

Human Judgement Errors and Astrology

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Abstract

This paper is an amended version of a paper originally intended for an edition of *Correlation* which I was going to co-edit. The plan was to concentrate on astrological methodology, one of the stated aims of *Correlation*, but there was insufficient material to fill an edition and a general lack of interest so the plan lapsed. The genesis of this paper was an article in *Correlation* concerning human judgement errors by Dean et al. which, in my view, the astrological community had either ignored or addressed inadequately. The paper argues that human judgement errors have no bearing on astrological judgements, that those judgements cannot be adequately understood in terms of 'satisfaction' and 'accuracy', and that instead of searching for empirically verifiable correlations which might underpin astrological rules it would be more fruitful for researchers to examine astrological methodology and the astrological experience.

Introduction

The original article by Dean et al. concerning human judgement errors was published in 1998/99 in *Correlation* (17/2) as "Astrology and Human Judgement." There has been little discussion of the arguments made in that article and in his letter to *Correlation* (26/1) – "Modern Science, Epistemology and Astrology: Following up on Garry Phillipson's challenging article" – Arthur Mather, in his criticism of Geoffrey Cornelius' divinatory position, says:

What we need but do not get is a clear step – by – step description of what happens during a horary judgement and how human perceptual and inferential biases do or do not apply at each step. As already mentioned, this requirement should not lead us to deny the veracity of encounters with astrologers. The *experiences* are real enough; what is in dispute is how they are best explained. Until Phillipson and Cornelius face this point, fruitful debate seems unlikely.

This article is an attempt to rectify this and to explain why "human perceptual and inferential biases" are irrelevant to astrological judgements. It then considers what might be meant by an astrological experience and concludes that research into the context of an astrological experience is more likely to be fruitful than more research into the empirical veracity of astrology.

The format of the paper is as follows: the first part will detail the argument made by Dean et al. in *Correlation* (17/2); the second part will show why human judgement errors are irrelevant to the process of making an astrological judgement and why they cannot explain an astrological experience; the third part will consider the issue of 'satisfaction' and 'accuracy', categories proposed by Dean et al. as a useful way to understand astrological judgements, and argue that they are not useful categories; the fourth part will examine an astrological chart in a "step-by-step description" to examine the process of making an astrological judgement; and the last part will consider what implication this has for future astrological research.

1. The argument of Dean et al.

i) The argument

The original article contains forty two pages of argument and footnotes. The brackets below refer to the page numbers from which the various quotations have been taken. My précis of the argument is as follows:

Astrologers believe in astrology because they believe that it “works” and they “perceive” in their practice that people “really do fit their birth charts”. However, human cognitive skills are inadequate for “complex situations such as interpreting birth charts” and are not “sensitive enough to detect the correlations said to exist between chart factors and human behaviour”. Indeed, “unaided human judgement is open to pervasive biases, inferential errors and statistical artifacts, all of which can generate convincing correlations between chart and person where none actually exist” (24) which provides a good explanation of why astrologers believe astrology is valid.

Dean et al. quote from Dwyer who has said that chart interpretation consists of taking all chart factors into consideration whatever matter is being considered and refer to other astrologers who believe that you must synthesise all chart factors to provide a judgement. Then they claim that “the system *requires* a correlation between each significator and the thing indicated. Otherwise the system is pointless, for no signification could indicate anything.” (31) However, these correlations have not been shown to exist and when this is coupled with “our poor ability to detect a real correlation” and “a spectacular ability to see [a] correlation where none exist” (36) it leads to “the phenomenon of believing-is-seeing” which is called an “*illusory correlation*”.

The problem is that “astrologers cannot possibly do what they say they do, namely juggle unaided every chart factor simultaneously.” (39) They cannot use intuition because intuition comes “from previous experience” and is not necessarily correct and provides no method of determining a correct intuition from an incorrect one. Theoretically, astrologers should be able to develop a system with different weightings for different chart factors but “the problem of course is that astrologers seldom agree on the relevant cues and their weighting.” (45)

Dean et al. then consider some of the individual biases in human judgement and provide a table with nine different types (46). All of these biases help explain why people might believe astrological readings are valid but none of them “require that there be any truth in astrology as such.” They then provide a table detailing thirty four biases which might occur during a chart reading which “shows there are many non-astrological reasons why clients should be satisfied by a chart reading, none of which require that astrology be true.” (48)

