

The Concepts of Modern Astrology: a Critique

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Summary

This article is a methodological and philosophical critique of astrology. It argues that astrology, as it is presently practised by the majority of astrologers (in either its traditional, or psychological form), offers no valid contribution to understanding ourselves, nor our place in the cosmos. Astrology itself is deeply problematic from beginning to end. Central notions like "as above, so below" and 'interconnectedness' are too poorly developed by astrologers to amount to anything useful. There is little consensus on basic issues in astrology, and little agreement on how to settle differences among astrological techniques and theories. Astrological symbolism is unsystematic and based on metaphors, analogies, verbal associations, and mythology, all of which are developed in different ways by astrologers with no clear way of evaluating them. The philosophies or world-views associated with astrology are underdeveloped or poorly articulated. Modern advocates cannot provide research studies that have results commensurate with the claims made in astrology books. Astrologers overwhelmingly rely on anecdotes or testimonials as central evidence, seemingly either unaware or uninterested in the potential flaws and biases inherent in such stories as evidence. Astrology as a discipline is a prime example of what happens when advocates consider only confirming evidence for their multitude of conflicting claims with little regard for contrary evidence, which is either 'explained away' by appeals to other parts of the horoscope, or with slogans like "the complexity of astrology", and "astrology is another way of viewing the world."

1 Introduction

However, since Newton, the views of astrologers and scientists have become increasingly opposed. Astrologers today still hold that the connection between celestial and earthly phenomena is so strong that knowing the heavens allows us to explain and/or predict the earthly happenings. But scientists and philosophers disagree. The terrestrial and cosmological sciences, including the life sciences and social sciences, even though no less interested in extraterrestrial relations with earthly events, do not provide any support to these realms of our existence as advocated by astrologers (see Kelly & Dean, 2000). The symbolic basis of mythology, analogies, metaphors, and verbal associations that underpin astrological claims are fraught with very problematic methodological issues. For one thing, much of astrological lore conflicts with what we have discovered about the solar system. The planet Venus is associated with aesthetics, love, and an individual's sense of internal harmony. However, we have discovered, over the last century, that Venus is more like Hades with its blistering high tem-

peratures, lava-covered landscape, and sulphuric acid clouds. It is even hotter than Mercury, although twice as far from the sun. The point is that most of the symbolism modern astrologers use was created in times when the then astronomer/astrologers had no idea whatever about the physical characteristics of the planets. There is little worldwide agreement on central tenets of astrology, let alone agreement on how astrological issues can be resolved. Surveys of research into astrology have provided no evidence that astrology does work, at least not in the way and to the extent claimed by astrologers. Of course, every time we wake up with the sun, or plan barbecues on moonlit nights, or go fishing at high tide, we are showing how celestial bodies have real impact on our lives. But this is very different from the symbolic connection claimed by astrologers. Other channels of relationship might exist and science is certainly open for unexpected discoveries (including celestial effects on human behaviour). But in the sciences, tradition and authorities are not deified as they are in astrology. Astrologers (unlike scientists), in general, can be characterized as less interested in discovering the truth of their assertions, and more interested in making a case for propositions already accepted in advance (check out magazines like *The Mountain Astrologer* or astrological web sites like *Stariq*, 2000).

Before 1950 very few scientific studies of astrology existed. Most critiques of astrology over the centuries focussed on the problematic nature of astrological theory or the gap between the claims of astrologers and their actual performance (Long, 1982). Something like a dozen major statistical compilations by astrologers had appeared since 1900, notably in France, Germany, England and the USA, but none were widely known, and in any case their methodology was too poor (e.g. no controls) for meaningful results. Not surprisingly, the few published critiques were confined mostly to historical surveys (e.g. Thomen, 1938, Bok & Mayall, 1941; Eisler, 1946). The only extensive scientific critique available was by the French astronomer Paul Couderc (1951/1974). Then in 1955 Michel Gauquelin published his landmark *L'Influence des Astres*, the first rigorous study of astrological claims, with generally negative results but with what seemed to be provocative exceptions (Gauquelin, 1955).

The research interest that Dean and Mather (1977) stimulated led to the foundation in 1981 of *Correlation*, an international peer-reviewed journal devoted entirely to scientific research into astrology, followed in 1982 by *Astro-Psychological Problems*, oriented more to Gauquelin interests. By then the advent of home computers in the late 1970s had revolutionized astrological practice and research. Calculating a birth chart (as well as the often required complementary charts, such as progressions, transits, etc.), once took anywhere from an hour to a day; now it could be done in seconds, allowing researchers to do studies that were previously unthinkable. Today there is a scholarly research base that covers most of the basic claims of astrology. Even sun sign columns have been tested (Dean & Mather, 2000). The outcome from all this, in what probably amounts to well over two hundred person-years of research, is almost uniformly negative (Dean, Mather, & Kelly, 1996). Unfortunately, much of this work is neither widely known nor easily accessible, a point I will return to shortly.

Critical reviews of astrology in the light of research findings, post 1980, include those by psychologists Eysenck and Nias (1982), astronomers Culver and Ianna (1988), Crowe (1990), skeptics Martens and Trachet (1998), and Bible scholars Ankerberg and Weldon (1989) and Bourque (1997). The most recent reviews and the first to include meta-analyses are by Kelly, Dean and Saklofske (1990) and Dean, Mather, and Kelly (1996). Critiques of philosophical, religious or social aspects of astrology include Kelly and Krutzen (1983), Leahey and Leahey (1983), Thagard (1980), Kanitscheider (1991), Dean (1992), Dean and Loptson (1996), Kelly

(1998), and Spencer (2000). Reviews of the arguments of astrologers include Kelly, Culver, and Loptson (1989), Dean, Mather, and Kelly (1996), Dean (1997), and Kelly (1999, 2000). Theories of astrology (including Jung's synchronicity theory) are critically examined in Dean, Loptson and Kelly (1996) and Dean, Ertel, Kelly, Mather, and Smit (2000). Descriptions of the Gauquelin work include Gauquelin (1983, 1988) and Ertel (1992) and Dean (2000). The 'Mars effect' is specifically addressed by Benski et al. (1996), whose conclusions are disputed by Ertel and Irving (1996). The cognitive and perceptual biases that can underlie belief in astrology are briefly reviewed by Dean (1992) and in detail by Dean, Kelly, Saklofske and Furnham (1992), and Dean, Kelly and Mather (1999). The social-psychological reasons for belief in astrology are described by Durant and Bauer (1997), Lindeman (1998), and astrology along with other paranormal phenomena in Goode (2000 b). Recent critiques of the occult that cover astrology include Couttie (1988), Hines (1988), and Neher (1990). There is of course an extensive and ongoing literature on the history of astrology, for example ancient astrology (Baigent, 1994; Barton, 1994; Stewart, 1996), medieval psychology (Kemp, 1990), pre-19th century astrology (Tester, 1987, Spencer, 1997), and 19th century astrology (Curry, 1992). The recent, scholarly journal *Culture and Cosmos* under the editorship of Nick Campion is an important contribution to the history of astrology across the world.

2 Recent shifts in astrological ideas

Classical (traditional) astrology was associated with prognostication and relatively specific, testable hypotheses about planetary configurations and human activities (Barton, 1994; French, 1996; Genuth, 1997; Grafton, 1998). Until the twentieth century, astrologers have held that the stellar connection mainly reflected actual outward human behaviour, but today among the influential group of psychological astrologers there is the tendency to put main weight on Jungian archetypes and (usually psychoanalytic) structures underlying personality. To appreciate the shift in claim, consider first the view of Charles Carter, who was the leading British astrologer in the mid-twentieth century:

Practical experiment will soon convince the most sceptical that the bodies of the solar system indicate, if they do not actually produce, changes in: (1) our minds. (2) Our feelings and emotions. (3) Our physical bodies. (4) Our external affairs and relationships with the world at large (1925, p.14).

Although every birth chart was different, and many astrological factors had to be assessed (often with mutually conflicting indications) it was conceded that there was an *observable, relatively specific something in common* that should be exhibited by people with a particular planetary configuration in their birth chart (horoscope). As the Dutch psychologist Jan van Rooij points out,

If one takes one hundred people with the sun in Aries, they should have something in common, irrespective of other astrological factors. And this commonality should be different from the common factor in one hundred people with the sun in Taurus, irrespective of additional factors (1994, p.55).

On this basis we should not expect to see the influence of a particular factor on a particular person. But examining large groups of people should allow commonalities to be detectable, if

they exist. Contrast this with the views of psychotherapist and astrologer Dr. Glenn Perry, one of the leading proponents of modern psychological astrology (also known as astro-psychology and archetype astrology) in the United States today:

Astrology does not deal with quantities that can be objectively measured...the [birth] chart depicts the structure and dynamics of consciousness...[it] shifts the emphasis from predicting outcomes to interpreting the *meaning* of outcomes as they relate to the inner life of the person (1993, pp. 7,8,9).

Further, “astrology only plays a role in the mental plane and does not express itself consistently or systematically in events or behavior” (Terpstra, 1994, p.42). Here Carter’s direct connection with outward behaviour and external events is played down. Instead the emphasis is with theoretical psychic structures that are symbolically connected to the planets. **[Note 2]**

In the latter half of the twentieth century, many astrologers thought scientific investigations could confirm many of the claims of astrology. Since the 1950’s many studies were conducted by both astrologers and researchers sympathetic to astrology. The picture that emerged out of this research, as pointed out, was mostly bad news for astrology. But negative studies, even when they are cumulative, have been ‘explained away’ and dismissed in many different ways by astrologers, such as the stars incline but not compel, or the astrologer or the technique is not infallible, allowing them to maintain their belief in astrology whatever the evidence or criticisms (see Kelly, 1998).

3 Dealing with criticisms the astrological way

Some ways of reaction often encountered in the astrological camp are as follows:

Ignore Bad News: First of all, such findings can be ignored or played down. As the astrologer Robert Hand tells us, “Positive results in the scientific study of astrology have to be taken seriously undeniably, but negative results not so seriously” (cited in Perry, 1995a, p.37). Overall, this has been the dominant response by the astrological community. This tack is taken by John Anthony West in his “The Case for Astrology” (1991) where he says “Since the aim of this book is to present the positive evidence, intimate details of the bulk of the negative evidence do not really concern us” (p.234). But nearly all the evidence is negative or not commensurate with astrological claims, so West’s deliberate suppression of it is irresponsible (Dean, 1993). A visit to any astrology bookstore will quickly confirm that research into astrology is rarely cited and when it is, it usually only involves a distorted presentation of the Gauquelin findings (Kelly & Saklofske, 1994) **[Note 3]** and an outdated reliance and misinterpretation of studies examining alleged lunar effects on human behaviour (see Kelly, 2000, for an analysis of astrologers’ misconceptions regarding lunar studies, and Kelly, Rotton & Culver, 1996 for a recent review of lunar effect studies). **[Note 4]**

Move Goalposts: Criticisms and serious long lasting anomalies can also be dealt with by hand-waving in another direction and the elevation of speculation to a futuristic higher plane. For example, a serious problem for astrology is the great divide between the Eastern Sidereal zodiac and the Western Tropical zodiac. These zodiacs currently differ by almost one sign. One may be an Aries in North America but a Pisces in India (Cornelius, Hyde & Webster, 1995, p. 31). Is this conflict between zodiacs a problem for astrology? Cornelius et al. tell us this could occur because there are “two different orders of influence, one from the constella-

tions and the other from the earth-sun cycle” or, alternatively, we can view “both zodiacs as two reflections of the same symbolic forms...[that] both show in their own different ways” (p. 32). The obfuscations ‘orders of influence’ and ‘reflections...showing in their own ways’ are nowhere clarified, hence we are no further in our understanding after being told this than we were before. [Note 5]

What about people who are born at the same time and have different destinies? This has long been a standard argument against astrology. The same astrologers tell us: “The singular horoscope [can be] read as a signature for these particular twins with different groups of planets describing the two individuals...where frequently one twin answers to the sun and the other to the moon in the same horoscope” (Cornelius, et al. 1995, p. 131). Here the term ‘frequently’ refers to inclining not compelling, to avoid disconfirmation. [Note 6] We are also entitled to ask how one would tell which one is sun and which one is moon, but no answer is provided. [Note 7] If that doesn’t work, Cornelius et al. remind us that we can always interpret astrological symbolism in a metaphorical way, for example, “Sigmund Freud was born on a different continent but within minutes of Robert Perry (sic). Freud discovered the unconscious and Perry (sic) discovered the North Pole” (p. 131; see also p. 96). Hence, these time-twins were both discoverers! [Note 8] If interpretations encompassing both literal and symbolic (including metaphorical) are equally admissible with astrological claims, then we cannot fail to find a fit between the horoscope and the person. The positive side to this is never having to admit you are wrong, the negative side saying very little of import.

Invoke Negatives: A fourth popular response is to say that the phenomena astrology deals with are very subtle and elusive, and what is needed are more creative ways of investigating them. For example, even though a large, consistent body of research converges on the view that sun signs are not valid (Dean & Mather, 2000), the astrologer Harvey could still say “It is absolutely correct to say that there is no evidence for signs and houses *as yet...* (1982, p. 47, italics Harvey’s) and twelve years later, after acknowledging an even larger body of negative studies, tell us ”I am personally still convinced that, given more sensitive and imaginative tests, confirmation of the reality of sun-sign typologies, and the signs generally, will be obtained” (1994, p.v) [Note 9]. Similarly, after finding no relationship between gender dysphoria and astrological factors, Anderson (1997) tells us “*Somewhere* the astrological signature *must exist* predicting that at some time during the native’s life this devastating upheaval will take place ” (p.106, italics mine). Since it is difficult to prove a negative in such cases, this position can be maintained indefinitely. A further point is that astrologers with incompatible positions on fundamental tenets can adopt the same intransigent attitude in regard to their own beliefs. Such a posture in the face of negative evidence can guarantee a static system and a lack of progress. If scientists had adopted similar attitudes in the face of negative studies and argument, physics would still be Aristotelian. It also contradicts the supposed ease with which astrological connections were first recognized. As Perry (1993) tells us of the ancients, “the partial if not complete validity of astrology was self-evident to anyone willing to attempt a serious study of the subject” (p.3). This discrepancy is in need of explanation. Furthermore, appeals to the self-evident have not been very fruitful guides to truth in the history of ideas.

