).
15. I enjoy luxury and eating tasty foods, and I have to watch my weight (Venus in Taurus).
16. I survive by my intellect and wits (Gemini on the cusp of the 2nd house).
17. I've always been attracted to ancient, mystical wisdom (Chiron in Capricorn conjunct the cusp of the 9th house).
18. The sexual urge to merge has always been strong (South Node conjunct cusp of 5th house; Mars in Scorpio; Scorpio on the cusp of the 7th house).
19. Mystical states of oneness were not present during childhood, but became extremely easy to experience in adulthood (Neptune quincunx Jupiter, inconjunct Mercury/Venus/Ascendant, sesquiquadrate Moon/Sun, very strongly sextile Pluto, sextile South Node and trine North Node, conjunct Saturn/Mars midpoint).
20. My powers of concentration and discipline are good (Sun mildly waning trine Saturn), and when I was little I imagined myself becoming a hermit and spending my life in meditation (Mercury/Jupiter in 12th house).

The Heliocentric Chart

In a heliocentric chart there is no rising sign or midheaven as these measurements pertain exclusively to a geocentric point of view. Also, there is no Moon since from the Sun's perspective that is just a speck of dust moving around the Earth. Consequently, the heliocentric chart represents a part of our being that exists beyond personality and particular physical incarnations. In that regard, the heliocentric chart is more of a reflection of an oversoul than it is a mirror of personality, and it shows us broad talents, abilities, and concerns of the soul that one can draw upon. Below is my heliocentric chart along with my understanding of what it says about me.

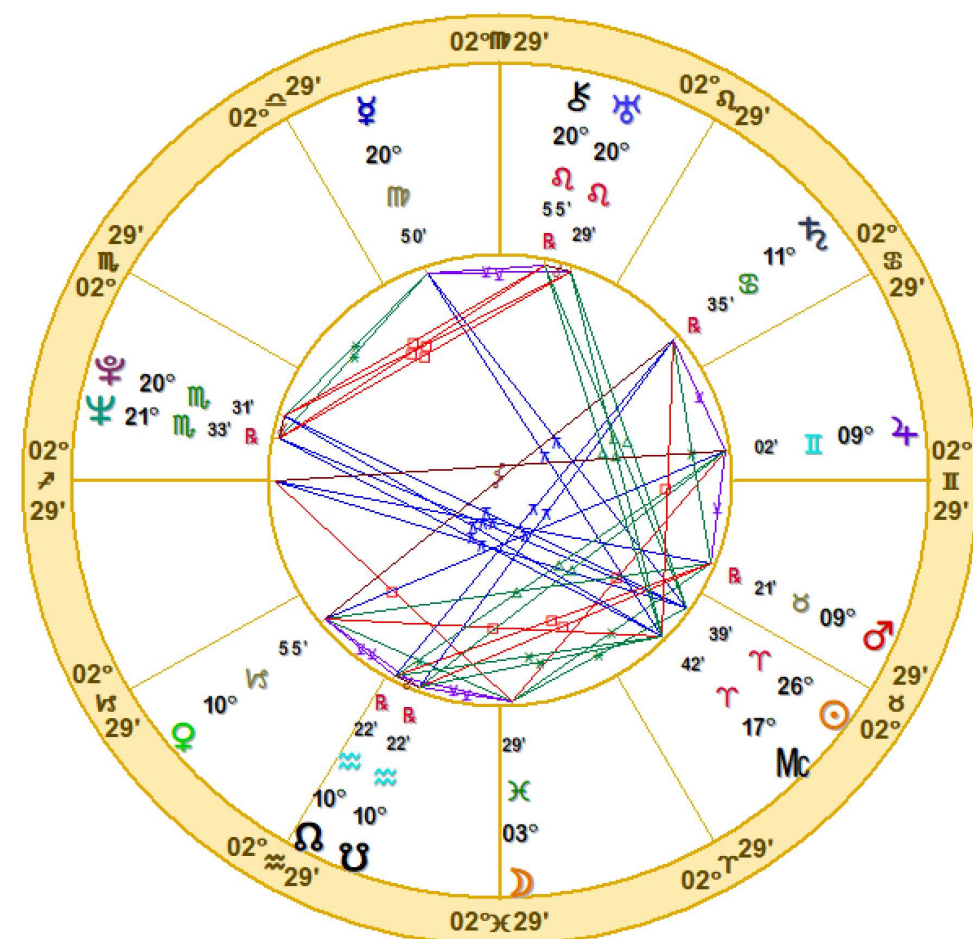


In this heliocentric chart we have Jupiter/Venus in Taurus sextile Mercury and Uranus and trine Chiron, and Uranus is also trine Mercury. This reveals expansive Kindness and enduring connection with the right-brain (Jupiter conjunct Venus in Taurus) and creativity that aims toward transcendence beyond the personal (Jupiter/Neptune sextile Uranus and trine Chiron), and all of this is integrated, too, with an active and dynamic left-brain (Jupiter/Venus sextile Mercury trine Mars). Additionally, the symbol for the Earth shows its position in Sagittarius suggesting the knowledge and wisdom that I came to this planet in order to acquire. Also noteworthy is the semisextile between Earth and Chiron that signals the enlightenment I seek in this incarnation, and additionally I note the conjunction of Saturn and Neptune signals a coordination between boundless awareness (Neptune) and concrete realization (Saturn) that I will realize through my interactions with others (Libra). These are all talents and tendencies that exist in a part of my being that transcends personality and other concerns of the earthly realm. Furthermore, the Uranus/Chiron opposition that is present in my geocentric chart is also present in my heliocentric chart, and that indicates that the realization of this flash of transcendent enlightenment is a major agenda for

