Reduction, Generation, and Truth: A Comparative Approach to Divinatory Interpretation

Abstract

The study of divination remains of central relevance to anthropology for what it reveals about the relationship between intuitive and reflective cognition. What marks divination out is the reflective elaboration of the role granted to intuitive associations in arriving at verdicts, which produces two distinct forms of divinatory interpretation. Generative interpretation, exemplified by Cuban Ifá, relies on maximising opportunity for intuitive association to render divinatory results relevant to clients' circumstances. In contrast, reductive interpretation, exemplified by Chinese six lines prediction, minimises the role of intuitive association by relying on highly formalised sets of fixed interpretive principles. Both approaches yield specific diagnoses, but arrive at them by emphasising different cognitive processes. A focus on the generative role of intuition has led some anthropologists of divination to argue that divinatory truth is properly understood as distinct from propositional or representational truth. Instead, anthropologists should take seriously diviners' claims to produce representational knowledge, demonstrating that claims for the 'alterity' of divinatory truth stem from a lack of due acknowledgement of the role of reflection in moving from polyvalent divinatory results to specific verdicts, or of the possibility of reductive interpretation as a key feature of certain divination systems.

Introduction

The forms of reasoning involved in divination have been a topic of perennial concern in anthropology since Evans-Pritchard's classic study of Zande oracles (1976). Accounts have frequently characterised divination as a process of drawing connections between disparate themes or systems of classification, facilitated by a dialogic interaction between the diviner and oracle (whether an imagined agent or a physical mechanism), often also involving the client (e.g. Abbink 1993; Graw 2009; Holbraad 2012; Joseph 1980; Parkin 1982; 1991; Swancutt 2006; Tedlock 2001). This is associated with creating the possibility for spontaneous associations from which meaning can be derived, or creating an 'excess' of meaning (Holbraad 2012, 174-75), speaking to a longstanding concern with the relationship between intuition and reflection as a core feature of divinatory interpretation (Parkin 1982; Peek 1991; Swancutt 2006; Tedlock 2001). A related concern has been the question of divinatory truth and attempts to take the study of divination beyond the 'rationality debate', which still casts a shadow over anthropological discussions of divinatory reasoning (Holbraad 2012, 18–74; Shaw 1991, 137–41), whilst other researchers have focused instead on pragmatics (Zeitlyn 1990) or cognitive processes (Boyer 1990, 61-78; 1994; 2020). However, all of these approaches, perhaps because they have tended to focus on particular ethnographic cases, have ignored a crucial comparative distinction¹ between two forms of divination: one which relies on the generation of meaning based on its results, and another which relies on reducing meaning. Strictly speaking, this is a distinction between the forms of divinatory interpretation employed in a given divination system - that is, the way in which the results of a divinatory procedure are understood and worked through by the diviner to arrive at a verdict; 'generative' or 'reductive interpretation' in this article should be understood in these terms. Conflating the two – or treating all divination practices as relying on the same kind of interpretive process – has caused significant confusion in the anthropology of divination and served as an obstacle to cumulative comparative work on how divinatory verdicts are interpreted, and what this says about the cognitive processes involved. Scholars of divination have tended to focus on patterns of

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¹ This is not the same as the distinction which has been drawn, at least since Cicero (1923, 235–37), between 'mechanical' divination systems based on specific instruments, such as coins, shells, or entrails, and 'emotive' (Zeitlyn 1990) forms based on performance (such as spirit possession).

interpretation in single ethnographic cases as representative of divination practices in general, often over-emphasising intuition as a striking feature of divination.²

Taking a comparative approach, this article demonstrates that we can distinguish 'reductive' interpretation, which emphasises reflective cognition and fixed meanings of divinatory results, from 'generative' interpretation, which emphasises intuition and polyvalent results. This distinction between modes of interpretation hinges on reflective consideration on the part of the diviner of the role of intuitive and reflective thought during divination. Throughout the article, I distinguish between divinatory result, referring to what is procedurally generated (the symbol associated with the fall of coins, for example, or the particular myth or story), and divinatory verdict, that is, a diagnosis or prediction (Zeitlyn 2012) relevant to the client's enquiry, which is the product of interpretation. The generative/reductive distinction pertains to the role granted to or denied intuitive association in the process of *arriving at* the verdict. Verdicts themselves can be more or less specific, or understood in more or less polyvalent terms by the client, but this is not a direct product of generative or reductive interpretation of a result to arrive at a verdict and lies beyond the scope of this article.

Divination here is understood as a means of acquiring accurate information about a real-world state of affairs in the past, present, or future, based on a pre-defined procedure which yields results which do not appear directly manipulable by the diviner,³ in order to facilitate decision-making. This is true for both generative and reductive interpretation, and notably does not require that divination involve any kind of metaphysical explanation. Even though the intuitive cognition favoured by generative interpretation is quite unlike the explicitly rules-constrained reflection promoted by reductive interpretation, it nonetheless relies on a reflective understanding of divination as a source of truth claims about the world. The distinction between the two modes thus offers an important contribution to the anthropology of truth in divination, which in notable cases has been interpreted as fundamentally 'other' to ideas of propositional truth (Holbraad 2012; Willis and Curry 2004). This article argues that such anthropological claims of epistemological and ontological 'alterity' place undue emphasis on the role of intuition at the expense of, and in opposition to, reflection, leading to a mistaken characterisation of divination systems in general as generative (though not using this terminology) and unconcerned with propositional truth.