For Dean et al. what is required for astrology to be true, for astrology to “work”, is that one can show astrology works with a) client and his chart; b) client and his control chart; c) control person and client’s chart; d) control person and control chart, “all determined blind of course” (49) Astrologers may believe in astrology because they think it “works” but until one tests astrology “using procedures that take our judgement biases into account” one cannot conclude that it does work. (50) Unfortunately, there are many judgement biases which make it unlikely that astrologers will be convinced of the necessity of taking human judgement biases into consideration but “to teach astrology today without reference to judgement biases

or research methodology is like teaching arithmetic without reference to multiplication or division.” (51)

ii) The argument reduced

This argument is wide ranging but essentially three points are being made. The first is that when making an astrological judgement, astrologers must juggle together many different astrological factors all of which could have a variety of different meanings, and synthesise these factors into a coherent judgement; this is something our minds are not capable of doing, although there may be many human biases which make us believe that we are capable of doing it. Second, that astrological judgements must be based on verifiable correlations between the astrological signifiers and the matters they indicate, but these correlations do not exist, although there may be many human biases which make us believe that they do exist. And third, that astrologers and clients believe astrology “works” – understood as correlations confirmed through blind tests – because they find that the results “work” but there are many human biases which might convince both astrologers and clients that the results of an astrological judgement “works” in the sense of verifiable correlations when it has not “worked” in that way at all.

iii) Explaining an astrological experience

For Dean et al. for an astrological judgement to be “true” it is necessary for it to be based on empirically verifiable correlations. If these correlations do not exist then nothing astrological has taken place. Thus, first one makes a judgement in “its everyday meaning of reaching an opinion about something” (26) and then one determines if the judgement is “true” by looking for empirically verifiable correlations. These correlations do not exist but there are good human bias reasons for believing that they might exist. In this way the experiences astrologers and others have during an astrological consultation can be explained by human judgement errors, although the experience is not astrological: as Mather says, he does not “question the reality of the associated experiences, only the factors on which those experiences are based” (2008: 54).

2. Why human judgement errors are irrelevant to astrological judgements.

Dean et al.’s argument fails because the central contentions do not hold. Astrological methodology used to make astrological judgements does not involve synthesising all chart factors into one coherent whole; it does not require empirically verified correlations between astrological signifiers and the matters being looked at; and the experience one has during an astrological consultation does not depend on the existence of these empirically verifiable correlations. It follows that human judgement errors, which might make one think that any one of these contentions is true, are irrelevant because these contentions do not need to be true for either an astrological judgement to be made or an astrological experience to occur.

i) Synthesising chart factors

Dean et al. quote T. Dwyer’s “golden rule” (1981): “*only the whole chart should be considered, for any astrological purpose whatever*”, and it would have been possible for them to quote from many other astrologers who have assumed that astrological methodology consists of attempting to synthesise all chart factors. However, this is not a universally accepted practice. It ignores the Company of Astrologers who have a method of ‘locating the

significator' when interpreting a chart specifically because they do not believe it is possible to synthesise all chart factors. It is also to ignore astrological history. For example, in the natal section of *Christian Astrology* (1647) William Lilly does not propose that one synthesises all chart factors but goes round the houses considering specific matters for which the house concerned is responsible. Synthesising all chart factors seems to be a methodology proposed by astrologers (largely psychological ones) during the second half of the twentieth century.

However, the number of astrologers who have or do propose 'synthesising all chart factors' as the correct astrological methodology for chart interpretation is a side issue. If human beings are incapable of 'synthesising all chart factors', as argued by Dean et al., then whatever these astrologers may claim it *cannot* be the methodology they use for chart interpretation. They must be doing something else because they are incapable of doing what they claim they are doing. Thus, if one accepts Dean et al.'s position – that astrologers cannot synthesise all chart factors – which I am sure is correct, it does not follow that astrologers have failed in some way; all that follows is that they are not doing what they think they are doing and the interesting question becomes 'what are they doing' and 'what does astrological methodology consist of'.