my deeper soul as well as this current incarnation. And additionally, the planets in my heliocentric chart are far more evenly distributed both by sign and by element and mode than they are in my geocentric chart, and this indicates that on the soul level I am much more connected with the rest of the multiverse than my tightly secluded and intensely focused geocentric self is. Thus, while in this world I may appear reclusive and monk like, in the vaster realm of spirit I am actively connected to everything!

Harmonic Charts

Vibrational astrologers who are quite experienced in the use of harmonic charts and midpoints will routinely use a variety of different harmonic charts in their analysis. I, however, am less experienced in that area, and I usually look at just two harmonic charts – the 12th harmonic and the 24th harmonic. The 12th harmonic angles are those angles that are integer multiples of 30° *modulo* 360°, and they comprise what I call my major aspects of conjunction, semisextile, sextile, square, trine, inconjunct, and opposite on. Furthermore, in the 12th harmonic chart all of these angles become indistinguishable from 0° (conjunction), and, hence, this chart shows us what structure remains after all the planets involved in major aspects have reached their perfected union. Thus, to me the 12th harmonic chart represents the state that results when all the major, conscious relationships between the planets have achieved the integration that they've sought. Below is my 12th harmonic chart along with a brief interpretation.

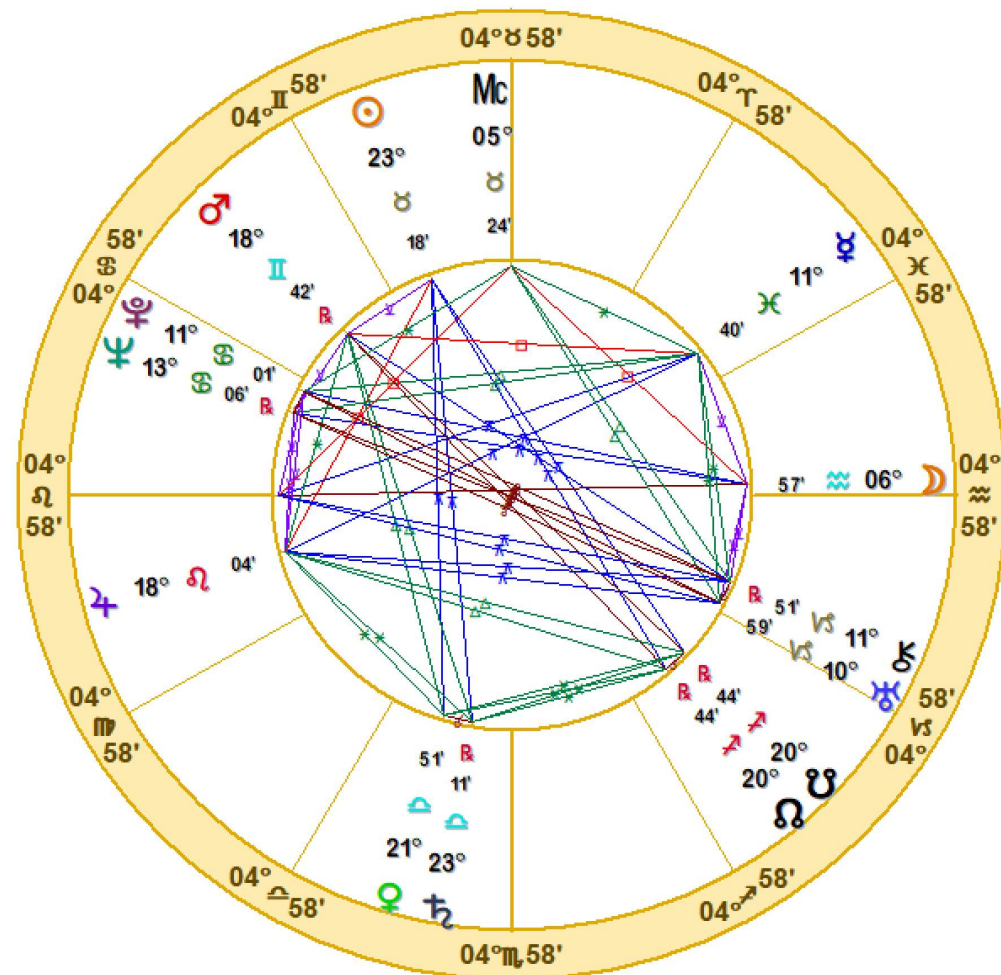


12th Harmonic Chart

In interpreting harmonic charts I normally seek a broad overview. I look at the Sun, Moon, and Ascendant, and I interpret good aspects as allies and negative aspects as not so. However, it seems that with me, at least, the negative aspects in harmonic charts often tend to represent parts of me that just operate separately from one another rather than in contention with one another. And having said that, the 12th harmonic represents a face of my being as it will look once all the major aspects (the 12th harmonic aspects, or, alternatively, the 24th harmonic aspects that are even multiples of 15°) in my chart have been brought to conjunction.