The first section of the article concerns the interplay of intuition and reflection as distinct types of cognitive process, as relevant to divination, introduced in terms of dual process theories of cognition. The distinction between reductive and generative interpretation is distinguished from other distinctions prevalent in the comparative anthropology of divination, and is illustrated with the example of the Kenyan 'Arab' diviner documented by David Parkin (1982). In particular, the generative/reductive framework depends on, but is distinct from, the distinction between intuition and reflection. The second and third sections introduce generative and reductive interpretation,

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² Comparison has been a focus of studies on other aspects of divination in anthropology and other disciplines, exemplified by edited volumes (Curry 2010; Loewe and Blacker 1981; Peek 1991), comparisons of techniques and socio-political roles (Beerden 2013; Raphals 2013), diagnosis and prediction (Zeitlyn 2012), and cross-cultural recurrence (Boyer 2020).

³ My thanks to the anonymous reviewer of an earlier draft who pointed out that, according to this definition, consulting a dictionary may as well be considered a form of 'divination'. Indeed. This raises a point of wider comparative importance: the definition underdetermines divination simply because divination does not refer to a 'natural kind' of phenomenon but is a polythetic category – many other epistemological techniques meet this definition, but the only significant difference is whether or not they are considered 'divination' by their participants or anthropologists (or perhaps from a more normative, etic perspective, whether or not they *really* arrive at empirically valid conclusions). 'Divination' nonetheless remains a *useful* category of social phenomena from an anthropological perspective, and the idea that it must be somehow different from other epistemological techniques, perhaps due to mistakenly identifying it as a natural kind of phenomenon, contributes to the comparative problems of overemphasising intuition due to its 'alterity' which this article seeks to address.

respectively drawing on the examples of Cuban Ifá documented by Martin Holbraad (2012), and Chinese six lines prediction (*liuyao yuce*), the subject of my own ethnographic research. Greater space is devoted to the latter, because unlike Ifá it has not been so thoroughly documented in the ethnographic literature, and because the characterisation of reductive interpretation constitutes a greater departure from existing analyses of divinatory interpretation. The fourth section examines reductive methods which yield only yes/no answers, with reference to Mongolian and Mambila examples; these present unique problems of 'incorrect' and contradictory verdicts, which require either recourse to generative methods or appeal to knowledge extrinsic to the immediate divination process. The final section employs the generative/reductive framework to demonstrate that previous approaches to divinatory knowledge have placed undue emphasis on the role of intuition, leading to unjustified arguments for the 'alterity' of divinatory truth claims. An examination of analyses of Western astrology (Willis and Curry 2004) based on reductive interpretation, and generative-based Cuban Ifá (Holbraad 2012), show that overemphasis on intuition misrepresents both divination based on reductive interpretation and the truth-claims of verdicts based on generative interpretation.

These arguments have important implications beyond the anthropology of divination. In particular, examination of the relationship between intuition and reflection in divinatory interpretation highlights key aspects of human cognition relevant to anthropology as a whole. It demonstrates the fundamental ways in which these two modes of cognition interact, against longstanding but misguided efforts to present 'rationality' and intuition as fundamentally opposed modes of thought. This cautions against both sides of the shadow still cast by the 'rationality debate', and against ongoing recourse to counterposing *bricolage* with scientific reasoning (Lévi-Strauss 1974) as features of particular cultures rather than as modes of thought emphasised to different degrees in different contexts across human societies. Central to the realisation that all human thought involves the interplay of intuition and reflection is the acknowledgement that, despite our intuitive 'folk sociology' (Boyer 2018), human cognition is the product of various mental systems rather than of unitary, coherent selves. This means that, when analysing divinatory interpretation or indeed any other practice involving human thought, inconsistency and contradiction are to be expected.

As discussed below, a key obstacle to understanding caused by the failure to acknowledge the differences between generative and reductive interpretation is the assumption that reasoning must obey a coherent logic throughout the divinatory process. This turns the anthropological task into one of explaining away incoherence; to the contrary, the present argument shows that divinatory interpretation is better approached as a process of the interaction between distinct, and consequently often contradictory, cognitive processes which manages to produce meaningful verdicts. This has significant wider implications, recasting anthropological questions concerning thought in terms of how coherence can be established under certain circumstances if we take plural cognitive processes and their frequently conflicting outputs as a general feature of human cognition rather than a problem. It thus offers an effective way out of the classic – but misguided – anthropological problem of 'alterity', of how phenomena as apparently bizarre as the Nuer saying that 'twins are birds' (or as people consulting diviners) can be rendered coherent. In the anthropology of divination, which exemplifies some of the problems the desire for coherence generates, this has frequently been responded to by either explaining away apparent inconsistencies through invocations of radical difference, or by bypassing the question of reasoning entirely, and unsatisfactorily, by limiting discussion to divination's social function (Abbink 1993; Boyer 2020).