Blame Faulty Methods: Finally, one can say, that if researchers are obtaining negative results, they must be doing it wrong. They are using the wrong methodology, the wrong paradigm or both. This approach has been adopted by increasing numbers of astrologers since

the 1950's, when research (and negative results) got underway. West (1991,1996), for example, contends that scientific criticisms of astrology are irrelevant because astrology is “a system of magic” (p.223), where magic is “the attempt to master the fundamental laws of resonance that have produced the cosmos” (p.220). He is insufficiently explicit about this ‘system of magic’ and we are left with a conjunction of unformulated statements about ‘the creative powers of nature’, or the ‘laws of harmony’ and appeals to authority (‘ancient wisdom’). West (1991, pp.222-223) attributes the symbolic planetary manifestations on earth studied by astrologers to the interactions of poorly understood fluctuations in physical fields around the planets, with even less understood, metaphysical ‘rarefied realms’ higher than our own. He says,

it is Heka, Magic, the Principle of Correspondences that sees to it that Divine Inspiration (Will or Intention), made manifest in the planets, transmits itself...in subtle frequencies and amplitudes. These in turn produce fluctuations in electromagnetic or geomagnetic fields...as yet not clearly understood or specifically identified but whose existence is acknowledged. These fluctuations are physical in a sense directly analogous to the fluctuations in the air, the sound waves, that the ear interprets as music, or the eye interprets as color. In this case, those fluctuations represent celestial harmonies, and they manifest on earth as ‘meaning’. The study of this meaning is astrology.

West’s “direct analogy” between hearing and vision and astrological meaning is deeply flawed. The dissimilarities between the two things being compared are far more significant than any similarities. We have a great deal of knowledge of sound and colour waves. For example, we know about the receptors involved, and the areas of the brain associated with these senses. On the other hand, we have little idea what the phrase ‘fluctuations representing celestial harmonies’ means, nor can we identify methods which would allow us to reliably distinguish different fluctuations from the planets and asteroids, let alone understand how the frequencies and fluctuations would relate to *hypothetical* planets, nor identify what receptors are involved. Further, while we have some understanding of how sound waves are related to pitch, etc and are interpreted as music, we are provided with no parallel how we can reliably interpret or identify these fluctuations as descriptive of our love lives, or financial lives, let alone future possibilities, or how such ‘celestial harmonies’ could lead to the claim that the herb Cayenne is ruled by Mars. Furthermore, while our sensory capabilities vary among people, and our sensory abilities decline with age, there is nothing analogous with people have differing sensitivities to astrological effects, or our responsiveness to astrological influences declining with age. As Evans (1994) points out, West’s

magical system is a closed system. We are invited to believe that it is true, not because it connects up with other things which experience has shown to be true, but by some inherent truth of its own which will have it that the planet Saturn symbolizes contraction whereas Jupiter symbolizes expansiveness....(p. 413).

While, in general, astrologers give the impression that claims about zodiacal signs, houses, planetary aspects, and so on are empirical statements (that is, claims capable of being rejected or modified by research or theory), to most astrologers such claims actually function as necessarily true claims (Kelly, 1998). The truth of central astrological tenets are themselves never in doubt.[**Note 10**]

4 Assumptions of astrology

Astrology involves one fundamental idea, the vague “As above so below” and the planets. One can, however, discern several other ideas that are loosely held by many astrological traditions. The second and the fourth are common to many kinds of astrology, namely that everything in the birth chart affects everything else in the birth chart, and that astrology is related to a transcendent, occult reality. The third claim is the unusual one, namely that the birth chart indicates not behaviour or events but changes in consciousness. A look at these four claims can now be taken one by one.

4.1 — The relationships postulated by astrologers between celestial phenomena and terrestrial phenomena are only correlational.

The former astrologer Joanna Ashmun (1998, p.6) points out,

The basic notion of astrology is ‘as above, so below’. It’s been elaborated to mean a lot of things, many of them goofy, but its basic meaning is that the heavenly pattern is reflected in the individual, as if the horoscope is somehow embedded in the person. It’s just assumed that there is an identity between the natal pattern and the person.

Traditional astrology usually adopted the notion that the relationships between celestial and terrestrial affairs was some kind of causal one. As Placidus said in 1657, “It is impossible for the efficient heavenly causes (as being so very far distant from things below) to influence sublunary bodies, unless by some medium or instrumental virtue ...the instrumental cause of the stars is light”, and “the stars, where they do not rise, are inactive”, so astrologers should “reject a secret influence as superfluous, nay, even impossible” (p. 1, 3). Most modern astrologers reject this causal approach [Note 11]. Perry (1994) tells us that the relationship between people and their birth charts are not causal but correlational. The astronomical bodies *reflect* human life experiences rather like a mirror reflecting a landscape which has to be interpreted. But there is much disagreement over the kinds of celestial configurations that are relevant, and how they are to be interpreted. In fact, no matter what an astrologer may claim, a search of the literature will invariably find a conflicting claim by another group of astrologers. Unlike disputes in science, it is unclear how such disputes can be resolved, even in principle. This disagreement exists even at the most fundamental level for entire populations of astrologers, for example Western astrologers disagree with Eastern astrologers on which zodiac to use and how many planets to use. While the Indian astrologers apply the real, star-related constellations in their charts, the Western zodiac is independent of the stars. Such systems are mutually incompatible, yet are seen as completely valid by their users.

Astrological signs and houses are problematic and there are no agreed upon rules for weighing their effects. For example, as the astrologer Prudence Jones (1996, p.282) says,

[The zodiac signs] rest on shaky foundations from the modern point of view. How in heaven do twelve 30 degree sectors of the ecliptic, measured from the vernal equinox but named after now-far-distant constellations, impart any qualities at all to the planets, houses, parts and nodes which we view against their backgrounds? Do they do so in fact, or is this wishful thinking? Some astrologers justify the signs (taking, usually without explanation, the sun in the signs as their exemplar) as shorthand for seasonal characteristics. But this implies that their order should be reversed in the southern hemisphere, which seldom happens. And what, in any case of horoscopes for equatorial latitudes, where seasonal change is minimal, but where, of course, astrology was invented?

Even though the Western Zodiac has lost its connection to the original sky (and cannot simply be reduced to a seasonal effect), the people born within Western zodiac are signs still said to display the personal characteristics associated with the original constellations. The sidereal signs have the same meanings as for tropical signs, e.g. Aries is aggressive in both systems, but the piece of sky to which this meaning is applied is not the same. So one side can believe a certain piece of the sky means ‘intense’, while the other side can believe the same piece of sky means ‘relaxed’ (this is Scorpio vs. Libra).

Much the same applies to the astrological notion of houses. The meanings across systems are usually the same, but because the boundaries can vary, the meaning of any particular piece of sky can depend on the system. House systems differ with regard to number, sequence, method of division, and interpretation (Dean & Mather, 1977; Martens & Trachet, 1998). Further, some house systems (including popular Placidus) break down at high latitudes. At high latitudes some parts of the zodiac never rise or set, and in affected house systems any house cusps or planets that fall in such areas cannot be shown on the birth chart, so in effect they cease to exist.

Western astrologers also differ in how many planets should be used, some use undiscovered hypothetical planets, others use asteroids (Dean & Mather, 1977). The good/bad interpretation of transits co-exists with the view that transits are to be viewed as opportunities for learning and growth. This diversity in fundamentals gives us grounds to be sceptical of claims that astrologers are speaking about something they have actually apprehended. This diversity in fundamentals becomes even more problematic when it is placed in a historical context. Astrology, in different senses, has been around for at least twenty-five hundred years. At the beginning of the new millennium astrology is in a chaotic state with an increasing plethora of conflicting claims with little agreement on how to adjudicate among them [Note 12] The claims become more varied and conflicting as some astrologers (eventually) take notice of research findings and retreat to safer pastures.

4.2 — The horoscope is a whole system in which every part is influenced by every other part.

4.2.a. The idea of interconnectedness: Along with the vague, variously interpreted notion of ‘as above, so below’, is the ambiguous idea of ‘interconnectedness’. Harding says, “We are interconnected; I think this is the central message of astrology” (in Phillipson, 2000, p.187), and Brady tells us “The very centre standing stone of astrology is the interconnectedness of things, so [astrology] can’t say that you are totally isolated and that’s it. It can’t ” (in Phillipson, 2000, p.189). Astrologers do not have a monopoly on saying we are interconnected. It is our familiarity with other notions of interconnectedness that give any initial plausibility to the more problematic astrological notion. In the 1600’s, Newton hypothesized interconnectedness in his statement that every body in the universe attracts every other body. Evolutionary theory emphasizes living organisms and their environments are constituted of interconnecting webs, and that life shares the same chemical basis. Astronomy acknowledges that all matter in the universe is interconnected in the sense that all matter is made of ‘star stuff’ that was produced in the Big Bang. Human beings are interconnected biologically in that they share the same DNA structure, and history and the social sciences show that we cannot be isolated beings in that we share culture and a heritage, and increasing specialization in our economic system ensures we are interdependent on others.

None of the above notions imply or even support the *astrological* idea of interconnectedness. When astrologers are talking about interconnectedness it is from a perspective that refers to *symbolic* connections between heavenly bodies and terrestrial events mediated through interpretation based on notions such as mythology (Mercury was the messenger of the Gods, so Mercury rules body systems that function as messengers), literally taken metaphors (the rings of Saturn represent constraint), analogies (red Mars represents blood and aggression), and idiosyncratically chosen associations (“If you want to activate Mars energy, wear red” (Phillipson, 2000, p.67). None of the previously mentioned notions from the social or natural sciences suggest in any way that *symbolic* planetary configurations (that are often unconnected with the actual planetary positions) have a *strong* relationship to earthy events, nor that the planetary configurations at one’s birth have any *lasting effect* on our lives, nor that the symbolism of astrology is *universal* for people over time and space.

4.2.b. The whole chart : Since everything is interconnected, astrological factors cannot be examined in isolation, the whole birth chart is needed. So the golden rule is that “only the whole chart should be considered, for any astrological purpose whatever” (Dwyer, 1985, p.1). As Perry points out “... no one part of a horoscope can be isolated...since *everything influences everything else*” and “...you cannot empirically observe a pure [astrological factor] isolated from other factors in the chart ” (Perry,1993, p.6; Vaughan, 1998). But astrologers disagree over which individual factors are important, so they disagree over what comprises the *whole chart*; they just agree that whatever it is, it’s important to keep it in mind when doing astrology. As Van Rooij (1994) asked:

Where does the whole chart end? With ten planets, twelve signs, twelve houses, midpoints, Arabic points, nodes, aspects and whatever other astrological concepts may be used, it is simply impossible to interpret a “whole chart”. When astrologers claim that they use the whole chart, they only refer to the fact that they use more factors than just one. Nevertheless, no matter how many factors they may use, *they always use a restricted number of factors, and therefore only a part of the horoscope. They never use the whole chart. But then the question becomes how many factors would be considered, and which factors?...Suppose that I consider as many as 20 factors, then undoubtedly an astrologer will come up who claims that I should use 21 factors* (p.56 italics mine).

The decisions of astrologers regarding what to include in their charts seems entirely arbitrary. Some astrologers use asteroids in birth charts. As Hand (1981) points out, size of an astronomical body is unrelated to astrological effectiveness, therefore “[t]he disaster is that there are thousands of asteroids and other minor bodies orbiting the sun, and using present-day astrological techniques there is no way of accounting for all of them in a chart” (p. 93). Other astrologers use hypothetical planets such as Vulcan and Lilith that have not been detected by astronomers (Hand, 1981, p. 95). There is no evidence that astrologers using asteroids or hypothetical planets are more insightful or more successful counsellors than those using “incomplete charts”, or than non-astrologically oriented psychotherapists or even lay therapists (Dean, 1985; McGrew & McFall, 1992).

How can different sets of parts give the same meaningful whole? This problem would seem to be exacerbated when we remember that conflicting Western astrologies utilize different factors, and even when the same factors are used, they are often weighed differently. If different schools of astrology use different astrological factors and hence operate with differ-

ent notions of the “whole chart”, then any reference to the supposed commonality of the “whole chart” is less than meaningful. Perry (1995a) stated “every planet and every sign of the zodiac is influenced by the whole in which it is embedded” (p. 34). But if one astrologer’s whole chart and another astrologer’s whole chart involve factors that are different in type or number, the end result must (according to Perry) be open to question. It is as if we thought we were talking about the same thing, but upon investigation found that I meant Volkswagen, while you were referring to Cadillacs.

Furthermore, the writings of astrologers continually (very often in the same work that condemns the use of isolated factors) violate this maxim (Kelly, 1999). They constantly refer to unqualified isolated factors. So in Phillipson (2000) we read, “Saturn does correlate with failure to conceive” (page 80), “When I had Mars at an angle, I knew I was going to have a hectic day”(page 81), and Moon square Mars is associated with people who work frenetically (page 93). Astrologers continually select one isolated factor out of a large set of possible factors in a chart (often ignoring conflicting factors) to explain both on-going terrestrial events, and events that have already happened. For example, Wolfstar (2000) explains the problems that Harrison Ford and his wife are having as due to “the troublemaker Uranus”, also known as “the divorce planet.”

Over the past year, transiting Uranus has been opposite Harrison Ford’s Mars...this is the major tension leading to separation from his wife.

If the Harrison Ford marriage relationship problems were not happening, Wolfstar and other astrologers would have no difficulty finding astrological factors that indicate contentment. For example, when Suzanne Lilley-Harvey (1981), a top British astrologer, compared the birth charts of Prince Charles and Lady Diana before their wedding, she found “very fundamental rapport...harmonious communication... physical attraction...general emotional and social compatibility...strong social/cultural/spiritual bond...excitingly attractive and romantic...ability to work together in a very practical way.” Which did not stop Campion (1993, p.154), another top British astrologer, *after* their separation, seeing in the same birth charts, only trauma, anger, rebellion, and disaster. The previous wonderful compatibility was nowhere to be found. In other words, due to the enormous number of factors, a perfect correspondence can always be found between any chart, any person, and any event. Nothing could be easier than picking the symbols to fit the circumstances, or the personal beliefs and expectations of the astrologer. As an example of the latter, ten prominent astrologers were asked to provide their predictions as to who would be in the White House after the year 2000 American presidential election; examining the birth charts of Gore and Bush, each astrologer found multiple indicators for their preferred candidate. Four predicted Gore would win, four predicted Bush would win, and two avoided predicting a winner (Stariq, 2000). An astrological horoscope generally provides planetary configurations for any number of conflicting predictions or after-the-fact explanations of events, so no wonder astrologers claim to see it ‘working’ everywhere.