In this chart I have Sun in Aries in the 5th house, Moon in Pisces conjunct the cusp of the 4th house, and Sagittarius rising. This suggests that this more perfected version of myself is more extroverted (Sun in Aries and Sagittarius rising) and assertive (Sun in Aries) with a focus on personal creativity (Sun in 5th house). I'm also feel freer and more expansive and expressive with a renewed interest in the wisdom of humankind (Sagittarius rising), and I am more sociable (Jupiter in Gemini in 7th house). However, in my interface with the world (Moon), I prefer my personal environment (Moon conjunct 4th house cusp), and I appear focused on mystical and spiritual concerns (Moon in Pisces). Additionally, Uranus and Chiron in Leo in the 9th house represent creativity and transcendence in the house of wisdom (9th house), and these drives function as allies to the self (Sun). The Sun makes a sextile to the Moon, and shows good coordination between inner self and personality, and the Moon itself sextiles both Venus and Mars indicating a balance between relaxation and activity. Meanwhile, Mercury is in Virgo in the 10th house indicating honor for my detailed and pragmatic thoughts and writings, and the sextile to Mercury from Neptune and Pluto conjunct in Scorpio in the 12th house show the depths to which these allies will take my thoughts. All in all this is a face of myself that is frequently present these days, and harmonic charts like these show how our personality changes as we mature and draw closer to the completion of our quest.

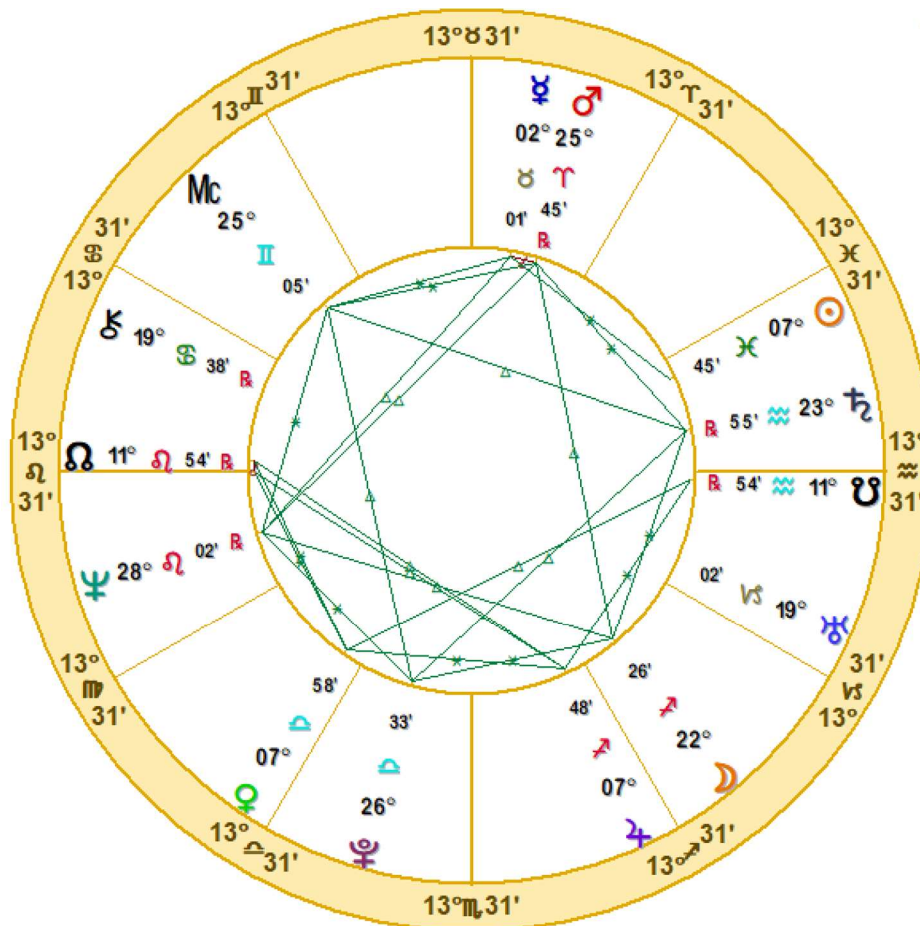
Now let's look at my 24th harmonic chart which advances all the 24th harmonic angles and cycles to conjunction.