Astrologers make judgements all the time. If they cannot synthesise charts it does not follow that astrologers cannot make astrological judgements, or that there is a problem with their judgements, it only means that the astrological methodology used to make those judgements is not, as some astrologers have claimed, 'synthesising all chart factors'. To dismiss astrological judgements because astrologers cannot synthesise all chart factors, as if that is what they should be doing, when one is arguing that humans *cannot* synthesise all chart factors is an odd argument to make.

ii) Verifiable correlations

If astrological methodology is meant to be based on verifiable correlations and astrological judgements, in order to be described as astrological, are meant to be confirmed by verifiable correlations which do not exist then that is a serious problem for astrology. Dean et al. assume that this is generally accepted and it would certainly have been possible for them to refer to various astrologers who have claimed that astrology is an empirically based subject. For example, in her 2002 Carter Memorial talk at the Astrological Association conference Julia Parker said, "It is very reassuring that we can confidently tell any sceptic or client that every statement we make has the backing of empirical research" (2002). Equally, it is the case that many astrologers – John Addey and Charles Harvey being two of the better known British astrologers – have been actively supportive of attempts to find empirical evidence for astrology through empirical test-work. However, it would be a mistake to think that all astrologers have accepted the empirical approach. Charles Carter was sceptical (see 1996/7: 84), while leading American astrologer Dane Rudhyar (1895-1985) specifically rejected the empirical approach, and Cornelius and the Company of Astrologers have developed a methodology for divinatory astrology which is the antithesis of the empirical approach.

There are many issues behind astrology's strange relationship with the empiricalⁱ. However, for our purposes there are two important points. The first is that any argument that astrological methodology should be based on empirically verifiable correlations is an attempt to reform extant astrology. No one suggests that extant astrological practice, in all its myriad forms, is empirically based therefore, if astrologers find their extant practice satisfactory, they are finding a non-empirically based astrology satisfactory. Thus, by assuming that an

empirically based practice is preferable and that this is what astrology and astrologers should be aiming Dean et al. do not accept current astrological practice but attempt to change it and, because these verifiable correlations do not exist, then to dismiss it.

The second point, which is crucial, is that astrological methodology *cannot* be empirically based. There are several reasons for this (see Brockbank: 2011) but the most important is the following. With any astrological judgement there are several rules that need to be taken into consideration and these can conflict. If astrological methodology is to be empirical there would have to be an empirically based rule to determine between two potentially contradictory rules, but that in turn requires another rule to interpret that rule leading to an infinite regress. This is a point originally made by Wittgenstein but has been discussed within astrology (see Willis and Curry (2004: 110)). A simple example will illustrate the problem. Suppose we have two astrological rules for which there is empirical support: 'planets in the first house are strong' and 'planets retrograde are weak'. We require another rule to decide whether a retrograde planet in the first house is strong or weak. However, there is another rule which says that a planet within a certain distance of the sun is combust and weakened so we must have another rule which tells us how a strong planet retrograde in the first house, a weak planet retrograde in the first house, a strong planet direct in the first house, a weak planet direct in the first house, are affected by proximity to the sun. But there is another rule which tells us that it 'is a good thing' if a planet receives an aspect from a benefic and a 'bad' thing if it receives an aspect from a malefic. Therefore, we will require a series of new rules to enable us to interpret the effect of aspects from both benefics and malefics which will depend both on the type of aspect and the strength of the benefic and malefic, because a well-placed benefic will, according to the rules of astrology, have a greater impact than a poorly-placed benefic. We will then require one new rule to combine all these rules before we consider all the other astrological rules we have not touched upon. What sign a planet is in, for example, and whether it is comfortable in that sign.

The aim, presumably, is to find one meta-rule which will cover all situations which we can then apply. However, given that this is unrealistic it has been suggested that we could find a few simple empirical rules and then use our astrological experience when we make an astrological judgements. This would be more realistic but it is not a coherent solution. Whatever the methodology we use for applying these rules to the context being considered - for weighing up and evaluating these rules which may be contradictory, for using non-empirical rules should the empirical rules provide insufficient information for the matter being considered - it cannot be empirical. It cannot be empirical because we are not using an empirically verifiable rule to make our interpretation - there is no meta-rule. Therefore, at this point astrological methodology *must* become non-empirical. Without a meta-rule we must use a non-empirical methodology to apply whatever empirical rules we have and if that methodology is to be coherent it must take precedence over the empirical in all cases.

Within the humanities – and astrology judgements address contingent concerns of humans – there is a tradition of scholars who have highlighted the problems involved when scientific methodology is brought into areas for which it is inappropriate. As Michael Oakshott says of any practice “it is only in fantasy that a practice appears as a composition of rules claiming obedience which to learn is to acquire a familiarity with injunctive propositions and to understand is to know one’s way about a rule-book” (1975: 91). It is fantasy to think that one could develop empirical rules to cover all the possibilities of an astrological chart and how that chart might relate to the matter being considered.