So when we are told by astrologers that “astrology works”, we are not sure what to make of it. [Note 13] It is also important to note that the slogan “it works” put forward by astrologers masks a number of issues. First of all, astrology is not one kind of animal, but a diverse set of conflicting techniques, conflicting theories, conflicting world-views, and conflicting claims of what astrology can and cannot do. Second, that astrologers of all (often very conflicting) persuasions will cite testimonials and stories as evidence for their very often incom-

patible versions of astrology suggest that non-astrological factors may play a large role in the perceived success (see Kelly, 1999, p. 43, footnote 6; also, Dean, Kelly & Mather, 1999). Third, “it works” can have a range of different meanings from “astrology is true” to “clients are satisfied”, so the statement is also ambiguous. [Note 14]

4.3 — Issues over the origin of astrological ideas

A legitimate query here concerns how astrological connections are established. For example, why do astrologers say that “The Full Moon in Taurus is a good time to attend to the thyroid gland” or “Avoid travelling when the planet ruling your ninth house is making an unfavorable aspect to another planet” (Stariq, 2000), or “Women travel on their Mars lines to meet men” (Phillipson, 2000, p.99), or “Neptune is associated with universal love, spirituality, dreams, and drugs” (Equinox astrology site, 1999)? Most astrologers write as if astrological tenets are based on a form of ‘inductive empiricism’, a basis where correlations between heavenly events and terrestrial events have been observed in everyday practice. Elwell (1999, p.24) says “This process of observation, refinement and confirmation, is how astrology built up over centuries.” To make it easier in examining this contention, let us initially consider a relatively straightforward astrological claim, and examine the theories advanced by astrologers to explain these connections.

According to traditional astrology, the planets are associated with certain character traits, for example, Uranus is associated with originality and independence. How did astrologers find this out or determine this?

Gauquelin (1980) and Startup (1981) have described five theories that are taken seriously by members of the astrological community. In what follows, I will describe each of these theories, relying heavily on many of the insights of Startup to examine them critically:

1) *The planetary connections were revealed to the ancients by a higher intelligence, for example by gods, angels, demons, or extraterrestrials.* For example, Harris (in Phillipson, 2000, p.17) suggests that astrology may have originated from spiritual beings that settled on earth and predate Atlantis. Apart from begging the question about the existence of these beings in the first place, explaining mysteries in terms of other mysteries does not take us any further than we were before. “We have not explained how these aliens got their knowledge” and so it merely pushes the problem elsewhere (Startup, p. 26). It is also not clear how this proposal could be independently tested.

2) *The early astrologers acquired this information about planets and personality by paranormal means.* This assumes that ESP is capable of establishing relationships far beyond the claims of researchers of the paranormal. Also,

which particular psi ability is to be invoked? Surely telepathy is no good here since, prior to the establishment of the typology, there was no one’s mind to read. Clairvoyance is equally dubious since it is difficult to imagine what state of affairs could have been paranormally perceived which was not available to ordinary perception. That leaves precognition...but this would presumably require that the ancient astrologers somehow saw the results of modern investigations which were themselves, in turn, inspired, albeit indirectly, by the ‘insights’ of the ancients (Startup, 1981, p. 26).

There are other problems. What is the ‘it’ we are detecting by paranormal means? Some ‘force’ emanating from the celestial object? How do the items detected para-normally relate to items detected by normal perception? (For example, if we detect all sorts of paranormal ‘rays’ around us, how can we tell that they are coming from what we visually perceive as Mars?). How do we know that there is a correlation between the normal and the paranormal item? By paranormal means? — That’s doubly question begging! By normal means? If so, then why could not we have noticed the paranormal item through normal channels?

3) *The planetary connections arose by analogy with the planets’ appearance and speed.*

Startup elaborates on this conjecture:

The idea here seems to be that the originator(s) of the planetary typology started out with the simple theory that the planets influence human personality and then to discover what these influences are, they took note of the gross appearances of the planets and interpreted these appearances analogically in terms of personality characteristics. Francoise Gauquelin gives a typical explanation of how the ancients were supposed to have thought: ‘...the large and brilliant Jupiter suggests power, the red Mars suggests fire and war, the light blue Venus suggests tenderness, the ashy yellowish Saturn suggests remoteness and old age, etc.’ (pp. 26-27).

Startup contends that these analogies were unlikely to have been the source of the personality characteristics associated astrologically with the planets:

Each of the planets has many characteristics visible to the naked eye, so how were the Babylonians to know which were the relevant ones?...Venus (and other planets to some extent) varies a great deal in visible brightness and yet is not thought to be changeable in character. The sun, and also the moon, are glaringly different from the planets in appearance and yet the temperaments attributed to all these bodies are of much the same order. Jupiter is comparatively large and bright and brightness may perhaps suggest power but [to the naked eye] Venus appears even larger and brighter (Startup, 1981, p. 27).

Also, the portrait of the very ancients that astrologers profess to admire as scholars is unflattering:

It requires us to believe that the learned men of Babylonia proceeded in a completely unsystematic, inconsistent manner. It suggests that the planets were judged by a hotch-potch of different types of characteristic, the Moon was judged by its phases, Mars by its colour, Jupiter by its brightness or size, Saturn by its apparent speed and so on (Startup, 1981, p. 27).

While knowledge can evolve by a hotch-potch of experiences, for example, Chinese popular herbal medicine likely evolved by a variety of less than systematic experiences, such claims can be investigated and demonstrated by the very kinds of studies eschewed by most astrologers (Allen, 2001). Further, what are the mechanisms analogous to natural selection that separate poor astrological techniques and hypotheses from better ones? As the astrologer McDonough (2000) complains:

Is there anyone ...that isn’t confused and overwhelmed by the plethora of techniques in the astrologer’s bag of tricks?...Why do we have such a massive, confusing mess of factors to deal with? Because there has been no way to toss anything out.

4) *The planetary connections are based on observation.* As Perry (1993) claimed,

The stargazers of antiquity systematically recorded their observations of heavenly movements and correlated these with observable events on earth. Through ongoing inductive analysis, these early explorers gradually reached certain conclusions as to the meaning of the variables in question and passed these down to succeeding generations (p.2).

Similarly, Harding (2000, p.29) says,

I need no theory of the birth chart in order to interpret it, merely an awareness that people with Mars in X and Venus in Y tend to present in various ways....Ultimately, I have to explain my ideas about the world in terms of how the world *is*. I might have some amazing idea about the relationship of Mars and Venus, but my 'proof' will lie...only in the positions of the planets themselves and what is said and done by people who were born at certain moments.

On one popular form of this scenario, the ancients, in the process of gathering data on both celestial and terrestrial affairs, began to notice a relationship between manifestations of personality and the activity of the planets. These personality characteristics associated with certain planets were also noticed to be similar to those attributed to certain gods. On the basis of these similarities, the ancients began to match the gods' names with the planets.

As Startup (1981, p.28) points out, this assumes a primitive, inductivist (theory-neutral observational) model of science. However, observations, even low level ones, are not completely theory-neutral because what we believe influences (at least to some extent) what we see. While statements about the presence or absence of a dog under the bed involve a minimal amount of theoretical content, statements about the presence or absence of neutrinos presuppose much more theory. In the case of personality, why would one look for associations with the planets in the first place and not elsewhere? If all ancient peoples had theory neutral access to the world around them, we would expect a great deal less diversity of belief about the world. Indeed, from this hypothesis, it would be peculiar if only the Babylonians (and nobody else) had noticed their particular personality-planetary relationships that are supposed to play such a large role in human life! Another problem is that the second fundamental claim of astrology says that astrological factors cannot be examined in isolation, because everything affects everything else. So by definition isolated planetary connections with human activity could not have been observed in the first place.

5) *The theory that the planets were symbols of the gods, and had the same terrestrial effects as their namesakes led to testable pairings of planets and gods.* This is the contrary view to the previous one. There the observations led to theories. Here it is the other way around:

The Babylonian gods 'existed' long before their names were also given to the planets. The Babylonians theorized that the planets were the gods, or symbolized the gods, and therefore had the same influence over the terrestrial affairs that the gods in their pantheon were supposed to have. Thus, to discover what influences each of the planets had, all they had to do was to find the correct pairing of god and planet...In this account, observation was used to check the appropriateness of the god-planet pairings that were proposed and, where the initial pairings proved unsatisfactory, it may have promoted a new round of conjectures and observations (Startup, 1981, pp. 30-31).

As Startup stated, a serious problem here is that “each horoscopic factor gives off only a weak signal which is embedded in noise...[so] it is not clear how such checks could have been made” (p. 31). One suggested way around the problem is to appeal to what Startup calls a “societal noise filter”. Perhaps there were groups of astrologers who studied, in detail, just one of the planets and “also fed back the results of their thoughts and observations to the group which discussed their ideas at length” (p. 32). Over time, these restricted groups, so the argument goes, gradually filtered out the wheat from the chaff. Startup pointed out that this seems to have some initial plausibility since many early cultures may have used such a process to learn about things like antibiotic remedies before people knew why and how they worked. There is, however, a large jump between making observational connections about using molds to treat infections and pairing complex personality attributes with planets and gods. In addition, even false theories can have a long life of their own when they serve political interests and are backed by powerful factions. Astrologers have, throughout history, used their art as a propaganda tool for various political factions. For example, the 17th century astrologer William Lilly wrote pamphlets attacking Charles 1st by selecting whatever celestial factors suited his purposes (Geneva, 1995). This flexibility of interpretation of astrological symbolism, and capacity of multiple denotation has allowed astrologers to play any side in the political arena, and so guarantee patrons and the survival of astrology.

As Startup pointed out, there is not “enough documentation of the relevant facts [about how early astrologers’ operated] to make speculation unnecessary” (p. 33) and speculation is not an adequate explanation of anything.

Startup concludes that all of these proposed explanations are *ad hoc* and unsatisfactory. In other words, traditional astrologers cannot plausibly account for the origins of a comparatively straightforward claim about the relationship between the planets and personality.

But astrologers claim to have uncovered far more varied and complex relationships between human affairs and the cosmos than just the association between planets and personality. There are an incredibly large, but finite, number of possible celestial patterns from which astrologers have arbitrarily excluded certain components. For example, they may have chosen to ignore the moons of Jupiter, or individual contributions from the 10^{22} stars in the part of the universe that we can see (there may be even more that are too weak to see), and so on. This still leaves a huge variety of celestial patterns to consider in separating out astrologically effective from astrologically ineffective combinations. And by huge I do mean **HUGE** — because even at the most basic level there are ten planets (for convenience, astrologers count the sun and moon as planets), each of which can appear in twelve signs and twelve houses, and make nine kinds of aspect (conjunction, semi-sextile, sextile, semi-square, square, sesqui-quadrate, trine, quincunx, opposition) to each of the other nine planets. However, because any given combination of planets- in- signs immediately limits the possibilities for houses and aspects (for example, two planets in the same sign cannot occupy opposite houses or be in opposition), and because some planet-in-sign combinations must be discounted (for example, Mercury is never far from the Sun, and the outer planets move too slowly to allow every combination except over thousands of years), the total combinations per planet is **not** simply $12 \times 12 \times 9 \times 9$, **nor** is the total combinations per ten planets simply 10^4 ($12 \times 12 \times 9 \times 9$) or about 10^{40} . Instead, the total is more like 10^{28} combinations, the exact figure depending on geographic location, house system, and the time period. This, of course, is just for the most basic astrological factors: many astrologers would use more factors, often many more, for example, axes, midpoints, retrogradation, and asteroids. Indeed,

one American astrologer (without giving details of her calculation) claims that the number of combinations is 5.39×10^{68} (Doane, 1956, p. 1). This makes 10^{28} seem puny. But even 10^{28} combinations reduced to one quarter page each, would still require a stack of paper roughly ten times heavier than the earth. Furthermore, our problems have only just started. Because we are forbidden to consider factors in isolation, we must now relate this huge variety of patterns directly to the large variety of patterns of human action. Obviously it cannot be done. In other words, astrological theory could not possibly be based on either observation or the testing of astrological ideas based on gods. Another complication refers to the importance of location of birth in constructing a horoscope. There is no evidence that early astrologers did or could have done longitudinal studies that even today would be difficult. Since these claims turn out to be deeply problematic, we have good reasons to reject more complicated claims based on these same theories.

We cannot escape from this dilemma by focussing on just one or two isolated factors, because our second fundamental principle (use only the whole chart) forbids it. But even if we do break the rules and look at isolated factors, we still have problems. Suppose we find that, out of all these 10^{28} celestial combinations, people born with the sun in Aquarius aspecting Saturn in the 12th House are reserved, but those with the Sun in Aquarius aspecting Saturn in the 11th House are outgoing. In the general population, people who are reserved or outgoing are common, but those with any particular planetary configuration will be relatively rare. The mismatch in occurrence makes our finding lack any clear meaning. Even then, our problems are not over. The same astrological factors are supposedly associated with many different things, including both positive and negative sides, which can be expressed in all sorts of differing ways. For example, together Mars and Neptune can indicate altruistic urges to perform good deeds, or, frustration and rage (Vaughan, 2000b). Our interpretation of the meaning of factors in the horoscope is also qualified by other more earthly factors like the person's sex, level of maturity, age, culture and so on. Furthermore, the same planetary configurations can mean different things depending on whether we are talking about a human being, a dog, a company, a country, or an idea. So we have complexity laid upon complexity, laid upon complexity. The extreme implausibility (others would say impossibility) of the ancients being able to correlate such diverse, complex, amorphous, aspects of reality together into one comprehensive package should reinforce our skepticism about astrology having any kind of basis in observation, and, on the same grounds, astrological claims could not have been refined over time by any empirical procedures. [Note 15]

4.4 — Astrology predicts changes in consciousness not behaviour or events

It is here that the new psychological astrology departs from tradition. Here the central relationship between celestial patterns and human beings is not with outward, observable patterns of behaviour and tendencies but rather with the unobservable, inner life of a person, or what Perry called the “psychic structure which underlies personality” (Perry, 1995 b, p. 123 ; see also, Perry, 1988). Much of the following will be based on the writings of astrologer-psychotherapist Glenn Perry since he is one of the most prominent and representative spokespersons of the psychological astrology school. Perry (1999, p.2) contrasts traditional event-oriented astrology and psychological astrology as follows:

A strictly predictive astrology ...implies that one's fate is more or less fixed and that one's ultimate good lies in avoiding pain and maximizing pleasure. Whereas psychological astrology

assists individuals in discovering how they are creating their own fate, predictive astrology merely describes fate without relating it to the inner, psychological life of the person. From this perspective, events have no meaning beyond being 'good' or 'bad'. To say that they are 'karma' from past lives, to be suffered and endured (or perhaps avoided through the cosmically informed counsel of one's astrologer), does little to help people live more constructively in the here and now. I believe that fate can be positively altered through a process of internal healing and integration. The real meaning of events is that they constitute 'feed back' that reflects back to the individual where s/he is at in terms of health and wholeness. And their real value is that they stimulate growth in precisely those areas where the individual most needs to change....