24th Harmonic Chart

In this 24th harmonic chart, the Sun rules my 1st house and is in the 10th house in Taurus, and it is actually at the same degree of Taurus as Venus in my natal chart. This shows that at this state of my evolution I will be honored for my enduring kindness. Meanwhile, the Moon is in Aquarius conjunct the cusp of my 7th house, and this indicates me readily working with groups as part of my interface with the rest of society. Also, there is an interesting rectangular configuration indicated by Moon inconjunct Pluto/Neptune semisextile Ascendant inconjunct Uranus/Chiron semisextile Moon, and this suggests a pattern of transcendent adjustments that will continue to be made within the personality. This is a face that I haven't yet fully realized, but I already feel much of it. Thus, these particular harmonic charts can also serve as astrological mandalas to contemplate as they give us glimpses into our evolutionary future.

I usually think of the 12th and the 24th harmonic charts as the two most important harmonic charts for assessing one's overall level of development, but sometimes other harmonics are also important due to their particular level of organization, and in my case the 17th harmonic is that way. I talked a lot about my 17th harmonic previously in my chapter on *Quotient Structures and Harmonic Astrology*, but I'll touch on it briefly again here, too.



17th Harmonic NATAL CHART

Christopher Benton
 May 23, 1952
 4:29 AM
 Standard Time
 Joplin, Missouri
 37°N 05'03" 94°W 30'47"
 Time Zone: 6 hours West
 Geocentric
 Tropical Equal

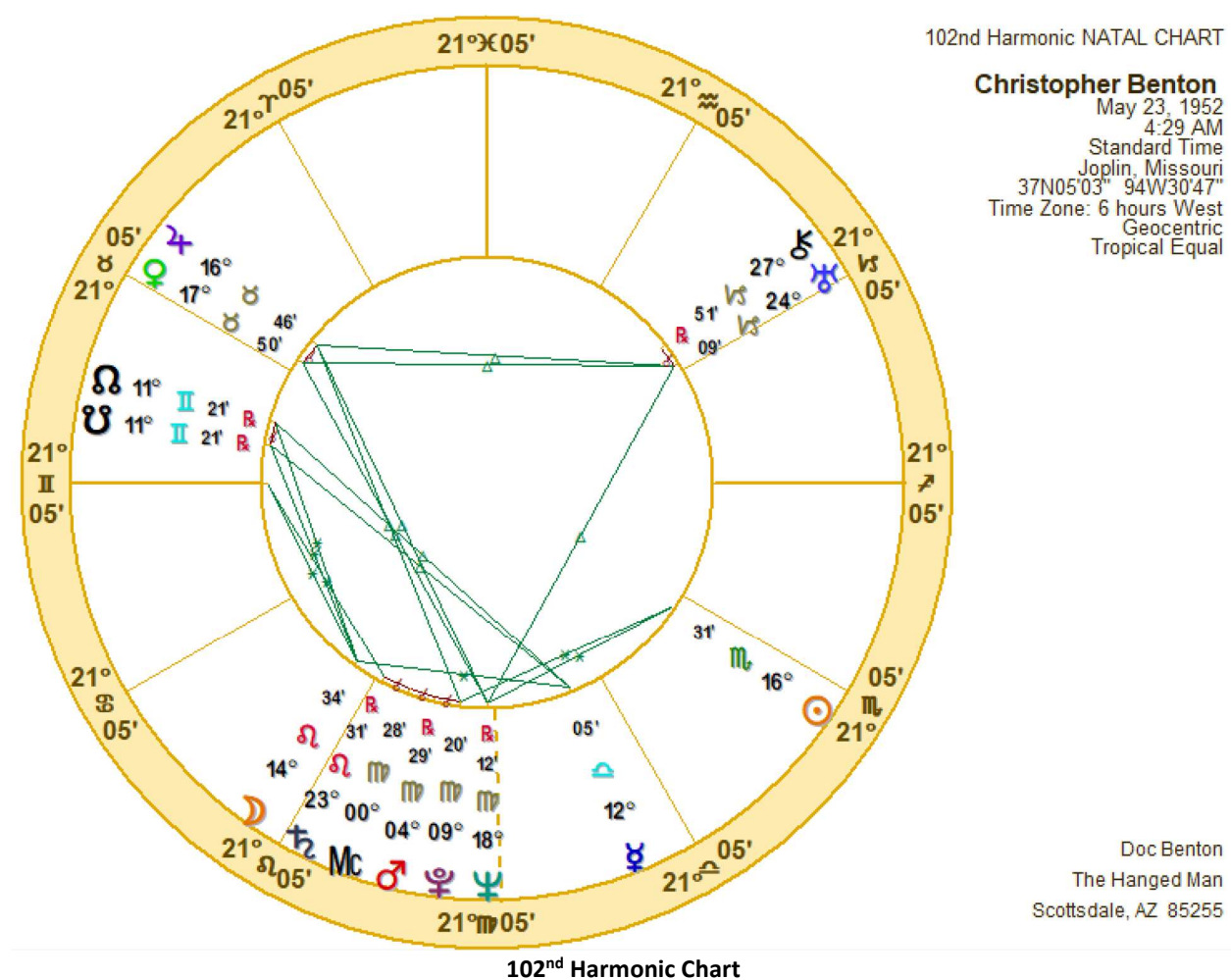
Doc Benton
 The Hanged Man
 Scottsdale, AZ 85255