As Dean et al. argue that astrological rules are often contradictory, that astrologers give the same rules different weightings, and that owing to human judgement errors humans are incapable of weighing up these different rules with scientific rigour, they would, presumably, agree that astrological methodology cannot be empirically based. If this is the case, if astrological methodology is not based on empirically verifiable correlations, and astrologers use their astrological experience and the tradition of astrology to choose and interpret astrological rules, then those human judgement errors which lead astrologers to think that astrological rules are based on verifiable correlations are irrelevant. As far as making an astrological judgement is concerned it does not matter whether or not an astrologer believes an astrological rule is empirically verifiable because the astrological judgement does not depend on the empirical verifiability of a rule. An astrologer is not using astrological experience to help choose between different astrological rules *because* of human judgement errors but because astrological methodology *requires* the input of that experience.

iii) Explaining an astrological experience.

For Dean et al. from this position – that astrological methodology cannot be empirical – it follows that astrology cannot be “true” and that the human judgement errors which lead astrologers and others to think that these verifiable correlations exist explain the “astrological” experiences which people experience in an astrological consultation. Essentially their argument is as follows: people believe that astrology ‘works’ (in the sense that it can be verified through blind tests), but there are human judgement errors which explain why they might think astrology ‘works’ (verified through blind tests) and human judgement errors which explain why they think that the results they find support verifiable correlations between astrological symbols and the matters they signify, which in turn supports the starting assumption that astrology ‘works’ (verified through blind tests). Thus, the actual experience that people have when they have an astrological experience is in actuality not astrological at all – in the sense of something that can be empirically verified – but an illusion caused by human judgement errors.

The central part of this argument is that what people mean when they say that ‘astrology works’ is that the astrology part can be verified through blind tests. This is assumed but it is a false and the only reason for thinking that it might hold is if one has fallen into the trap of human judgement errors and believes that the astrological experience is based on astrological rules which have been empirically verified.

One will have an astrological experience if one experiences astrology ‘working’ in a particular situation. That experience just is. Any claim that the experience one has just had must be verified by further tests is confused. One can test the experience for anything that one wants to test it for but the results will have no impact on the experience one has had. Logically, the experience one has of astrology ‘working’ is quite separate to any blind tests that follow it. If the blind tests do not confirm whatever one is checking one has still had the experience: that cannot be obliterated. Dean et al. would argue that if the astrological experience is not verified by further tests that confirm the correlation between astrological symbol and the matter indicated that one did not have an *astrological* experience, one had some other sort of experience. However, if the rules of astrology and an astrological chart are central to the original experience then to argue that the experience is not astrological is simply to re-define astrology in terms of verifiable astrological correlations. This would simply define astrology as it is currently practiced out of existence.

Dean et al. would, perhaps, argue that once people realise that they only believe astrology is ‘working’ (in the sense of verifiable correlations) because of human judgement errors, they will realise that there are no verifiable correlations and that there is no astrology. The ‘astrological’ part of the experience can then be understood as an illusion or a mistake. The experience is the same but how one understands it is different. It may, of course, be correct that how one understands the experience is different: one cannot understand it in terms of verifiable empirical correlations. However, this does not make the experience an illusion, a mistake, or different in any way: the experience *just is*. One’s interpretation of an experience and one’s understanding of it is separate to the actual experience even if the two are often conflated. Equally, one cannot eliminate the astrological part of any understanding of that experience. If the rules of astrology and an astrological chart were central to that experience then they were central to it and must be considered and form a central part of any examination of the experience. The fact that the rules of astrology have not been empirically verified will, in turn, become part of that examination.

Dean et al.’s position assumes that their understanding of astrology – that it requires verifiable correlations – is generally accepted, but this is not the case. Many astrologers are well aware that empirically verifiable correlations do not exist but still practice astrology.

Curry has produced an alternative definition of astrology ‘working’:

‘it works’ means nothing more nor less than that ‘person x in situation y experienced the truth of a perception or statement’, where astrology was integral to situation y. (2003: 102)

This definition and Dean et al.’s definition of astrology “works” are not contradictory but it is clear that the Curry definition is closer to what astrologers mean when they say astrology works. If blind tests are required then most of what astrologers do – talking with clients – would be excluded and there is no reason for thinking that astrologers are not referring to their own experiences when they say astrology ‘works’ and are instead making some sort of wider claim.