Further, it is not the job of the astrologer to tell clients what to do since planetary configurations provide:

an opportunity for learning rather than an occasion for evasive action...[and] one of the core meanings of the opportunity it affords-no, *requires*, [is] increasing one's trust in an inner source of knowing, I take that away by recommending a specific course of action. I do him a great disservice. I steal his choice, for it would be interfering in his fate to predict an outcome... The important thing is not *what* is going to happen, but how he accommodates [to it] ...I believe our value as astrologers lies less in telling people what to do than in encouraging them to trust themselves and the Universe (Perry, 1999, p.2, 3).

Perry (1999) further tells us astrologers should help client achieve a "greater realization of their potentials [as revealed in the birth chart] " (p.4) and thereby "best harmonize with the universe"(p.1). How do we know when the individual has achieved this? When they are in a state of "health and wholeness"(p.2). The advice given by Perry is hardly unique to astrology. Much of the transcendental talk and advice given by psychological astrologers can be found in pastoral counselling and popular psychology (as found in every book store), without talk of birth charts and astrological symbolism. The crucial point is that Perry's comments about inner selves, etc. does not require stars and horoscopes. He capitalizes on astrology by using otherwise acceptable or disputable insights provided by others. It is very likely that there are more effective ways of dealing with the existential and everyday issues of clients than what astrologers can offer. Farha (2001) points out that most astrologers do not have training in crisis management or related fields, and neither are there astrological national standards that provide a baseline of ethical practice as exists in fields like counselling, psychology, social work, or other human services. Further, the providing of constructive council for living in the here and now, and the providing of meaning, along with ways of stimulating self-examination are very arguably more effectively done by practitioners in the emerging field of philosophical counselling (see Marinoff, 1999; Raabe, 2001; Le Bon, 2001). Given that many of the issues clients deal with are existential or spiritual,

Philosophers are typically far better trained philosophically than their counterparts. They are therefore better able to help a client when it comes to clarifying her thinking, avoiding both logical and procedural mistakes in reasoning, ethical decision making, values clarification, questions about the meaning of life, and the development of a sound and reasonable personal philosophy (Raabe, 2001, p.277).

The astrological notion of potential may be more narrow than that advocated by humanistic philosophers and psychologists. While our potentials may, from these other perspectives, be limited to some extent by our genetics and cultural opportunities, the astrologer adds a further limitation, namely, the potentialities ‘promised’ in the natal chart. The astrologer Cornelius (1998, p.10) criticises this notion as follows:

If you're born says this school of thought, with a very powerful Saturn, then you have *the potential* for certain experiences [opportunities] of a Saturnine nature. Remember, however, that this is a velvet glove fatalism because you're still *fated* to have been born with a Saturn potential! This approach hasn't really solved the problem.

4.4.a. The inner psyche. Let us now turn to the inner psyche purportedly symbolized by the planets. Perry says,

A horoscope symbolizes the complex, evolving nature of consciousness...the depths of personality...the dynamic relations between psychological drives. For example, Sun square Saturn symbolizes a conflict between the need for self-expression and the need for self-control... (Perry, 1995b, p.124).

Zodiac signs symbolize general, "...fundamental human needs, or motivational drives, inherent in the human condition" (Perry, 1988, p.1), whereas the house positions and planetary aspects symbolize a particular individual's "map of consciousness" or "inborn personality structure" (Perry, 1988, p.2,3). [Note 16] The extreme problems of accounting for the relations between celestial factors and observable, relatively specific outcomes postulated by the traditional astrologer are further exacerbated by the psychological astrologer's additional conjectures. How do we know such invisible psychological processes underlie the astrological symbolism? Perry tells us such cognitive processes and structures are distilled from the composite descriptions associated with traditional astrological symbolism. For example,

..the need of a [zodiac] sign can be inferred from the behavior which is characteristic of that sign, eg., Leonian pride, creativity, and amiability evidence the universal human need for validation of perceived identity (Perry, 1988, p.2).

It is difficult to see how it follows in the first place from the characteristic behaviours of a sign that one intrinsic motivational factor ties them all together, and even if the case could be made, a further case would need to be independently made for the particular human drives postulated by Perry. He never clearly sets out how he arrived at these conclusions. No sets of studies of a quantitative or qualitative nature are discussed, nor is there any kind of an appeal to any careful examination of the astrologically symbolized behaviours by independent astrologers or psychologists to determine what one might infer from them. Furthermore, if only the whole chart will do, inferences based on parts are by definition meaningless. An additional problem is lack of agreement on the characteristics or behaviours associated with each particular sign. The sets of keywords and expressions assigned to particular planets, signs, and houses are far from consistent (Dean, Mather, & Kelly, 1996, p.82). While there is agreement on many characteristics associated with the signs and planets, the disagreements could contribute to quite different inferences about the underlying psychological structures symbolized.

Perry elevates psychological astrology to Biblical miracle status by further informing us that the dynamic relations between various psychological drives symbolized by the horoscope

are “fluid and changing, varying in accord with situational specificity, developmental age, emotional maturity, and level of psychological integration” (1995b, p. 123; 1994, p.34). Further, “...unlike the boundaries of physical objects, the contents and processes of consciousness involve meanings whose boundary regions are fuzzy...[m]eanings are indefinite, arbitrary, relational and culturally embedded” (Perry, 1995 a, p.34). The fuzziness claimed by Perry would be one more reason why the astro-connections would be, at best, exceedingly difficult to establish, and one more reason why astrology becomes even more unfalsifiable.

4.4.b. Consciousness. It is clear that no theory of consciousness based on physical processes can perform the role demanded, so Perry opts for dualism, the existence of a nonphysical, immaterial mind or soul. While psychological astrology is described as a theory of “extraordinary complexity *and* a model of consciousness” (Perry, 1995a, p.32; 1994, p.33), epistemological questions regarding this dualistic view of consciousness are never addressed, we are merely offered tidbits such as, consciousness is a “non-physical system” (1995a, p.32) and “a subjective experience of awareness that has no material correlates...” (1995a, p.34). Nowhere does Perry attempt to articulate the intrinsic nature of his version of the non-physical mind. While the notion of ‘soul’ is a central part of many astrological positions, we are left with vague mental images of a non-physical, internal poltergeist that acts in equally mysterious ways, on the neurological structure and behaviour of human beings. It is far from clear how the postulation of a soul/non-physical mind can contribute toward clarifying and informing our understanding of central notions such as purposive behaviour, values, internal self-causation, meanings and creativity, over that offered by contemporary models consistent with materialism (such as those offered by Crick, 1994; Flanagan, 1992; Penrose, 1994; Searle, 1992; Dennett, 1996) [Note 17]. Neither does he offer us any inkling as to the mediating role the non-physical mind plays between cosmos and psychic structure. The most we get are vague appeals to notions such as synchronicity which substitute one mystery for another, and sidestep issues of conflicting astrologies but fail to clarify issues of how this imprinting of the cosmos on the psyche takes place. All the astrological talk of souls and non-physical entities worsens the picture for astrology without bringing an increase in understanding.

Since psychological astrology does not have a theory of its own regarding the *nature and structure* of the inner psychological processes supposedly mirrored by planetary configurations, it rests mainly on those postulated by various psycho-dynamic theories. More specifically, Perry relates the birth chart (horoscope) to “conscious and unconscious processes, areas of repression and conflict, pathways of sublimation, transference dynamics, projections and the like ” (Perry, 1995b, p. 123; See also, Perry, 1988; Arroyo, 1993; Greene, 1996). Even if we contend that psychological astrologers have refined the crude approximations of the traditional astrologers (who themselves do not offer plausible scenarios of how *their* correlations were established), this case is very difficult to make. The reason is simple. Twentieth century theorizing was influenced by a great variety of areas of research, including investigations into brain function, humanistic and existential schools of psychology, neuropsychology, artificial intelligence, physicalism and functionalism in philosophy, and so on. Ancient, medieval, and renaissance theories of mind that would have been utilized by the astrologers of the past were quite different than contemporary models (See Pasnau, 1997; Wright & Potter, 2000). Further, this astrologically symbolized psychic structure is based on psychoanalytic and humanistic psychological theories that since the 1950’s have come under very heavy criticism. [Note 18] Psychoanalytic processes and concepts, alluded to by many

psychological astrologers, have been described as unfalsifiable because they are consistent with any physically possible human behaviour. In addition, the coherence of the theory is questionable, along with the controversy over its therapeutic effectiveness (e.g. see Crews, 1998; Grunbaum, 1993; Spence, 1994; Esterson, 1993; Kerr, 1993; Macmillan, 1991; Webster, 1995; McGinn, 1999; Coiffi, F, 1998). If the psychological structure symbolized by the planets and their interrelationships are problematic, the rest of the theory is on shaky ground. [Note 19]

Is human nature the same the world over? Do all people share the same underlying archetypes as some psychological astrologers contend? Granted that there are physical and psychological commonalities across cultures, but are cognitive styles and thinking processes the same? Some recent research suggest that people in the Orient follow different basic thinking processes than those in the West. People in the Orient pay greater attention to context and relationships and rely more on experience-based knowledge than those in the West. In the West, people tend to detach objects from their context, and are more concerned with consistency in reasoning. If these cultural variations in thinking and perception exist, as some philosophers and psychologists contend (e.g Nisbett, Peng, Choi, & Norenzayan, 2001; Stich, 2001), a problem arises how the same planetary configurations can reflect diverse reasoning patterns, psychological process, or human natures. The views of many psychological astrologers seem to assume that any divergent thinking or psychological differences among cultures can be reduced to the psycho-dynamic mechanisms popular in their circles. [Note 20]

Consider also the psychological astrologers' contention that inner mental dynamics can be expressed in a great variety of ways. Here they reject as simplistic the traditional astrologer's claim that celestial patterns are typically associated with relatively specific outcomes. As an example of this complexity, the British astrologer Charles Harvey (1995) claims:

The same [planetary] combination can express itself in a whole range of ways. For example, Uranus in hard aspect with the midpoint of Sun and Moon may produce a Napoleon or a Hitler, but equally it may produce a Margaret Thatcher, a Spike Mulligan, a Martin Luther or a particular [spiritual, caring] astrologer [such] as Dr. Zip Dobyns (p. 52).

Similarly, Perry claims that Psychological Astrology does not predict specific behaviours or life outcomes but rather "predicts qualitative experiences of consciousness that can be reflected in a variety of manifestations" (Perry, 1995a, p. 34; 1994,p.34). He affirms that "The meanings of the parts may be stable, [but] the emergent qualities they produce when combined are not [because] real people are changing, evolving entities that are far too complex to type or tag with a few simple key words" (Perry, 1993, p.7). In other words, according to Perry and Harvey, the birth chart accurately shows our underlying subjective processes, but as to their outward manifestation, astrologers can only guess at a range of possible happenings. The inner psychic state is shown in the birth chart, but after that just about anything goes. As Perry said, "we all have the potential to behave in any way that is humanly possible, and we frequently do" (1995 a, p.36).

We can see that the psychological astrologer is working with a challenging system. It involves celestial configurations that can never be examined in isolation, and whose variety when combined is immensely larger than anyone could possibly cope with. Yet these planetary configurations supposedly correlate with an invisible, largely unconscious, philosophically and scientifically controversial, psychic structure that is supposed to underly personality, and is associated with outcomes so varied and so uncertain that the astrologer can only make guesses.

This miracle of faith is further complicated by the lack of consensus on basics within the psychological astrology school itself: “there is probably no uniform psychological approach to astrology” (Perry, 2000). [Note 21] Clients seeing different psychological astrologers would be provided with different considerations of potentials and likely varying descriptions of opportunities for growth and change. [Note 22] Further, the reader should not come away with the impression that psychological astrology has not gone uncriticised by other astrologers. Thoughtful critiques from within astrology of many of the problematic notions of psychological astrologers can be found in Harding (1992) and Elwell (1999).

4.5 — Astrology can only be appropriately evaluated in a transcendent, animistic world-view

Traditional astrology emphasizes the prediction of events, the association of relatively specific, observable outcomes with astrological factors, sometimes with the view that planets are transmitters of physical influence. Thus the clients of the famous 17th century astrologer William Lilly expected predictions and decision making, not psychology and religion. Such a traditional orientation is not adverse to experimental investigation. A main problem of this approach, as Perry acknowledged, is that the vast majority of studies have not supported such claims (Perry, 1995a). Further, there is little prospect that plausible physical linkages will be discovered that explain *astrological* associations with human activity (Perry, 1995a, pp. 26-33; Culver & Ianna, 1988; Crowe, 1990; Nègre, 1998). For example, no proposed physical explanation can explain, in advance, how Sun-Jupiter contacts symbolize expansive, optimistic beliefs rather than something else, how Scorpio can symbolize secrecy rather than something else, or how the 2nd House can symbolize possessions rather than something else, or how hypothetical planets and impossible planetary configurations can be encompassed in charts, and so on.

Perry states, that even though studies relating astrological configurations with specific observable outcomes have failed, this poses no difficulty for psychological astrology since it is concerned with the ‘inner life’ of an individual, which cannot be adequately tested by modern, materialistic, scientific methodology. Besides, he claims, astrologers already have independent experiential (clinical) evidence that astrology works [Note 23] (Perry, 1995a, pp.14, 26).

4.5.a What is the astrological world-view? While astrology seems implausible from the perspective of modern physical theories, we are told if we adopt a different set of metaphysical assumptions (for example, a more transcendental framework), astrology becomes plausible. [Note 24] This world-view, according to many astrologers, is very different from scientific world-views. Hence, Vaughan (2000) says, “the scientific viewpoint is one way of observing the world, and astrology is another” (which does not stop her claiming scientific evidence for astrology). Similarly, Harding (2000, p.17) tells us, without providing any specifics, that “The claim can be made that the scientific world-view is so completely different from that of the astrologer, that science simply cannot engage with the astrological model at all...” (This claim simultaneously exists alongside the rush in the astrological community to associate astrology with the latest scientific theories – see note #18). But what is this astrological world-view? Is it the Aristotelian world view held by many ancient astrologers? The neo-Platonic view held by astrologers like Plotinus? Or is the astrological world-view associated with a hierarchy of ‘planes of being and existence’, as portrayed by Nègre (1998)? Or, following Cornelius (1994, 1998), should astrologers return to ancient Mesopotamian ideas regarding

omens and spirits? Or are the psychological astrologers who content that astrology is just a projection of unconscious archetypes on the right track? Further, what do expressions like “different ways of viewing the world” and “completely different” entail? Does astrology provide an alternative account of human origins, and is it associated with its own models of the origin and workings of the universe than contemporary scientific models? Surveys of Western astrologers themselves do not indicate that they subscribe to any particular world-view. They seem no different than any other group in society (see e.g. Elliot, 1993).