17th Harmonic Chart

Recall that the root 17th harmonic angle is $21.176^\circ = \frac{360^\circ}{17}$ which places it in the sign of Aries. Also, if we subdivide this 30° interval with another zodiac and then subdivide each of those 2.5° segments with yet another zodiac, then we can deduce that 21.176° has an Aries/Sagittarius/Virgo flavor. Since this angle is in Aries, I expect it to be more of a mental orientation, and the additional subdivisions color it with Sagittarius and Virgo, too. The influence of Sagittarius greatly expands one's curiosity and interests as well as the manner in which one expresses themselves, and the additional influence of Virgo adds both an attention to detail and a desire to serve. David Cochrane has noted that strong 17th harmonic charts are often found among actors, and in addition to being a past member of Actor's Equity Association, all of my mathematics lectures were essentially performance pieces in which exaggerated my expression while paying great attention to detail in order to better serve my students. All of that fits well with both my theoretical interpretation and David Cochrane's pragmatic assessment of the 17th harmonic.

The reason that my 17th harmonic chart is important is not because I have an abundance of 17th harmonic angles in my birth chart (which would appear as conjunctions in the 17th harmonic), but because I have such a well-defined *Star of David* configuration in the 17th harmonic with all the points on the star further connected by sextiles. This is an incredibly harmonious configuration, and we always tend to gravitate toward that which is easy. Hence, I would tend to function well in any profession that allows both a larger-than-life form of expression and attention to detail in order to be of better service to others. However, all the harmony in this chart suggests another that I should look at, namely the 102nd harmonic chart. This is

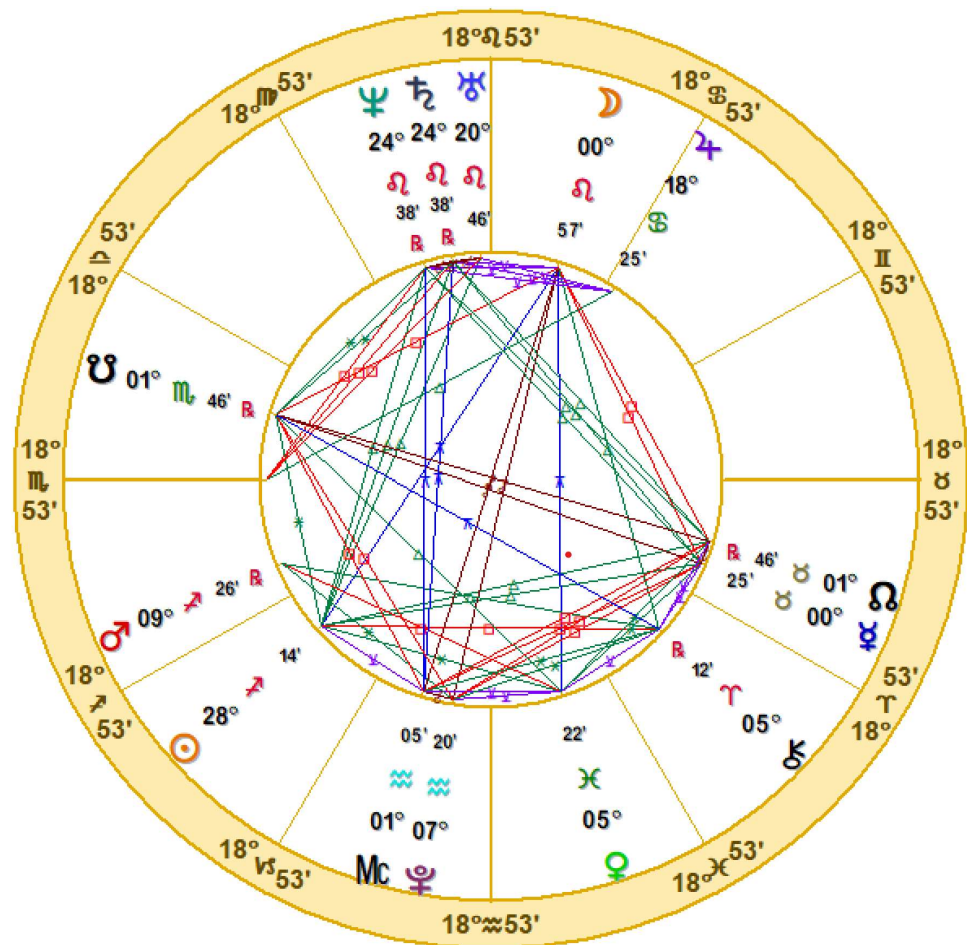
warranted because since $102 = (6)(17)$, this chart will convert all of the sextiles in the 17th harmonic into conjunctions, and that is clearly where things are trying to go. Thus, let's also take a quick look at my 102nd harmonic chart.