Dean et al. would argue that if this is the case then astrology can best be understood as a form of satisfaction rather than accuracy. This important issue will be discussed in the next section. Meanwhile we can conclude this section by saying that human judgement errors can only explain an astrological experience, where the astrological chart and the rules of astrology are central to that experience, if an experience can only be called astrological when there are verifiable correlations between the astrological symbols and the matters they signify. However, for someone who has actually had an experience in which the astrological chart and astrological symbols in that chart were an integral part of that experience, to describe it as non-astrological will only be a satisfactory explanation if one believes that astrology must be supported by empirically verifiable correlations and accepts that without those correlations there can be no astrology. There is no reason to think that this position is generally held, certainly not among astrologers and their clients. Moreover, it would not explain *why* the astrological symbols and the meanings they indicated were integral to the original experience; why they could be used to provide a pertinent and relevant response to the client’s enquiry.

3. Accuracy and Satisfaction.

The separation of astrological judgements into those which provide accuracy and those which provide satisfaction was first suggested by Geoffrey Dean and Arthur Mather in Key Topic 1 “Is the Scientific Approach Relevant to Astrology?” (*Correlation*: 13/1) but their position has been explained in the clearest manner in the discussion of Dean et al. with Garry Phillipson in *Astrology in the Year Zero* (2000). Their argument is as follows:

We can use two axis: a subjective axis and an objective axis; the subjective axis would measure matters like benefit, self-awareness, understanding, insight, spiritual values, and other matters which are labelled satisfaction; the objective axis would measure matters like “Are the statements of astrology true? Are Leos more Leonian than non-Leos? Which techniques are the most accurate? Do rectified times agree with actual times? Can astrologers pick the real chart from a control? Can clients pick their own interpretation from a control? Does astrology provide information which is not available elsewhere? *To be accepted objective astrology needs to be true.*” (129)

Thus, astrology can be understood as ‘satisfaction’ or ‘accuracy’, or somewhere in between. Given that there are no verifiable correlations between astrology and the matters that they signify astrology can best be understood as ‘satisfaction’.

We can see that of the two definitions proposed for astrology ‘works’ only the one by Dean et al. is ‘accurate’; the definition proposed by Curry could not be described as ‘accurate’ but is compatible with ‘satisfaction’. This enables Dean et al. to argue not only that astrology is best understood as a form of satisfaction but also that it is ‘not true’ and is ‘not accurate’. These can be startling statements for the astrologer because they are pejorative but it must be understood that a particular definition of accuracy – requiring repeatability – is being used which is not exclusively how we use the term while the definition of truth – as ‘accuracy’ – would be considered far too simplistic by most scholars.ⁱⁱ

There are many problems with the argument that astrology can be understood in terms of ‘satisfaction’ (see Brockbank 2011), but what concerns us here is whether this is a useful way to understand astrological judgements. On reflection it is clear that it is not. If one establishes that an astrological judgement cannot be ‘accurate’ it does not follow that it can consequently be understood in terms of ‘satisfaction’. The majority of astrological judgements concern matters which are both subjective to the client – how they feel about whatever matter is being considered – but also objective to the client – the context. An astrological judgement concerning a relationship or a job will be necessarily *both* subjective and objective to the client. For example, concerns about a job will include how the client will enjoy it, which we might consider subjective (although even this will be dependent on matters objective to the client), but also how much money it is likely to pay in the future, the prospects for future promotion or whether the company is likely to go bankrupt, all of which are objective matters. These objective concerns, which are likely to be important in any astrological consultation, are all independent to the client, but cannot be covered by ‘accuracy’ because they cannot be repeated in exactly the same way – each context is unique to that client. Indeed, any similar contexts may be of little more than passing interest to a client concerned with their own contingent circumstances. Repeatability may be of no importance. However, as these matters are objective to the client they do not form part of ‘satisfaction’ although they form an integral part of many astrological judgements. If one wants to argue that astrological judgements should not contain objective matters because they cannot be shown to be

‘accurate’ one is attempting to reform astrology into an empirical science rather than attempting to understand what astrologers actually do in their practice.