Unfortunately, finding a world-view, paradigm, or philosophy that is more compatible with astrology than modern scientific ones, by itself, provides little support for the basic loose astrological premiss of “as above, so below”, let alone *particular* systems of astrology. Finding a paradigm that is compatible with astrology achieves little since astrology still has to be tested within the paradigm. Why should astrology be taken seriously just because a new paradigm might happen to be compatible with it? As a comparison, let us consider the materialistic or naturalistic world-view, which can support a very large diversity of competing theories with greatly differing assumptions like Lamarckism and Evolution in biology, and theories like Phrenology, Behaviourism, Functionalism, Connectionism, Sociobiology, Freudian Psychoanalysis, and Piaget in psychology. Each of these approaches is encompassed within a naturalistic world-view but this does not preclude their extensive critical evaluation and comparison within that framework and, in many cases, rejection.

Perry (1991a) tells us the world-view needed to make sense of astrology must involve “a sacred realm that unites, orders, and animates the cosmos” (p. 19), or what West calls “a system of magic” (1991, p. 223) and Cornelius (1994, p.19) calls “some other element” (that is, other than delusion and ESP). The perspective proposed by Perry re-introduces ancient notions of teleological causation, occult powers of attraction, and most importantly, the notion that psyche and cosmos are alike, and correspond through symbolic action-at-a-distance (1995a, p.15-16), without the discussion and debate needed to evaluate these expressions.

Further, Perry explains, this will involve a return, at least in part, to beliefs that were common in pre-scientific cultures in which a ‘world soul/consciousness’ was immanent in all parts of the universe. The universe, so conceived, involved a hierarchy with parts interconnected by “sympathetic resonances”. Astrology played a large part in such world-views because it gave people a symbolic language “for understanding the various meanings and correspondences of natural phenomena” (Perry, 1995a, p. 15; also, 1993, p. 2).

On Perry’s transcendent perspective, the “Universe has intentions for us” and “there is an underlying intelligence that organizes the infinity of things happening in the universe”. This “organizing intelligence” or “greater consciousness is always assisting us in the unfoldment of our innate capacities-growing us, as it were, so that we can become more fully conscious of our true identities” (Perry, 1999, p.1, 3) [Note 25] It is not clear how Perry knows this, it seems unlikely that he has direct, unmediated access to the divine mind. Many might even agree with Perry’s general notion about an ‘underlying intelligence’ and yet deny that astrology gives us insight into its intentions for human beings (see Bourque, 1997; Ankerberg & Weldon, 1989). [Note 26] The notion of ‘our true identity’ for example, is one with which many empiricists, post-modernist philosophers, and Buddhists would consider problematic. The Buddhists consider talk of an essential core of one’s being illusory, while post-modernists would consider such talk of ‘our true identities’ a modernist illusion. So an explication of astrological theories should explain these central elements. Instead, we are offered evasions such as “Astrology seems to belong to some other order of knowing things, barely conceiv-

able in the modern world” (Cornelius, Hyde & Webster, 1995, p. 167). While nothing remotely resembling a fuller discussion of the nature of these forces or resonances is provided, we are still told that, whatever they are, they “make possible creation, indeed, all conscious, organic life” (West, 1991, p. 221).

4.5.b. The Problem of the Diversity of Astrological World Views. The notion of world-views is related to philosophical traditions. Champion (1996, p.134) points out “the philosophical schools that many astrologers find so attractive, especially Platonism, Buddhism and Taoism can equally encourage scepticism and therefore hostility to astrology”. For example, Wilber (1999), working from a trans-personal, spiritual perspective, strongly criticises astrology. Furthermore, Perry and others ignore or play down the great diversity found among early cultures regarding pre-scientific world-views and the conflicting astrologies that were developed within them. The different astrologies we find around the world are intertwined with various conflicting religious systems and cosmologies.

Societies that did possess what we would recognize as a form of astrology were associated with both world-views and astrologies that differed radically and were contradictory in many fundamentals, including, their conceptions regarding the nature of ultimate reality and the transcendent, whether the transcendent can be known or is ineffable and unknowable, the basic hierarchical structures within the postulated transcendent realities, the modes of divine activity (and whether the divine nature was personal or nonpersonal), the nature of the self, the destiny of human beings, etc. Also, astrologies in the East have closer ties to theological systems than modern Western ones. There is also a larger concern in the East with removing negative astrological effects in ways that would not be considered possible by many Western astrologers. For example, in India, many people visit astrologers to soften the blows of horoscopic fate; “On Sundays many worshippers come to the temple to request that [the goddess] Kali remove the evil astrological influences of the two shadow planets, Rahu and Ketu” (Malville & Swaminathan, 1998, p 9). Hence, general statements that astrologers believe in a “spiritual or transcendent reality” rather than subscribe to a naturalistic view of the universe, masks a myriad set of conflicting philosophies. [Note 27] To which pre-scientific or ancient astrological world-view do astrologers like Perry advocate we return ? [Note 28]

Likewise, the associated astrologies often differed from each other along essential dimensions. For example, the circumpolar stars, the pole star, and the quadrant divisions of the sky utilized in Chinese astrology are used differently in Western astrology. The circle of 12 animals in Chinese astrology bear little resemblance to the Western zodiac. In ancient China, Mars was related to joy and Jupiter to anger, the opposite of that found in Western astrology (Douglas, 1999). The ascendant is important in Western astrology but not in Chinese astrology, and so on (Culver & Ianna, 1988, p.25; Dean, Mather & Kelly, 1996, pp. 56-57). Within Viking mythology the Taurus constellation was interpreted as the open, biting mouth of the furious fenris wolf — a different psychological interpretation when compared with the usually calm and slow Taurus person of modern astrology.

In India there are also a number of astrological systems which conflict both with each other and with Western approaches. [See Premanand, Bhatta & Risbud (1993) for an overview and critique of Indian astrology]. “In Western astrology the general tendency is to regard the North Node as benefic and the South Node as malefic. In Hindu astrology the general tendency is to regard both Nodes as malefic” (Dean & Mather, 1977, p.259). In the Dasha-paddhati system the names of the planets are written in a sequence that is not only ar-

bitrary from a Western astrological perspective but is also not related to any physical characteristics of the planets or their distance from the earth. Each planet is alleged to have a certain period of influence over the destiny of people. These periods vary from 6 years to 20 years. Each planet takes control over a person's destiny in the order specified by the system and the duration assigned to them. The sequence of the planets is the same for all people provided you are following the Vinshotiari 120 year system. On the other hand, if an astrologer uses the Ashtottari dasha system, the last four planets appear in a reversed order and together have a different duration of 108 years. During one's life-time, the same planet cannot take charge of your destiny again, unless you live for more than 120 years (or 108 years) (see Risbud, 1998 for a critique of these systems). These two systems cannot both be correct, but this seems to have had no effect on their acceptance by astrologers and clients.

When we turn to the Americas, other fundamental differences in world-view, along with astrological differences, emerge. The Aztecs were just interested in the Sun, Moon, and Venus (Botherstone, 1988). In terms of hierarchical structures and allied astrology, the Mayan cosmology was quite different from the orbital-themed earth or sun-centered ideas of other cultures. For a start, Mayan astrology assigned a very central role for Venus. In addition, the position of Venus relative to the horizon was, contrary to Western astrology, more important for the Mayans than its movement. They also associated the morning and evening appearances of Venus with lunar phasing and eclipses which have no counterparts in other astrological systems. Finally, astrology in Mayan life was closer to the astrology of India and traditional Western astrology than Perry's version in that the central focus was divination and prophecy (Aveni, 1992; Danien & Sharer, 1992).

There are even different colour associations with the planets among cultures. Cultures have perceived Venus as white or yellow; Saturn as white, yellow, red, brown, and black; Jupiter as white or greenish-blue; Mercury as green or blue, and the moon has been variously described as green, blue, and silver (Douglas, 1999). Within Western astrology, Venus is associated with "everything beautiful, which catches the attraction of your eyes — museums, theaters, cabarets-and brothels" (de Wohl, 1951, p.146).

The serious problems that arise due to these differing notions are precisely analogous to those issues that arise with religious diversity around the globe (see Hick, 1997 for an overview of these critical questions). One cannot presume that the differing notions can be referring to the same ultimate reality (like different fingers pointing to the same moon). The different astrologies throughout the world (over both the past and present), are connected with very different ideas about fundamental reality and its complexity that cannot be side-stepped with general talk like "Astrology unites us with a living cosmos. In a conscious universe, people and planets are woven into the same seamless web of being" or "there is an immanent divine guiding intelligence" to the universe (Perry, 1991, p.8;1999). Clearly not all the conflicting views of the divine and transcendent can be true, and neither can the different views of human nature and destiny or the conflicting astrologies associated with them. **[Note 29]**

It is important to keep in mind that diversity can bear productivity and we should not stick to one dominant approach, but search out alternative conceptions and promote inquiry into such alternatives. However, this attitude is not prevalent in astrology. Genuine inquiry involves a desire to learn and a determination to follow the truth wherever it leads. In contrast, an examination of astrological books, internet sites, magazines and journals reveal what can be termed sham inquiry, astrologers go through the motions of inquiry in order to demonstrate foregone conclusions (Kelly, 1998; see Haack, 1998 on the notion of sham inquiry).

4.5.c. Problems with Astrological Symbolism. It was argued earlier that the correspondences claimed by astrologers were not based on any kind of inductive empiricism, as a number of astrologers have claimed. Rather, the connections are established on the basis of word associations, mythological associations, a variety of cultural symbolic notions based in turn on a plethora of conflicting theological and occult beliefs, and idiosyncratic word play by individual astrologers. Other factors are the influence of authority and tradition. Authority because an astrological master said so, and tradition because it has been done that way for hundreds or thousands of years. The end result being the chaotic state that characterizes astrology with no agreed upon methodology to separate valid notions from less valid or invalid notions. In this section we will explore these symbolic notions.

While the astronomical and mathematical *bases* of the cosmologies and astrologies developed by the Mesopotamian, Chinese, Mayan, and Indian cultures were sophisticated, the meaning or quality ascribed to planetary conjunctions and movements were dependent on the religious and mythological beliefs of the particular societies in question. This explains why many of the physical characteristics of the celestial bodies (size, distance, etc.) are considered irrelevant with regard to their effects or meaning, or even whether a planetary body actually exists (e.g. Vulcan) because what matters is the symbolism or mythology attached to the body's name. The influences, effects, or correlations attributed to the planetary configurations are based on *a priori* endemic "magical correspondences", relying on superficial similarities and analogies. For example, the medieval astrologer-physician William of England, appealed to the magical doctrine of "like affects like", as have astrologers of all periods. Hence, he argued, "...the sun and Mars affect red bile (because all three are hot) and the moon and Venus affect phlegm (because they are cold)" and "Should the hot and dry Mars be causing a disturbance of the blood, then when Mars moves into a house that has a disturbance of the chest, the patient will spit blood" (French, 1996, p.478). [Note 30] The astrologer Davidson (1963) tells us, "Without the sun there would be no life. It is the driving force behind the whole solar system. It represents Will Power, Vitality, Leadership, Creativity..."(p.29) and "The rings of Saturn symbolize the limitations imposed by Saturnian action that operate as a harsh external discipline until we have learnt to discipline ourselves" (p.32). In mythology, Mercury is referred to as the 'messenger of the gods', therefore, by simple analogy, "Mercury rules the body systems that function as messengers or conduits for communication, [such as] the central nervous system, the endocrine system, and the respiratory system" (Gailing, 2000). What is interesting about the latter example is that while Mercury was the messenger of the gods in mythology, talk of bodily systems as messengers is metaphorical. The three bodily systems mentioned 'communicate' in quite different ways with parts of the body, why not also include the circulatory and lymphatic system? What governs the extent to which astrologers extend such metaphors? There seems no underlying systematic method.

Whenever a newly discovered astronomical body is found, the attribution of its earthly connections is not based on the results of published investigations with extensive public discussion to establish its relationships with worldly affairs. Rather, if the name can be identified (e.g. by looking it up in dictionaries of mythology) and could be plausibly related to existing planetary mythology (not difficult), then the result will be long articles in astrology journals by authors surfing the mythology wave, where readers will be moved to tears or to outrage by the beauty and insight of the connections. When Pluto was discovered in 1930 and Chiron in 1977 (a minor planet or moon between the orbits of Saturn and Uranus), astrologers did not publish research to establish their relationships with human and worldly affairs. Pluto

is given, as one might expect from mythology, a malefic influence on human life. As Davison (1963) tells us, "The planet named after the God of Hades represents the Underworld of man's consciousness, those elements in his nature that have not been redeemed..." (P.33) Could it be otherwise? It is difficult to imagine that astrologers would ever inform us that a planet named "Pluto" would be associated with love of life and fellow human beings, sensitivity and pleasure (like Venus)! Similarly, Hand (1981) remarked "(Chiron) is believed by many to have a connection with conscious-expanding teachings and with initiation into higher consciousness" (p.94). In the case of Chiron, as with Pluto, these relationships are those we would expect astrologers to attribute to them if they were based to a large extent on mythology (Culver & Ianna, 1988).

Similarly, as the astrologer Press (1993) says about asteroids, "...the particular mythology, whether Greek, Roman, Egyptian, etc., is relevant to the expression of the asteroid in the [birth] chart" (p.178). Having determined the asteroid's mythology, the astrologer looks at the asteroid's position (eg., by sign, by house, by aspect) in various peoples' charts to see if there is anything in the personality or case history that could match the interpretation of that position. For example, "The asteroid Icarus represents flying too close to the sun. The position (house, sign, numerical) and exact aspects of Icarus will show where a person will take risks" (p.197). Whenever possible, some astrologers will add physical symbolism to the mythological symbolism. For example,

The orbit of Icarus is between the sun and Jupiter. This containment surrounds Icarus with the irradiation of the Sun and the expansiveness of Jupiter. Icarus' orbit is in and crosses the orbits of Mercury, Venus, the Earth and Mars. Being in those orbits gives Icarus a smattering of the restlessness of Mercury, the sensuousness of Venus, the earthiness of the Earth and the self-assertiveness of Mars" (Press, 1993, p.196). **[Note 31]**

What happens if the new astronomical bodies are named after modern individuals? Startup (1981) said,

A popular modern astrological doctrine maintains that newly discovered planets are inevitably given appropriate names [from which the correct terrestrial relationships can be inferred], even though the names are bestowed by astronomers nowadays. This is usually taken as one more example of synchronicity (p.33).

Asteroids without classical names have a special kind of importance, again based purely on symbolic considerations. Here we enter the realm of "personal name asteroids". Press (1993, p.212) concludes (after much uncontrolled research), that if an asteroid has your name, or something close to it, then its position in your horoscope describes your relationship to yourself (whatever that means). If an asteroid has the name of another person (eg asteroid #3085 is called Donna), then its position in your horoscope (birth chart) describes your relationship to that person. This would seem to imply that your relationship to all the Donna's in the world would have much in common.