In this chart I am showing only the trines and sextiles so that the inherent beauty of it can more easily be appreciated. Specifically, there is a stable grand trine involving Jupiter/Venus, Uranus/Chiron, and Pluto/Neptune. This shows my kindness (Jupiter/Venus), my transpersonal creativity (Uranus/Chiron), and my ease with higher, unstructured, transformative states of mind (Pluto/Neptune) all working in harmony with one another. Additional harmony is indicated by the Lunar Nodes sextile Moon/Saturn sextile Mercury trine the Lunar Nodes, and also Sun sextile Pluto/Neptune. This all indicates a high degree of organization and harmonious integration once one reaches this harmonic. With houses 3, 8, and 12 involved (due to proximity to the cusp of the 12th house), this also suggests a strong mental nature that will probe secrets (8th house) while preferring a somewhat monastic lifestyle (12th house). These tendencies are reinforced by Gemini rising (mental) and Sun in Scorpio (deep secrets). Additionally, with Moon in Leo and close to the cusp of the third house, I'll likely appear both cerebral and regal to others. This is a facet of myself that I experience more and more as I get older!

Arc Transform Charts

As we continue this dive into my own horoscope, the next thing I like to look at are arc transform charts for the more prominent aspects in my birth chart. These arc transform charts then reveal what our face will look like as we complete to conjunction the planetary cycles that we are working with. We've already looked at several of my arc transform charts in a previous section, but there is one more that we should look at that is suggested by my heliocentric chart. In that chart I have Saturn conjunct Neptune which suggests a union of my drive for regulation and control with my urge towards transcendence and oneness. Hence, an arc transform of my natal chart that perfects the union of these two planets should reveal a familiar face to me. Below is that arc transform.



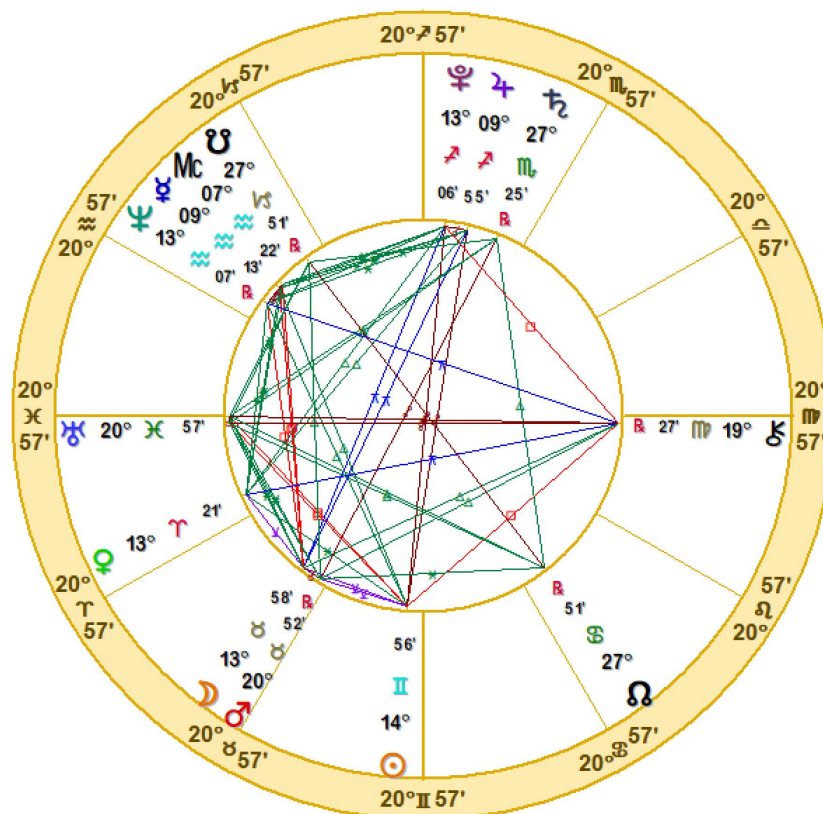
Saturn/Neptune Arc Transform

In this chart my newly derived Saturn/Neptune conjunction is in the 10th house showing the honor that I accrue for my disciplined approach to mystical states, and as a bonus, both planets are also conjunct Uranus indicating the creativity that is additionally involved. Furthermore, these planets make a grand trine with Sun and Mercury showing that the coordination of these drives with Self (Sun) and left-brain (Mercury) results in a pattern that is very stable and, hence, very likely. Meanwhile, Scorpio is rising indicating the depths to which I plunge during my quest, and its ruler Pluto is in the 3rd house in opposition to the Moon in the 9th indicating that I also seek to transform my outward personality. Furthermore, since

Chiron in Aries trines the Moon and sextiles Pluto, the drive to transcend (Chiron) through awareness of the true self (Aries) is an ally in this process. Additionally, Jupiter conjunct the 9th house cusp indicates the collective wisdom I pursue to help me achieve my goal. All in all, this is yet another face of myself with which I am well familiar.