4. Example Chart

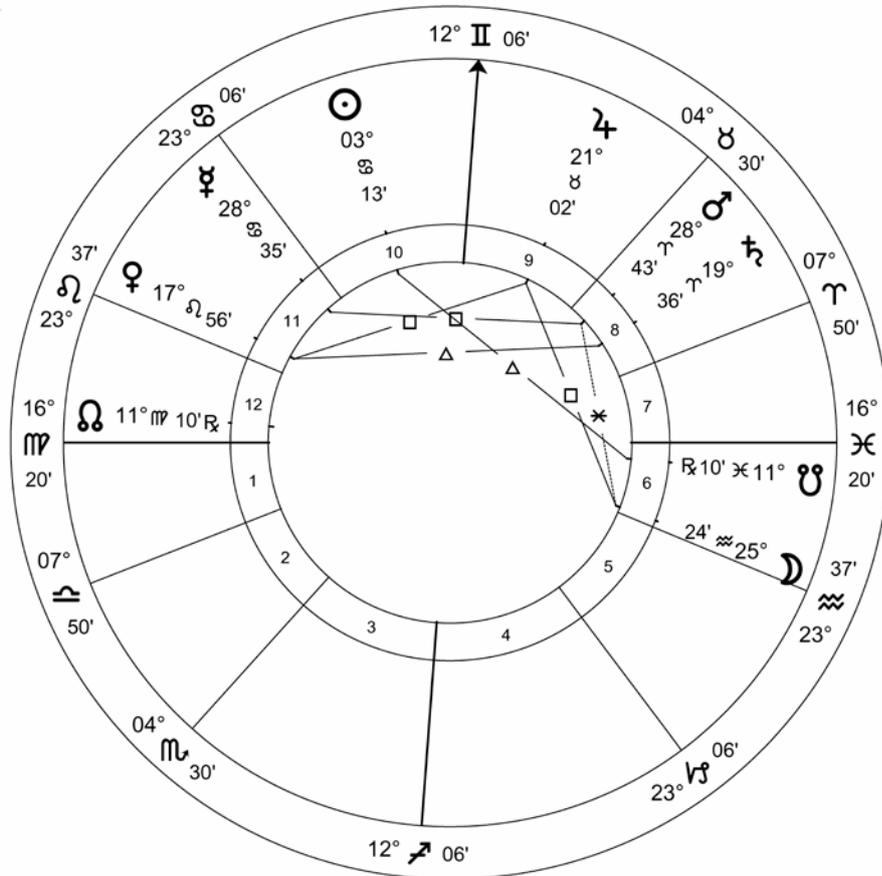


Chart calculated for: 10.30 am, 24th June 1644 NS, London. This produces the closest match to the chart as Lilly calculated it, albeit with minor variations in planetary positions. Lilly’s calculations gave these positions for the planets: Sun 3cn16; Moon 24aq; Jup 21 Tau; Sat 19Ar; Mar 28ar39; Ven 18Le; Mer 28Cn31; NN 9Vir.ⁱⁱⁱ

My example chart is taken from William Lilly’s *England’s Prophetic Merlin* (1644: 135). The full question is “A gentlewoman desired to know if she should have an aged man; yea, or no.” It has been fully discussed by Cornelius in *The Moment of Astrology* (2003: 148-150) where Lilly’s full text is provided. However, as I am interested in the impact of human judgement errors on an astrological judgement I will only consider (in my words) Lilly’s astrological reasoning.

Mercury is significant for the woman because Mercury rules the Ascendant. Jupiter is significant for the aged man because Jupiter rules the seventh house. This follows the rules of horary.

Mercury has just separated from a sextile to Jupiter so Lilly thinks there had recently been a treaty about this marriage, which is confirmed by the client. Again this is straightforward astrological reasoning: there was a connection between the two signifiers so given the context Lilly judges that they had made an agreement concerning the marriage.

Lilly judges that the old man is very keen on the marriage because Jupiter receives Mercury in Cancer, his exaltation, and Jupiter is trine the ascendant. But because the Moon (from the rules of horary co-signifier of the woman/querent) separates from Jupiter and applies to Mars, and Mercury is also applying to a square of Mars, Lilly judged that the lady was not interested in the old man but was interested in a younger man, probably a soldier (Mars). This too seems straight forward astrological thinking and was confirmed by the client. He judges that there had been problems with this relationship because both Mars and the Moon are in difficult houses. This too was confirmed by the client.