Cultural concerns lead astrologers of a particular region to attribute symbolic associations to astronomical phenomena that would be viewed entirely differently by astrologers in other parts of the world, assuming they considered such observations of relevance in the first place. For example, at some Hindu temples in India, it is believed that the sun suffers from leprosy. Sunspots may have played a role in this symbolic association (Malville & Swaminathan, 1998).

Most modern astrologers view astrology as an all-encompassing, life-pervading system. For them, everything that happens on earth, including fuels and their prices, road-rage, stealing bases in baseball, finding your best mate, athletic advantages at the Olympics, the political behaviour of opposing candidates, a person slipping on the ice in winter, whether or not a person gets in an automobile accident, etc. are all connected to the planets (see articles by astrologers on the astrology site, Stariq, 2000). The symbolic connections described by astrologers, such as “Neptune is linked to fossil fuels”, and “Uranus and Neptune brought us the internet”, are based entirely on verbal associations, stretched analogies, and idiosyncratic extensions of mythological symbolism. Further, the validity of these symbolic connections are not determined by empirical investigation, or coherence with established scientific theory, but rather by the prestige of the astrologer, the creativity of the astrologer in stretching the symbolism to encompass the interests of the readership, and the ability of the astrologer to tell a ‘good story.’ Hence, different astrologers will arrive at quite different symbolic interpretations of planetary positions and terrestrial events, and each will be convinced of the validity of their own perceived connections. If per chance, the astrologer can find an empirical study that will support the claims, it is touted as ‘scientifically supported’, but the lack of any supporting empirical research will have no effect on the perceived validity of the asserted symbolic connections [see any issue of the *Mountain Astrologer*, the *Astrological Journal*, or the astrological site *Stariq*, 2000).

4.5.d. Symbolism and the testing of astrological claims. The forgoing section on symbolism indicates how astrologers can claim that the testing of astrology is almost impossible, while simultaneously claiming that their daily experience (i.e. testing) confirms everything. Although there are specific astrological traditions, the flexibility of symbolism allows almost any outcome to be viewed as confirmatory. Consequently, a main problem with the testing of astrological claims is that there are no clear-cut results that would be considered problematic for astrological theory. In fact, the behaviour of astrologers, indicates that there seems only one overall ‘theory’ in astrology, “As above, so below”, or the claim that there are (unspecified in advance) correlations between the positions of the heavenly bodies and earthly events.

Astrologers call Uranus the divorce planet (see Wolfstar, 2000), but neither Uranus nor any particular conjunction or transit with Uranus need play a role in any particular divorce or even most divorces. In fact, almost *any* other planetary conjunction or transit could, with a little stretching, be interpreted to play a role in a divorced couples chart, making everything ‘explainable’ in astrological terms. If we found “Venus Square Saturn” in the majority of divorced people’s charts, this would make astrological sense. But with a little stretch so would “Sun Square Mars”. Sun Square Mars stands for will power, aggression, etc. An expression in daily life would be lots of arguments, strife, the will of one partner to dominate over the other, and so on, hence, “No wonder these people got divorced.” [Note 32]

Consider now an astrologer who explains a sudden death of a client with a transit Uranus within one degree conjunct with the Fifth House cusp. This looks odd because the Fifth House is associated with children and fun. But the astrologer could point out, on the ‘mundane’ level, the Fifth House cusp makes a Square with the Eighth House cusp, which is the House of Death. A reader will not find anything about such a ‘cause’ in any astrological textbook. Nevertheless, there would be quite a few astrologers who could easily be persuaded that such an explanation makes sense (such ad hoc astrological juggling takes place all the time on astrological internet sites such as *Stariq*).

According, in research by astrologers and those sympathetic, “anything goes” as long as *some* relationship between astrological symbolism and earthly events is obtained. And, of course, the likelihood of *some* relationship being uncovered is far, far higher, than that any specific relationship be uncovered. [Note 33] Let us consider the study recently published by Denness (2000). This study found a tendency for car thieves and their victims to share the same sun sign in two areas in England. No specific astrological theory is tested here, only the question whether there is a connection between one set of data (in this case, birth sign of car owners) and another set of data (birth sign of car thieves). If the uncovered relationship was very different, for example, victims and car thieves avoided sharing the same signs, or had opposite signs, or one group had odd signs and the other even signs, or one group had male signs and the other group female signs, the study would still be described as “an argument that zodiacal signs influence career choices” (p. 47). On the other hand, if the study had found no relationship of any kind between the signs of the participants, this would still not be a problem for astrologers. The negative findings would be criticised by astrologers for testing isolated factors and ignoring the qualifying effects of other factors in the horoscopes, or it would be argued that sun signs are too crude to pick up such subtle effects and planetary conjunctions and transits would have been more informative. Ironically, it could be criticised as not testing any recognized textbook claim. [Note 34]

Testing specific claims does not help either, since astrologers have a vast array of ad hoc excuses for rejecting any study that does not confirm any specific claim. Some of these are: a factor was overlooked in the chart, it was done in the wrong country, the stars incline not compel, the meaning of the factors may have changed for the people involved, etc. (see Kelly, 1998). All of this supports the conclusion that astrology is not a discipline worthy of the name. Positive findings could never add up to anything coherent since there is no way of following up studies and testing refined hypotheses that could advance the field. There is no astrological theory in research except the vague “as above, so below”, and an ad hoc hypothesis for every negative finding.

5 Appeals to mysterious and unknown forces

Magical or unknown influences are appealed to whenever astrology is in difficulty. Earlier in this article (p.10) the problem of including all the asteroids in the birth chart/horoscope was described. Hand (1981) points out that astrologer Eleanor Bach ‘solved’ the problem by using just the first four asteroids to be discovered. Hand (1981) justifies this arbitrary choice by informing us that:

One way of defending the use of the first four to be discovered (rather than the four largest) is to say that the effect of celestial bodies is in some way related to human consciousness of them rather than to their physical properties. As the first to be discovered they no doubt made a greater impact than the thousands later to be discovered (p. 93).

We are left in the dark as to what the “some way related” and “greater impact” are intended to mean here. What about people who have never heard of the first four asteroids? (The same problem applies to the use of Uranus, Neptune, and Pluto! Up to the discovery of Uranus in the late 1700’s, astrology had Saturn as the outer planet). Does this mean the asteroids cannot be used in constructing their charts, or does the awareness of academics of their existence cover for the rest of us? No doubt another set of “special rules” can be devised by

astrologers to 'solve' this problem. [Goodman (1971) mentions that new asteroids merely work from the very first moments they are discovered by astronomers]. Such speculations have the great advantage of requiring no argument and the disadvantage of saying nothing.

Some of the grave difficulties of magical correspondences as explanations are described by Dean, Loptson and Kelly (1996):

First, magical correspondences are arguments from analogy, which can be expressed in the form object X has properties A and B, object Y has property A, therefore Y also has B. John Smith is tall, therefore John Brown is tall...The inference is vivid and quick, and therefore (as in astrology) agreeably seductive, but our chances of it being correct are not good...No longer do midwives open the door to ease a painful labour. No longer do alchemical ideas appear in chemistry courses. In fact, magical correspondences have been so spectacularly unsuccessful that in Western education today the doctrine survives only as an example of fallacious thinking. Second, it is impossible to specify any two things, no matter how dissimilar, that do not show some kind of correspondence. A raven is like a writing desk because both begin with the 'r' sound, both cast shadows, both contain quills. A speck of sand is like the Empire State Building because they have the same colour, both contain silica, and have a large number of atoms The point is, how can we distinguish a magical correspondence from other correspondences? The books do not tell us. Third, we have no immediate way of choosing between opposing magical correspondences. Black cats were lucky to ancient Egyptians but unlucky to medieval Europeans. The moon was male to the Babylonians but female to the Greeks....Is Mars unfortunate because red = blood (war), or fortunate because red = blood (life)? Who can believe any magical correspondence when it is so easily denied by another? (pp.28-29).

Other criticisms of magical thinking can be found from a philosophical viewpoint by Thagard (1980) and Vickers (1988), and from a psychological perspective by Zusne and Jones (1989).

6 Conclusion

The arguments given in this article show that accounts put forward by astrologers for the origin and justification of postulated celestial relationships with outward behaviour/activities of human beings (traditional astrology), or inner structures of consciousness (modern psychological astrology) are problematic and implausible in the extreme.

We can conclude that astrology, as presently practised by most astrologers, in its multifaceted, often contradictory variations (all of which claim truths that allegedly transcend both time and space) is not a reliable source of information or knowledge about ourselves. Anomalies and problems do not result in constructive attempts to revise the conceptual basis of astrology or extend it in ways that would allow astrologers to learn from failures as they do in orthodox disciplines (Mayo, 1996). Rather, they are dealt with by the use of metaphors that lead nowhere and constantly shifting *ad hoc* hypotheses that are not independently testable. Confirmations are readily attributed as support, but failures can be hidden in the complexity of astrology and never need confront any specific astrological hypotheses. Hence, the general indifference of most astrologers to negative evidence (Mayo, 1996, pp 280-282; Kelly, 1998).

The failure of physical models to provide a plausible underpinning for astrological tenets has resulted in a shift to, or return to, more animistic, transcendental world-views. While as-

trology is more “plausible” within such world-views, it is so only in the banal sense that such frameworks provide fewer constraints on what may be postulated than modern scientific formulations of the world. The appeal to transcendent world-views allows astrologers’ postulations to override or sidestep any physical laws that may conflict with astrological philosophizing (Evans, 1994). Astrologers who advocate such world-views do not provide articulated positions capable of constructive evaluation and improvement, but rather, couch their ‘framework’ in terms of spiritual/occult expressions, along with passing references to modern physics and allied disciplines to appear contemporary and fashionable. These convolutions (e.g. ‘animating spirits’, ‘sympathies’, ‘pure consciousness’, ‘resonant bonds of vibratory frequencies’, ‘psychic anatomy’, etc.) are not ascribed properties to be of any useful explanatory value. We are left with a disparate set of ideas taken out of context from various, often incompatible, ancient world-views, juxtaposed together without any coherent, interlocking metaphysics.

There is little agreement within astrology on what astrological factors should be considered in a chart (that is, what factors can be ignored), nor how selected factors should be combined, nor which factors make the strongest contribution in the birth chart, nor how to collect relevant data to resolve even the most basic astrological disputes. Astrology consequently does not have the conceptual resources to deal with its own anomalies, let alone to contribute to findings in other fields (such as psychology or biology) other than by arbitrary means and sophistry. Astrological interpretations from birth charts are based on an unsystematic hodge-podge of physical symbolisms, word associations, analogies, mythological connections and idiosyncratic contributions of individual astrologers, as well as authority and tradition. Astrology is part of our past, but astrologers have given no plausible reason why it should have a role in our future except for its undeniable historical value.

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Notes

NOTE 1. This article is an expanded and revised version of an article published in *Psychological Reports*, 1997, 81, 1035-1066. I want to recognize the significant contributions of Geoffrey Dean and Suitbert Ertel to this manuscript. In a myriad of ways they contributed to a more readable and accurate article. I also thank for their comments: Rudolf Smit, J.W.Nienhuys, Mogens Winther, Anthony Aveni (on Mayan astrology), Dale Beyerstein, Peter Loptson, and M.S. Risbud.

NOTE 2. How successful are astrologers at making predictions? Different astrologers provide conflicting answers. Vaughan (1995) tells us that astrologers have, throughout medieval times, made many successful predictions, including predictions of death. On the other hand, Guinard (1997) says, "it remains true that for two thousand years, astrology by itself has strictly *not* predicted any major political or cultural event." Champion (1997) contends that there are no reliable techniques in astrology for making successful specific predictions. For example, consider predictions of death: "The prediction of death, astrologically, is a highly subjective business, and there can be no rules for predicting death, because if they applied in medieval times they would apply now — but now we have a much longer life expectancy and the planetary cycles have not stretched." It is also interesting to note that when successful predictions are made, there is no consensus in the astrological community regarding the predictions. The successful predictions seem to be made by isolated astrologers with the vast majority missing the event entirely. While a number of astrologers contend that astrologers cannot predict specific events, they claim they can tell that "something" is going to happen. But astrologers did not predict World War II, and why did the vast majority of astrologers miss 'the something' of the fall of the Berlin wall and breakup of Russia in 1990? And why did so many astrologers wrongly predict catastrophe at the turn of the twentieth century with the Y2K fiasco? [See Townshend's (1999) astrological site for a large number of astrologer's predictions of Y2K disaster]. The vast majority of astrologers completely miss important events, and the vast majority are wrong when they make specific predictions of major events. Interesting recent examples involve the predictions by astrologers of the outcome of the year 2000 USA presidential election, and the predictions of the Jan 26 earthquake in India (the worst in 50 years). As usual, only a few isolated astrologers made the correct calls. Let us view these in context. In a survey of ten prominent astrologers on the astrological site, Stariq (2000), four found multiple celestial indicators that Bush would win, four predicted Gore would win, and two hedged their bets and made no clear prediction regarding who the new president would be. These predictions follow the polls made of US voters who were equally divided. After the election, astrologers made much that "Mercury stationed direct on the evening of November 7, 2000" (See Tarriktar, 2001). If it was so obvious about Mercury, why did millions of astrologers around the world miss it? Also, does talk of stationary Mercury make astrological sense, given that Mercury retrograde is an isolated factor? Similarly, we are told (Stariq, 2001) that at least two astrologers in India, out of perhaps a hundred thousand, predicted the earthquake of Jan 26, 2001 and "We can see the earthquake reflected in the transits to India's chart" (Wolfstar, 2001). But again we are dealing with an isolated factor which is allegedly taboo in astrology. Furthermore, if it is so easily seen why didn't the astrological communities around the world (and especially in India) issue public warnings? And why did only a few out of the millions around the world see it coming? And what is the *over-*

all batting average (correct specific predictions versus incorrect specific predictions) of the astrologers making successful predictions? The reader is unlikely to learn from the astrological community that some Hindu astrologers predicted that an even bigger earthquake than the Jan 26 one would occur in India by Feb 5, 2001 (Yahoo, Feb 2, 2001). Happily, they were wrong that time. Given that astrologers not only possess all the same information that everybody else has, they are also supposed to have an additional source of information provided by the heavens. One might expect astrologers to not only have far more consensus in their predictions, but also, as a group, consistently outperform everyone else. If there is so much diversity among astrologers regarding two-outcome predictions like elections, they surely cannot be trusted on more complex issues. For an interesting, historical discussion of prediction relevant to astrological prediction see Pickover (2001).