Prognostications

Another use I make of arc transform charts is to help me better understand the dynamics and remedies regarding long term transits. For example, in 2023 – 2024 transiting Uranus will be conjunct my Ascendant three times, and while Uranus is, overall, a favorable planet for me (Uranus rules my 10th house and is sextile my Mercury), there is, nonetheless, some concern that this could potentially be something very disruptive in my life. However, in order to get a broader perspective, I can examine the arc transform chart that brings Uranus into conjunction with the Ascendant, and fortunately this chart is quite positive.




Uranus/Ascendant Arc Transform

In this chart, Uranus is conjunct the Ascendant with Pisces rising. This indicates a period that is both creative and mystical. Furthermore, Uranus forms a grand trine with the North Node and Saturn, thus, creating a stable configuration with these allies. Uranus also sextiles both the South Node and the Moon/Mars conjunction in Taurus conjunct the cusp of the 3rd house. This will also be a good time for more creative writing and intellectual thought. With Neptune square Moon, however, unstructured states of consciousness could be disconcerting to the stability that the persona (Moon in Taurus) is trying to achieve. Also, Chiron is in opposition to Uranus and conjunct the Descendant, and this shows that the integration of a more transcendent self is one of the tasks at hand. Jupiter conjunct Pluto in Sagittarius in

the 9th house punctuates the transformative wisdom that will be involved, and since the Uranus, North Node, Saturn grand trine is in water signs, the inner feeling component is very strong and the spiritual sky is the limit! Hence, this upcoming transit, hopefully, holds more blessings than disruptions, and the arc transform chart gives me a different perspective on what to expect with this transit and how to respond to it in a positive way. Hence, rather than being concerned about what might happen, now I can't wait!

Star Types

If astrologer David Cochrane is the current Sorcerer Supreme of geocentric charts, Michael Erlewine is the Sorcerer Supreme of heliocentric charts! He is absolutely amazing when it comes to the information he can derive from the heliocentric perspective. He is quite adept at analyzing chart patterns and midpoint patterns in both the geocentric and heliocentric charts in ways that uncannily reveal some of the deepest nuances within a person. Since I do not yet have the expertise in this area that Michael Erlewine possesses, I won't dwell on his techniques. Instead, I'll just post the Star Type that his analysis suggests is most representative of me, and I can't disagree at all. If nothing else, the motif of the "vision quest" is an incredibly accurate description of my life which is derived from a chart pattern in my heliocentric chart!



The Vision Quest

The Lover 18

Gender
☒ Male ☐ Female ☐ Event

Christopher's StarType
 The heavens surrounding Earth are in constant change as the Sun, Moon, and planets move along in their orbits to create with one another vast kaleidoscope-like patterns in the sky. StarType analysis sorts through these many patterns and isolates the strongest and most pronounced pattern in effect at the moment of your birth. This whole-chart pattern is called your "StarType," because overall it best represents what is happening in the heavens above.

Your StarType represents your most inner self, the "you" that is somewhere "in there" behind the personality and circumstances of your life in which you are embedded within. This is also your future self, the "true" you, who you are when you have taken all the changes that life brings. This is the you as only your close friends know you, as you know yourself. This is your StarType.

This StarType: The Vision Quest
 Christopher is driven by a strong motivation to gain real vision, to get the whole picture - a vision quest. His StarType, is the Grand Trine, the archetype of the care-giving StarType family, a classic pattern in the history of astrology, and one that prefers the role of "The Lover" in relationships, the provider of care and affection. The most compassionate of all StarTypes, this pattern is considered the most Bodhisattva-like.

Christopher has powerful conceptual abilities, and depends on his mental powers to make his way through life. He thinks before he acts, and usually plans things out far in advance, sometimes preferring to read more about something than to actually do and experience it. He may have trouble getting going, doing something.

And he has clear vision, able to get the big picture, to see the forest AND the trees, right off.

Conclusions

As I've tried to explain, astrology is not really about what I call the three Fs – Fame, Fortune, and Frivolity – even though that is what many people go to astrologers for information about. Astrology can be applied to that, but that is not its highest purpose. Instead, astrology and the various charts we may look at serve as a map our psyche and the hero's journey that we are on. The natal chart and its various derivatives can illuminate the path we are on and advise us on how to complete our quest. How to achieve those results and learn those lessons that we came into being for. In order to do this, we learn that all the various cycles in our chart have a merger and union of drives as their goal, and the horoscope shows where we begin in our quest for oneness and how we may achieve it. That is what astrology is and should be about. It is our shamanic quest for transcendence and perfection, and it can help us achieve this purpose better than any other psychological art I've encountered.