Saturn and Mars are in the eighth house (responsible for money) and Mars (malefic) is the impeding planet so Lilly judges that the old man has money issues and proposes that the client asks for a jointure. The jointure cannot be provided and the marriage falls through. There was a charge against the old man's land which is signified by Saturn and Mars in the old man's second house.

There is nothing here which is too complicated to grasp. Lilly does not take the whole chart into consideration – not all the planets are mentioned, but only those planets which he considers relevant to the context. In each part of the judgement he considers one or two planets along with an aspect of that planet's movement or position, applies them to the context, and judges what it might signify. It is quite possible that there was some discussion between Lilly and his client but that we are not told.

If we consider the impact of human judgement errors on this judgement it is clear that there is none. Lilly does not attempt to synthesise the chart so human judgement errors which make synthesising a chart impossible are irrelevant. Similarly, all of Lilly's judgements are based on astrological thinking which is embedded in the rules of astrology; they are not based on correlations which have been verified and do not require that a correlation has been shown between any of the astrological symbols he uses and what he says they signify in this context. There is nothing particularly complicated about what he is doing. All that matters is their relevance to the context: the client will find his judgement pertinent, that it "works", if it is relevant and helpful to her situation and this is not dependent on a series of empirical tests conducted on other cases. Equally, the client is not involved in any human judgement error; she is not deluded into thinking that Lilly's judgement is correct because she wants to believe in astrology, or for any other reason. She acts on his advice and the marriage proposal falls apart; no human judgement error is involved. Lilly does not say but we can assume that one of the reasons for the marriage was the financial security it would provide.

If we consider whether this judgement can be usefully understood in terms of 'satisfaction' and 'accuracy' it is clear that it cannot. The subjective matters which could be described as 'satisfaction' might consist of the client's feelings towards her aged suitor, but a key part of the judgement is that the money expected from the aged suitor will not be forthcoming. This money is objective to the client but cannot be covered under the 'accuracy' axis because no blind tests exist to cover this sort of situation and would, in any event, be irrelevant because what matters is this context and no other.

What Lilly is doing is thinking astrologically. What astrological judgements consist of is astrologers weighing up various chart factors in light of the matter being considered, and in accordance with the rules of astrology, and making a judgement. Oakeshott, in his essay “The study of ‘politics’ in a university” says:

What a university has to offer is not information but practice in thinking; and not practice in thinking in no manner particular but in specific manners each capable of reaching its own characteristic kind of conclusions. And what undergraduates may get at a university, and nowhere else in such favourable circumstances, is some understanding of what it is to think historically, mathematically, scientifically or philosophically, and some understanding of these not as ‘subjects’, but as ‘living languages’ and of those who explore and speak them as being engaged in explanatory enterprises of different sorts (1991: 197).

I would suggest that thinking astrologically and making astrological judgements is in principle no different to any of the above.

5. Conclusion and suggestions for further research

Our argument is not that human judgement errors do not exist but that they are not relevant to making astrological judgements. Astrological judgements do not need to involve synthesising a whole chart and often involve relatively simple procedures. Similarly, the judgements do not depend on verifiable correlations being shown between astrological symbols and what they indicate. What astrological symbols might indicate is determined by the rules of astrology and not by correlations which so far have not been shown to exist. The difficulties in making an astrological judgement usually involve knowing how to relate the astrological symbols to the matter being considered. This requires experience or practical knowledge, rather than an endless amount of technical knowledge. Thus, we can say, in answer to Mather, that as far as our example horary is concerned human judgement errors are irrelevant.

The reason that Dean et al. believe that human judgement errors do apply to astrological judgements is that they assume astrologers are trying to make judgements in accordance with correlations between astrological signifiers and the matters they signify. Dean et al’s position can be summarised by the quote above we have already used: “the system requires a correlation between each signifier and the thing indicated. Otherwise the system is pointless, for no signification can indicate anything.” Clearly, if one is to have a scientific astrology this is the case but if one considers our example chart it is equally clear that no correlation is required for Lilly to make his judgements. An astrological symbol can mean something in an astrological context without a verifiable correlation with that something; what it can mean is determined by the rules of astrology.