NOTE 3. The research of the late Michael Gauquelin and his wife Françoise have been consistently misunderstood and distorted by astrologers and those sympathetic to astrology (eg West, 1991, 1996). The Gauquelins found no evidence for signs, aspects, or transits, but they did find a weak relationship between some planetary positions in the sky and the birth of eminent professionals in various occupations. For example, at the birth of outstanding sports champions Mars tended to occur more often than expected by chance in the areas just past rise and culmination.

The Gauquelins attempted to explain these findings by suggesting that the underlying processes involved an inherited temperament (character traits) that was imprinted by planetary geomagnetic effects. An implication here was that if the suggested mediating factors were correct, one would expect such planetary relationships to be linked to hereditary factors and to character traits.

In 1966 an initial study by Gauquelin of a total of N=16034 parents and children did indeed find a weak tendency for children to be born with the same planetary emphasis as their parents. In 1976 a second study of N=18298 confirmed the effect, although it was slightly weaker, but in 1984 a third larger study of N=33120 found no effect (Gauquelin, 1988). Gauquelin attributed the decreasing effect to the increasing use of birth induction, but Ertel (1989) found no evidence of induction effects, and concluded that Gauquelin's proposed mechanism was problematic, so it has to be "replaced by something else."

Subsequently Ertel (1990, 1993) found no support for character-trait effects or for geomagnetic effects, which left only the initial occupation effects with eminent professionals. The trustworthiness of the Gauquelin data base has been challenged by the Dutch mathematician J.W. Nienhuys (1997), who claims the findings can be explained by data selection and manipulation.

Dean (2000, 2002) has recently re-analysed the Gauquelin professional and heredity data, and has found evidence for hitherto unsuspected social artifacts. The effects predicted by social artifacts show a provocative match with the effects observed by Gauquelin, but as emphasised by Dean, this does not necessarily mean that the observed effects are thereby explained, it means only that social artifacts have to be controlled before we can proceed further.

However, the presence of social artifacts would argue against the data being untrustworthy or fraudulent, simply because Gauquelin could hardly be fraudulent about social artifacts he was unaware of. Ertel (2000, 2003) has contested Dean's findings, arguing that the social conditions needed to produce social artifacts did not exist, which arguments have been rebutted by Dean (2003).

It is of interest to note that the overall findings of Gauquelin are hardly supportive of astrology. As noted by Dean (2002), “astrologers do not claim that astrology fails to work for half the planets, for signs, for aspects, for character, or (on Gauquelin’s figures) for the 99.994 percent of the population who are not eminent.” Furthermore, when Gauquelin tested the ability of astrologers to predict people’s character and behaviour using the whole chart, they invariably failed, which led him to conclude that horoscopes were of no useful value in understanding people (Gauquelin, 1983).

Seymour (1990, 1996) has argued for the validity of a limited astrology based on the Gauquelin findings. He speculates that our neural networks respond to fluctuations in the earth’s geomagnetic field which, in turn, interacts with the gravitational fields of the planets. McGillion (2002) has argued in favour of a pineal intermediary.

Unfortunately, while Seymour’s and McGillion’s theorizing do not contradict modern physical theories, to make a plausible case one needs more than an after-the-event fit to the Gauquelin results. Despite their appeals to the scientific status of their explanation, they fail to specify how their theories could be tested. For example they fail to address the mismatch between planetary and biological frequencies, and how an unborn child can pick up the difference between Jupiter and Saturn when the frequencies of their diurnal signals actually overlap, and how it can actually work when the causal chain from genetic heredity to personality is extremely complex and non-linear (see Turkheimer, 1998). See also Dean (2000) for further criticisms.

Even worse, both Seymour and McGillion fail to discuss the unworkability of an astrology based on vanishingly weak effects (calling it a “limited astrology” is a huge understatement). For example suppose we have a male client whose Mars was just past rising or culminating. If on the basis of Gauquelin’s Mars effect, we predicted that he could be a sports champion, our chance of being right would be 52% if he was actually an eminent sports champion, 50.2% if he was eminent, and 50.00001% if he was not eminent, all vs 50% for tossing a coin. Even if he was eminent, a prediction that happened to disagree with what he was already eminent in would most likely be ignored. Our astrology would be unworkable.

Of course, if social artifacts do turn out to explain Gauquelin effects, then both Seymour and McGillion are left with nothing to explain.

NOTE 4. The quality of much astrological thinking is summarized by ex-astrologer Joanna Ashmun’s descriptions of internet exchanges between astrologers: “Skepticism is not in evidence, and is in fact discouraged....The way astrologers treat researchers and skeptics is just the way they treat other astrologers who disagree with them — continuing on as if they and their disagreements never existed...The thing that I find least comfortable about astrology discussions (and not just on the internet) is their immateriality, their lack of grounding. Astrologers are less literate than average; they write badly and they read badly; there is almost no critical response; errors are ignored, corrections are not acknowledged. They answer off the top of their heads, quote from memory, claim that anything published anywhere at any time is general knowledge, and then get sidetracked into arguing about who’s a liar instead of sorting out the facts of the original question. There is nothing resembling peer review, except in regard to political correctness. The fact is they don’t look stuff up, not even when they disagree with you! Most astrologers would rather have an iffy quotation from Dane Rudhyar or C.G. Jung to support their opinions than some good research” (Ashmun, 1996, p.41-43).

NOTE 5. This way of dealing with conflicting ideas is quite common in the astrological world. It is often claimed that “Everything works”—it just depends on one’s point of view, line of approach, etc. Here speculation, devoid of accompanying argument, is often the rule. So in regard to conflicting house systems one can hear responses like, “Perhaps Regiomontanus works best for character and circumstances in life, whereas Placidus may give a better insight into events, and Koch works best for horse racing...”. But there is no agreement among astrologers on these claims or even minimal agreement on how such speculation could be tested.

NOTE 6. The oft-heard claim in textbooks that “The stars incline, not compel” is contradicted by statements in any astrology book or magazine. So the British astrologer Campion (1987) tells us, “signs rule skills and talents” (p.45), “Artists are specifically linked to a strong Venus ” (p.17), 5th house (p.47), and sun in fifth house" (p.49). No ifs or buts here.

NOTE 7. A variety of *ad hoc* rules could be used, for example, oldest = Sun, or (for opposite-sex twins) Male = Sun, or it could be whichever one on inspection fits best. At the end of the day all that matters to astrologers is having a practical strategy no matter how arbitrary.

NOTE 8. Actually, Freud *did not* discover the unconscious. There is a large pre-Freudian literature on the topic. What Freud did was use the term as a working tool that could be investigated psychologically (Fine, 1973, p.36-37). Further, the North Pole wasn’t ‘discovered’ at all. Everybody knew where and what it was.

NOTE 9. Owen (2000), writing in *The Mountain Astrologer*, praises sun-sign delineations because people can “recognize themselves” in them, which implies they are accurate, but is mystified by the public’s appetite for sun-sign forecasts when they are so “consistently wrong”. Unfortunately, she does not make clear the distinction between forecasts and delineations or why one and not the other could be seen as accurate.

NOTE 10. A more general underlying issue here is why astrologers themselves believe in astrology. As Dean, Mather and Kelly (1996) point out, the steps in belief are roughly:

1. Read astrology books, become aware of the system.
2. Learn more, calculate charts, see that they appear to work
3. Become dazzled by the history, majesty, and sheer appeal of it all.
4. Adopt the system as true, and reject attacks to avoid cognitive dissonance.

The sequence from 1 to 4 is not unreasonable. Students of astrology are not told to accept astrology without question, they are told to try things out for themselves, so at first sight, what could be fairer? The problem, of course, is that they are not made aware of all the pitfalls of personal validation (and the confirmation bias), nor are they told how to make controlled tests or to design research that actually tests astrological hypotheses and not auxiliary hypotheses. Nor are they presented with the vast body of criticism of astrological tenets, as is, for example, found in this article and references. Once they reach (4) then any internal inconsistencies and disagreements can logically be accommodated as minor hiccups due to the complexities of astrology or inevitable human fallibility (see Dean, Mather,& Kelly, 1996).

NOTE 11. Astrologers will often, in the same article or book, shift back and forth between causal and non-causal terminology . Cornelius (1998, p.10) mentions that this was noted by

St. Augustine almost two millennia ago: “[Augustine] observed that astrologers (when it suited them) will say ‘Mars caused the action of violence in that man’ and, if then pressed on that point, will say ‘Mars is a symbol’, *but* catch them another moment and they’re back to talking as if Mars caused the thing.” For example, the British astrologer Campion (1987) says, “Saturn *causes* delays, obstacles and material difficulties” (p.19) and “Uranus rules all new technology” (p.19).

NOTE 12. Johnsen (2000) points out that the debate between those astrologers who believed in divinatory astrology and those looking for physical explanations of astral influences was present in the second century C.E. Almost 20 centuries later, the debate is still alive in astrological circles with about as much hope of being resolved as it was two millennia ago.

NOTE 13. Consider as an analogy, the phrase “medicine works”. This would likely be interpreted to mean that medicine as a discipline has demonstrated techniques that work. However, some medical claims about the functioning of the human body are strongly supported by evidence, some are moderately supported, and others weakly supported or dubious. Similarly, some techniques in medical practice have been shown by studies to work very well, others moderately well [but may still be used because of a lack of better alternatives, others not very well (e.g. The PSA test for prostate cancer but may still be used because of a lack of alternatives despite high false positives and false negatives)]. Further, there is awareness in the medical community that some techniques may work for different reasons than those considered by advocates (see Beyerstein, 1999). Medicine is buttressed by a large consensus in the medical community (on areas such as anatomy, mechanisms of many diseases) and is associated with a successful technology (X-rays, surgery, MRI, PET scans, etc). There is no comparable consensus within astrology about the comparative reliability of techniques or even how we might go about determining the reliability of the techniques.

NOTE 14. It might be argued by astrologers that many of the techniques are complementary rather than contradictory (various diseases may be cured by herbs, drugs, climate change, psychotherapy, etc.). But this depends on the astrologer and/or astrological school. Most astrologers do not seem to care about consistency in the systems they use, if only because most of them have either no idea of the technical details or of the philosophy behind them. Only a few schools in astrology (Ebertin, Hamburg, Ram, etc) know exactly what they are doing and hence reject systems that do not confirm with their ideas. As many astrologers see it, astrology is a pragmatic business. As long as it seems to work then they do not worry about (the absence of) consistency in techniques, philosophy, etc.

NOTE 15. West (1991) attempts to bypass the problem of how the astrological relationships could have been determined by pointing in another direction. He agrees that a complex system such as astrology could not have been built on observations but argues that this similarly holds for other bodies of ideas: “...this system (astrology)...is a whole. No amount of aimless observation, no matter how accurate or painstaking, could develop willy-nilly into such an elegant and internally consistent system. In the realm of man, nothing evolves mindlessly. No coherent body of knowledge – such as astrology – simply accumulates, taking form as it goes” (p.38). However, astrology is not a coherent body of knowledge but a body of ideas, and ideas do not have to be true to be coherent (eg Tolkien’s world, Star Trek, etc.). Also, the

historical inconsistencies and differences among astrological systems throughout the world show that astrology is not the generic internally coherent system that West makes it out to be. Furthermore, bodies of knowledge in the social and natural sciences have theoretical conceptual structures that have become more refined over time in response to research findings which, in turn, direct and facilitate research (Whitt, 1992). In contrast, astrology has shown no progress in solving its empirical and conceptual problems. Unlike many other theories, astrology doesn't have diverse evidence that converges on its central claims, has no plausible explanation for its putative correlations, there is little worldwide agreement on central tenets, and anomalies that were pointed out by critics centuries ago still remains as persistent difficulties (See Dean, Mather & Kelly, 1996, pp.62-64; Dean, Ertel, Kelly, Mather, & Smit, 2000).

NOTE 16. Dane Rudhyar began the move in the United States away from traditional ideas. In their psychological orientation Rudhyar and Perry overlap, the main difference being that Rudhyar is more inclined to Eastern mysticism and religious concepts. A critical examination of Rudhyar's astrology can be found in Kelly and Krutzen (1983). A thorough consideration of the development of psychological astrology in the early twentieth century would also acknowledge the theosophist ideas injected by the British astrologer Alan Leo and the American astrologer Marc Edmund Jones (Zoller, 1998).

NOTE 17. A useful critique of non-physical/dualist views of mind can be found in Parsons (2000).

NOTE 18. Astrologers are forever trying to increase the surface plausibility of astrology by associating it with the latest theories that have caught the public imagination. So Blumenthal (1994, p. 19) appealed to the relevance of "fuzzy logic" to astrology, while Perry alluded to 'chaos theory' (1994, p. 34) and the 'new physics' exemplified by Fritjof Capra and David Bohm. Townley (1994) informs us that "the more advanced areas of systems mathematics [complexity theory, information theory] and neuroscience [could] be very friendly to the type of structural thinking that the best of astrology has to offer and to which astrology could make important contributions" (p. 43). Jewsbury (1988) notes how Rupert Sheldrakes principle of formative causation "should remove the objection that astrology is impossible", adding in an interesting circularity that "astrology itself is a further pointer to its truth". Astrologers just *assert*, without providing details, that Bell's theorem, Bohm's holonomic theory of quantum mechanics, the Anthropic Principle, and purposive evolution are, both all compatible with each other, and support the principles upon which astrology is based. A negative feature of these astrologers' writings is their penchant to be crucially vague at critical points. We are not provided with specifics of *how* these juxtapositions will take place. We are only given promissory notes. It is never made clear how the new physics and other modern disciplines can provide support for the supposition that specific planetary configurations can SYMBOLIZE fundamental human needs, or motivational drives (eg. How Sun square Mars symbolizes overall strength and vigor in the personality) [See Stengler (1995, 1996) for critical comments on misinterpretations of Quantum Mechanics by advocates of New Age claims]. Further, such modern approaches in physics do not explain why the planetary positions of a moment in the past (birth) describe the supposedly continuing nature of a person in the present. And what about the 'birth' of a country, a company, a resolution, a domicile, and so on, all of which astrologers confidently take as having their own natal charts? (Jones, 1996). The astrologer Cornelius (1998) has pointed out that this is an old game that astrologers have al-

ways played, namely that astrology has survived by disguising itself as part of the science and philosophy of each particular time period. The modern disguise being, according to Cornelius, depth psychology (Jungian archetype psychoanalysis) and modern physics.