Questioning

Astrology

QUESTIONING ASTROLOGY

I have encountered many astrologers who are set in their ways regarding astrology. They have it all figured out, and they will readily denigrate anyone who disagrees with them. At the same time, they usually have no evidence to support many of their positions, and yet they often engage in demeaning debate with others who have different points of view that are also often not supported by evidence. And then there are other astrologers who are more accepting of the practices of their fellows, but who, nonetheless, rarely grow within their own discipline. In my opinion, neither stance is desirable. Instead, I believe that every astrologer should always be questioning everything that they know because that is the only way we can advance and learn. Astrology can be viewed as both a cohesive and coherent theory and also as a collection of hundreds and hundreds of rules and guidance for interpretation, but many issues are still unresolved. For instance, do sidereal zodiacs and tropical zodiacs both work? Is more than one house system correct, and is more than one horoscope for America correct? And to what extent do celestial events interact with our lives? Many astrologers will promote freewill and the dictum that the stars impel but do not compel, and yet, in practice, they will often act as if everything under the Sun is brought about solely by astrological configurations. What is the balance between the two, and where is the proper place to draw the line? This is yet another question that should be asked, and the bottom line is that we should never assume that we know it all because once we do, we stop learning. There are several more questions to be asked and several areas into which we should extend our learning.

There was once a time in Europe when large numbers of astrologers were also astronomers, physicists, and mathematicians, and the ranks of astrologers included such luminaries as Isaac Newton, Johannes Kepler, Galileo Galilei, John Dee, Tycho Brahe, Gerolamo Cardano, Copernicus, and Johannes Müller von Königsberg (Regiomontanus). While it is a given that not every astrologer can simultaneously be a mathematician, the subject is greatly in need today of people who excel both in abstract thought and abstract mathematics in order to continue to advance the field scientifically. Some astrologers out there have that capability, and are currently leading the way toward an evidence-based astrology. However, many more are currently needed. At the same time, though, we are currently witnessing a new golden age for astrology thanks in a large part to both the Internet which has accelerated the exchange of ideas and to innovative software that has accelerated experimentation within the art by eliminating time consuming calculations that, in the past, limited the amount of experience that individual astrologers could acquire. At the same time, modern science is making new discoveries involving fractals and quantum entanglement and how large systems can be impacted by weak gravitational forces that were previously believed to be too small to have any effect, and all of these discoveries and more have implications for astrology and possible explanations of how it works. Regarding the current state of things in astrology, our star is certainly rising!

As I write these words in the first month of the year 2022, things are certainly difficult for humanity and the road ahead appears to be difficult as well. Nonetheless, if these are times of great change, they are also times of great opportunity, and the same conditions that cause great discomfort can also result in great growth. All we have to do is to simply keep asking questions. And through continual questioning we can arrive at the proper understanding that we seek, and it is only through such questioning that we can eventually complete our quest. May it be so, and may we all continue to question and learn so that we may arrive in the end at that we are seeking. And though many think that we astrologers are no different

than someone like Don Quixote engaging with windmills through delusion, I prefer a different interpretation as illustrated by the lyrics of this well-known Broadway song:

“This is my quest, to follow that star,
No matter how hopeless,
No matter how far,
To fight for the right,
Without question or pause,
To be willing to march into hell
For a heavenly cause.

And I know if I’ll only be true
To this glorious quest,
That my will heart will be peaceful and calm
when I’m laid to my rest.

And the world would be better for this,
That one man scorned and covered with scars
Still strove with his last ounce of courage
To reach that unreachable star.”

It is our vision of what “windmills” may become that will lead us into our future. Thus, may you always question, and may you always reach for that unreachable star!



EPILOGUE

Writing this diary/book has been quite a journey for me, and that is why I do it. The process of writing is just one way in which I can teach myself and bring my own light into focus. Some parts of this work are easily accessible to everyone while other parts probably require prior experience with the theory of astrology. And a few parts demand expertise with statistics and higher mathematics. Nonetheless, I hope everyone leaves this journey with a greater understanding of the following:

- The *cycle of becoming* is the most fundamental concept for all of astrology.
- Astrological theory illustrates some deep mathematics, and astrologers with a deeper understanding of higher math are needed in order to take full advantage of these connections. We need mathematics so that we can develop better models for what we are doing and why.
- There already exists a lot of scientific evidence in support of astrology, but only when the people are ready will they be able to see what is already right before their eyes.
- Modern astrologers need a greater understanding of statistics and how to construct an evidence-based astrology, but at the same time, there are also problems with the methodology of modern statistics that need to be both understood and corrected.
- The mathematical concept of a *quotient structure* needs to be grasped by all astrologers because it unifies so many astrological procedures while also providing a very useful theoretical interpretation of what is really going on.
- The most beneficial way to approach an individual's horoscope is as a *quest*, and it is the professional astrologer's job to help the client understand their individual quest and how they

can successfully complete it. We should seek to understand both our individual cycles and the larger cycles that we each find ourselves a part of.

- And above all, we must always question because it is only through seeking and questioning that we will find, and that is the way that one must proceed in order to find both wholeness and harmony within the cosmos and one's life. That is the way!