If what an astrological symbol indicates is not determined by verifiable correlations between that symbol and the thing indicated but, in part at least, by the rules of astrology then an appropriate avenue of research would be astrological methodology: what astrologers actually do when they make judgements. Astrological methodology must provide a method for determining what an astrological symbol indicates and research into what that method is, how different astrologers go about it, and any problems or issues which are raised, would be both useful and worthwhile. It is likely that Lilly in his judgement discussed his findings with the client and he did involve the client in the judgement by suggesting that she ask for a jointure. This back and forth between client and astrologer precludes the possibility of blind tests and,

therefore, of astrology 'working' in accordance with the Dean et al. definition. However, if it is what astrologers do then to examine it in detail it would seem to be a more appropriate avenue of research than to assume that the methodology is a mistake because it is not based on empirical research.

Astrological methodology must involve a method of choosing what meaning each astrological symbol has in the matter being looked at. This methodology cannot be empirical because there can be no one empirical rule to which all other rules must submit and may involve a dialogue with a client so that the results cannot be used to show that there are verifiable correlations, because the methodology will preclude blind tests. Equally, because astrological judgements are concerned with a particular set of circumstances unique to that judgement, tests on other similar cases do not impact on the original judgement and cannot be said to verify or confirm that judgement which must stand on its own merits. This immediately suggests another avenue of research. It may not be possible to provide empirical verifications conducted through blind tests which would meet scientific standards but it should be possible to examine the individual cases where astrologers claim success in their judgements and the circumstances surrounding them. It should be understood that what is being suggested is an examination of the circumstances of the successful judgement and not an attempt to repeat that judgement so that one can say that the first judgement was 'correct'. Trying to repeat astrological judgements in an attempt to find empirical support for astrology has been nothing more than a dead end.

That people have astrological experiences is not in dispute so it would seem sensible to investigate those experiences in more detail. Much research has been conducted on the nature of religious experiences but little on the nature of astrological experiences, although astrological experiences are potentially more interesting: religious experiences are usually inner experiences which can, therefore, be described in purely psychological terms whereas, as we have seen, astrological experiences usually involve something which is objective to those involved so cannot be described in purely psychological terms. Something else is going on. Research into what might be going on would, I believe, be more fruitful than searching for verifiable correlations between astrological symbols and the matters they signify, correlations that few people believe exist.

Bibliography

Brockbank, James. (2011), *The Responsive Cosmos: an Enquiry into the Theoretical Foundation of Astrology*, University of Kent thesis, available at www.cosmocritic.com

Carter, Charles. (1996/7), "When Astrology Doesn't Work", *Astrological Quarterly*, Volume 67(1).

Cornelius, Geoffrey. (2003), *The Moment of Astrology*, The Wessex Astrologer, Bournemouth, UK.

Dean, Geoffrey, and Mather, Arthur. (1994), "Key Topic 1: Is the Scientific Approach Relevant to Astrology?", *Correlation*, Volume 13 (1).

Dean, Geoffrey, et al. (1998/99), "Discourse for Key Topic 4: Astrology and Human Judgement", *Correlation*, Volume 17 (2).

Lilly, William. (1644), *England's Prophetical Merline*, John Rawarth, London. (Facsimile copy printed by Ascella Publications, Mansfield, Notts, UK.)

Lilly, William. (1647) *Christian Astrology*, Regulus, London.

Mather, Arthur. (2008), Modern Science, Epistemology and Astrology. Following up on Garry Phillipson's challenging article." *Correlation*, Volume 26 (1).

Oakeshott, Michael. (1975), *On human conduct*, Clarendon Press, Oxford.

Oakeshott, Michael. (1991), *Rationalism in Politics and other essays*, Liberty Fund, Indianapolis.

Parker, Julia. (2002). "The Planets – Myth and Reality", *The Astrological Journal*, September/October, Volume 44 (5)

Phillipson, Garry. (2000), *Astrology in the Year Zero*, Flare Publications, London.

Willis, Roy and Curry, Patrick, (2004). *Astrology, Science and Culture*, Berg, Oxford and New York.

ⁱ For a fuller discussion please see Brockbank (2011) chapters one through five.

ⁱⁱ For a fuller discussion of these issues see Brockbank (2011).

ⁱⁱⁱ Modern calculations provide different figures for some of the planets which would lead to different astrological reasoning for those planets although a similar conclusion. Often when one examines charts from the pre-modern period, from Vettius Valens onwards, one finds that the planetary positions do not accord with modern calculations. But these were the most successful astrologers of their period which puts a serious question mark against the modern emphasis on exact times. This issue is discussed in *The Moment of Astrology*.