Apart from giving the impression that modern theories in physics hold the key to astrological explanation, many astrologers mix in modern theorizing in the social and biological sciences with their symbolic interpretations, creating a very uneasy alliance. Since the theories in the social sciences change in response to new discoveries and evidence, it is interesting how easily astrologers relate planetary conjunctions with completely different findings and theories over time. For example, Banfield (2000) in "The Astrology of Depression" refers to findings in the psychological literature that there may be a link between "adult depression and being hypersensitive, shy, introverted, and timid when young." These childhood signatures, Banfield claims, can be identified in the natal/birth chart and may be suggestive of future depression. For example, "Astrological indicators for sensitivity and vulnerability are linked to a strong natal emphasis on the receptive planets...emphasis on the water signs...and water houses...and suppression of the fire element in the chart" (Banfield, 2000, p.77). On the other hand, Angelfire (1999) considers depression in terms of excessive Saturn and has no need of such theorizing. So we find some astrologers relating planetary configurations to psychological theorizing and others ignoring such findings. This adds further chaos to the already bloated set of astrological techniques and consequent disorder in the entire field.

We have also heard it all before. In the past, the same confidence was expressed by astrologers with every prominent theory of the period. The two millennia of failures provides some good inductive grounds for believing that the confidence of present-day astrologers is as misplaced as that of their predecessors. Such represents the triumph of hope over experience.

NOTE 19. We are told that "astrology was never disproven by the methods of science. Rather, its invalidity was a presupposition. The issue was not one of proof, but of paradigm" (Perry, 1991/2000, p.4). [Note 35] However, in the history of science and ideas, theories and paradigms do not have to be dis-proven to be replaced or superceded. Both Popper and Kuhn (two prominent philosophers of science in the 20th century) were aware that astrology was not dis-proven. Popper (1959), argued that, on the contrary, astrologers go out of their way to develop immunizing strategies to make sure that no evidence will ever seriously threaten their theory. Their one-size-fits-all theories are so elastic that any disconfirming evidence can be 'explained away'. Kuhn (1970a, b), along related lines, contended that astrology fails because practitioners did not and do not learn from failures. They have not set up reliable procedures to determine the causes of mistakes, learn from them, and improve their theories. While astrologers have acquired multiple 'outs' for failures they do not have agreed upon means of reducing these alternative explanations of failure and identifying specific astrological claims that need rejection or revision. We might also point out that the views of astrologers in the medieval and middle ages (which are often at variance with much present day practice) have also not been disproved by present day astrologers (e.g. see Crane (1999) for a review of such approaches in medieval times). One interesting example is the doctrine of sect, where charts of daytime and nighttime births are read differently (Hand, 1995). In this approach, the planets change their meanings in day and night charts!

NOTE 20. Astrologers could get around this problem by having astrological symbolism restrict itself to the basics of human nature as claimed by bio-psychological researchers and

psychometricians. This would turn astrology into a science that could be investigated by the quantitative methods used in the social and life sciences. This does not seem, however, a path most astrologers seem willing to pursue.

NOTE 21. A similar situation arises in counselling and psychotherapy. However, an examination of astrology books compared with clinical and counselling texts show important differences. The psychological texts, unlike texts for astrologers, present overviews of the research literature, and compare and contrast differing perspectives in terms of strengths and weaknesses (see Capuzzi & Gross, 1999 for a typical example). Further, in-depth research based discussions of what is currently known about which treatments are most effective for various psychological disorders can be found in the psychological literature (e.g. Nathan & Gorman, 1998), but similar research-based comparisons of techniques are absent in the astrological literature.

The theories in psychology also do not require the extravagant and problematic transcendental and supernatural assumptions that underlay astrology. Astrology complicates our view of the universe without providing an increase in understanding.

NOTE 22. Astrologers often claim, in a loose, unsystematic way, that astrology can arrive at a quicker, in-depth understanding of a person than can psychologists. So Tyl (in Phillipson, 2000, p.62) says, “There are hundreds and hundreds of people who have said ‘My God, it took my therapist six months (or a year) to get to that!’ ”. First of all, the same stories occur in psychology, when clients change to a therapist with a different orientation, so the situation is hardly unique to astrology. It often happens within astrology itself when clients consult a different astrologer. Second, what can we infer from this? Not much without complete transcripts of the interviews. Third, such stories create other problems for astrology, since the same situation can arise when wrong birth information is used. The psychologist/astrologer Niehenke (1983) reports, “One of my clients had consulted four other astrologers before she came to me. She judged my interpretation as the most adequate of all, and showed me for comparison the work of my colleagues. I thus realized that I had made an error of 20 years on her birth date” (p. 37).

NOTE 23. The seductive phrase ‘experiential evidence’ (or ‘clinical evidence’) is problematic. Practitioners of psychological approaches Perry disavows (eg Skinnerian behaviourism, orthodox Freudian psychoanalysis) and the many competing schools of astrology in both the East and West, many of whom would contest Perry’s approach, all cite testimonial evidence and case studies in support. But if we can *all* cite experiential evidence for our positions, it can hardly, *by itself* distinguish the good from the bad, the better theory from the worse. As Meehl points out, “the scholarly authors of *Malleus Maleficarum* pursued...an enterprise detailing symptoms that diagnose witchcraft. Despite their scholarly efforts, we know today there are no persons who have made a solemn pact with Satan and thereby gained preternatural powers. If asked to support their theoretical system and the technical procedures warranted by it, [they] would doubtless have invoked the medieval equivalent of ‘clinical experience’ ” (1995, p. 1021).

A salutary lesson here is provided by other non-mainstream approaches such as phrenology, graphology (handwriting analysis), and palmistry which cover the same ground as psychological astrology. Phrenology was immensely popular in the nineteenth century and both phreno-

logists and their clients were very satisfied with phrenological readings. Graphology has been around for centuries and is still very popular. It is instructive to compare the following endorsements of psychological astrology, phrenology, graphology, and palm-reading:

- (1) “[T]he client’s character and life story inevitably conform to the range of potentials symbolized by the [horoscope], often in extraordinary specific ways” (Perry, 1994, p.35).
- (2) “The phrenologist has shown that he is able to read character like an open book, and to lay bare the hidden springs of conduct with an accuracy that the most intimate friends cannot approach” (Alfred Russel Wallace, cited in Severn, 1916, p.6).
- (3) “Your handwriting is all-revealing. To the trained eye it lays open your secret mind. Every whirl or line you pen exposes your true character and personality...” (Marne, 1988, p.2).
- (4) “A study of the hand tells much about ...the physical body...health, vitality...the emotional nature — love potential...the will and individuality...success in business...talent...creativity...fame... Self-fulfilment — travel, life experience, spiritual development” (Wilson, 1971, pp.7-8).

Astrology is only one of a very large number of contenders, past and present, which rely on magical thinking and purport to yield knowledge unattainable by materialistic science. No plausible reasons have been provided that all of these extra-science contenders are interconnected, or mutually supporting. (Lopton, 1996). Planets or head-bumps or palms or handwriting, at least one of them is redundant. Astrology is in the unenviable position of having to show either that it provides genuine insight into areas not covered by the social sciences and related disciplines, or to show that it can meliorate our understanding in the same domains covered by contemporary psychological and sociological theories. Astrologers have to show they can provide insight or benefits beyond those provided by non-astrological theories. Third, many sources of bias operate in such personal experiences that can lead clinicians to claims of personal knowledge that are invalid, despite their association with high levels of conviction (Dean, Kelly, Saklofske & Furnham, 1992; Dawes, 1994, 2001; Grove & Meehl, 1996).

NOTE 24. The astrologer Pottenger (1994) said “Opponents of astrology like to quote ‘extraordinary claims require extraordinary proof’ without giving any proof that ‘as above so below’ is an extraordinary claim. It is only extraordinary in some philosophies, especially *materialistic* frameworks which deny meaning” (p. 37). As it stands, what Pottenger stated is trivially true. WHATEVER is postulated (barring logical impossibilities) is more ‘plausible’ within some world-view(s) than others. For example, fairy bubbles, goblins, and Guardian angels are extraordinary claims in materialistic conceptions of the world (and perhaps many others as well), but this alone does not provide any reason to believe in their existence.

The claim that the universe has MEANING and provides us with signs/portents does not imply that the signs are to be found ‘up there’, they might only be found in entrails, the tracks and movements of nature, or only in messages from angels or similar beings, or in a number of other forms. It does not follow that an animistic/magical universe MUST have, or even might have, meaning reflected everywhere. We need cogent reasons to prefer the animistic universe of astrologers to other possible animistic universes, and furthermore evidence for a particular astrological system than other alternatives.

There are also an incredibly large number of possible pairings between ‘as above, so below’. The possibilities are even larger for a system based on the symbolic meaning of signs. For example, there are probably more possible pairings of two things in, say, Jungian symbolism than if we confine ourselves to putative causal (material) relationships; so it is even more in-

cumbent on astrologers to provide a reason why they connect two things together than it would be for a materialist.

NOTE 25. Perry (1999, p.1) informs us, without supporting argument, that “I believe the purpose of life is to progressively evolve a deeper and wider connection to this parent consciousness until we ultimately realize our at-one-ment with it.” The issue of purpose in life is a very complex one with diverse answers both within and among cultures. The expression ‘a deeper and wider connection to this parent consciousness’ is less than helpful, since it would have vastly different interpretations in Eastern and Western traditions. It would also need a great deal of explication as to how astrology can help us to realize this purpose. Many would deny Perry’s claim that any transcendental purpose(s) are even knowable by human beings. Further, it is unclear whether any transcendental claims to meaning and purpose really help since we can step back from any proposed spiritual perspective and doubt its point as well (Nagel, 1980). Finally, the notion of purpose is an ambiguous one in that if there is no cosmic purpose to the universe, it does not follow that individual human beings cannot live meaningful/purposeful lives (Ames, 1999; Sharpe, 1999; Taylor, 1999).

NOTE 26. The ‘underlying intelligence’ also seems from Perry’s perspective to be benevolent rather than indifferent or vindictive (since it is ‘always assisting us’). Presumably, this is why we should ‘trust the universe’. This notion comes face-to-face with the argument from evil (see Weisberger, 1999). Given that this ‘Intelligence’ plays a large role in the transcendental aspect of many astrologies, one might expect an elaboration, along with some awareness of the extensive debate in the philosophical and religious literature on this topic.

NOTE 27. Contrast this to the debates in modern physics over the nature of reality. Physicists, unlike astrologers, are very forthcoming in the weaknesses and shortcomings of their theories and their willingness to embrace new paradigms (see economist.com, 2000; Johnson, 2000). Astrologers, unlike physicists, like new paradigms as long as they don’t challenge basic astrological practice or fundamental beliefs.

NOTE 28. Astrology is viewed in different ways by astrologers. Most astrologers, if implicitly, hold a *realist* view, that is, that astrology conveys truths about the universe and the human situation. While such a perspective indicates a need to arbitrate conflicting astrological views, there is a general reluctance in the astrological community to do so. However, ‘Basinger’s Rule’ surely applies to astrology as it does with religion: If we want to maximize truth and avoid error, we are under an obligation to attempt to resolve significant conflict between astrological claims. Astrologers have an obligation to *identify and assess* the reasons why astrologers with whom they disagree hold their positions (Basinger, 2000; see also, Trigg, 1998). Other astrologers are *non-realists* since they would contend that astrological claims do not rest on evidence, but rather express commitments to a way of life or particular values. While non-realist theologians may talk of ‘God’ and ‘life after death’, they would reject realist talk of an objectively real God or actual physical survival of our deaths. Similarly, non-realist astrologers like Kochunas (1999) contend that astrology is more in line with drama and poetry. It does not provide factual meanings but can still add value, interest, and meaning to our lives.

NOTE 29. Many astrologers seem to be simultaneously universalist and relativist. They claim that their astrology is shown to work by their own experience and holds for all people on the planet, but they also acknowledge the existence of conflicting traditions of astrology that work as well. A similar problematic situation occurs when astrologers purport to be both post-modernist and embrace astrology as a universal, Grand Narrative. Astrology is, ironically, a paradigm example of the kind of universalist, all-encompassing self-described repository of received wisdom that post modernism opposes (see Sim, 1998, pp. vii- ix).

NOTE 30. Venus was widely believed at the time to be a cold planet, whereas Mars was characterized as hot and dry. Hot(h), cold(c), wet(w), and dry(d) were the four qualities underlying the four elements considered by Greek philosophers to be the basic constituents of the physical world, namely, earth=cd, air=hw, fire=hd, water=cw. Elements with common qualities were able to change into each other, eg., water =cw could change into earth=cd because both included the quality of coldness. Most Greek scholars, of course, considered science (as we know it today) to be an insignificant part of philosophy, which meant that their world view was based mainly on philosophical ideals rather than empirical observations. So hot and cold, etc do not necessarily correspond to what we today call hot and cold, etc.

NOTE 31. The diversity in symbolisms used by astrologers with apparently no rules about being consistent are noteworthy. Davison (1963) bases his astrological symbolism variously on physical attributes of the planets and on attributes of the Greek gods. The astrologer Press (1993), on the other hand, utilizes other mythologies and adds another dimension of physical characteristics to her symbolism, such as a celestial body's proximity to other celestial bodies. Which particular magical correspondences are perceived as relevant are in the eye of the beholder, and there are many different astrologer beholders.

NOTE 32. On the whole, astrologers will recognize some combinations easier than others. They will recognize Venus 0/90/180 to Saturn, or Venus 0/90/180 to Uranus, or Venus 0/90/180 to Neptune, or Venus 0/90/180 to Pluto as a 'cause' or contributor to divorce. After all, Venus is the love planet, and the other planets mentioned are all considered disruptive 'forces' when connected in negative aspect with Venus (Saturn = coldness, Uranus = unable to tie the knot, Neptune = deceit, and Pluto = oppression).

NOTE 33. Some astrologers view "As above, so below" in the widest sense possible to encompass *any* correlations (including physical correlations) between heavenly and terrestrial events. On this view, sunspot effects on radio transmissions on earth, gravitational or electromagnetic effects (however variable) on animals and plants, or daily cycles in animal metabolism are subsumed under the astrology label even though astrologers did not postulate the nature or form of the obtained relations, or contribute to research uncovering such relationships. Somehow such research is supposed to confirm the notion that the rest of astrology is supported. A difficulty with this vague position is making clear how one goes from such physical correlations to astrological symbolic claims like the herb garlic is ruled by Mars, or the area of the sky called the Seventh House is associated with marriage, or how a snapshot of the sky captured at a particular moment (expressed in an astrological chart) should have an enduring strong relationship with almost all aspects of a person's life (see also Kelly & Dean, 2000 for a critical examination of this position).

NOTE 34. Astrologer Valerie Vaughan (2000) criticises studies conducted by skeptics that failed to uncover significant results with “which astrological theory is he referring to?”

NOTE 35. We might also point out that the many divergent views of astrologers in the medieval and middle ages (which are often at variance with much of present day practice) have also not been disproved by present day astrologers (see e.g. Crane, 1999). Rather, such views are just out of fashion in the astrological community. An interesting example is the doctrine of sect, where the charts of daytime and nighttime births are read differently (Hand, 1995). In this approach, the planets change their meanings in day and night birth charts.

* * *

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