Comparative assessment of the ethnographic record, in light of the above concerns, is essential for building a cumulative body of anthropological knowledge and testable theory. The distinction between generative and reductive interpretation does this based on clear explanatory criteria, and

provides a basis for examining further comparative questions. As discussed, a key component of divination systems employing reductive interpretation is a high degree of formalisation. This has a direct effect on interpretation in terms of constraining the perceived validity of intuitive associations, but also has wider contextual implications. Is it possible, for example, for such a system to become widespread in the absence of writing? Does formalisation indicate a historical response to competing sources of knowledge deriving their legitimacy from formal systems? A key aim of this article is to use the case of divinatory interpretation to further demonstrate the value of systematic comparison for generating such positive questions which can be assessed against the ethnographic and historical record, as well as by future research. The next section begins by considering the central role of intuition and reflection.

All Divination Involves Intuition and Reflection

It has been widely noted by scholars of divination that the practice involves the interplay of two different modes of thought, labelled variously as 'representative' and 'conjectural' (Swancutt 2006), 'simultaneous' or 'synchronous' and 'sequential' (Parkin 1982), and 'presentational' and 'representational' symbolism (Tedlock 2001). Rather than referring to the overall mode of interpretation, these refer to particular judgements made during the interpretive process. Katherine Swancutt, for example, describes representational divination as based on symbolic interpretation through the combination of a wide range of possible arguments, resulting in innovative explanations for phenomena (2006: 335-336); conjectural divination meanwhile requires 'successive stages of analysis' (2006:337) which begin by defining the parameters of the situation of concern, proceed through a series of yes/no type assessments, and arrive at a specific conclusion. Parkin describes divinatory interpretation as an interplay between simultaneity, likened to Jung's 'synchronicity' (Parkin 1982, 71–72) and referencing a 'pool of meanings', and sequencing, in which these generated meanings are ordered and rendered intelligible. For Tedlock, 'presentational symbolism' involves meaning emerging 'as a result of experiential immersion in the expressive patterns of the symbolic medium, which is grasped intuitively', while 'representational symbolism' relies on 'specific intentional reference' (2001, 191-92). What is being described in these cases, from distinct ethnographic contexts (Mongolia, Giriama and Swahili, Navajo), is as Jon Abbink puts it, 'an attempt to integrate linear-analytical and synthetic-analogical thinking in order to effect cognitive and/or behavioural change' (1993, 706).

Rather than use these labels, however, I refer to these cognitive processes as intuition and reflection, as this aligns with a broader literature which extends to wider questions of belief (Sperber 1997; Boyer 1994; 1996; 1998; 2010). This work itself is influenced by dual process theory (Evans 2003; 2011), the result of psychological research pointing to the essential interplay of intuition and reflection in human cognition more generally (see e.g. Chaiken and Trope 1999; De Neys 2017; J. Evans and Frankish 2009 for overviews of research in this field). I follow this literature in characterising 'intuition' (or Type One processing) in terms of spontaneous, low-effort judgements based on perceived contextual cues, and 'reflection' (Type Two) in terms of deliberative, slower, high effort judgements based on rules (Smith and Collins 2009). Whilst we may be conscious of intuitive judgements (for example, as 'gut feelings'), the process by which we arrive at them is not consciously accessible – unlike reflection, which involves conscious deliberation and working memory.

As a general feature of human cognition, the interplay of intuition and reflection in divination is not confined to interpretation alone; for example, Pascal Boyer (2020) makes a convincing case that the cross-cultural recurrence of divination stems from its removal of intuitive obstacles to doubt in the

form of human authors of statements – rendering it intuitively authoritative if not necessarily reflectively persuasive. Similarly, quite apart from the interpretive processes described above, expert diviners will rely on intuitive processes to recall predetermined referents of symbols and so forth, and utilise both processes in recognition and discussion with clients about their own circumstances. These activities can be distinguished from the role of intuition and reflection in interpreting divinatory results based on conventions and principles of specific techniques. For example, Parkin's analysis of divinatory dialogue emphasises the 'Arab' diviner's spontaneous linkage of different aspects of his client's life as potential sources of distress, combined with shifting between different metaphors to describe these (1982: 74–76):

[The 'Arab' diviner's] client has come on behalf of his ten-year old son who talks to himself, woops and yells as if possessed, plays on his own and not with other children, and is easily angered.

- 1. The diviner's spirits make the following points:
- (a) He (i.e. the victim) is troubled because of his trade the trade carried out from his home I mean the trade that results from a man marrying a wide and having a child by her. I mean that trade for the wife is the investment and the child the profit. Women are the loads which we men trade with, feeding them, and hoping to trade further with.
- (b) But the wife can't or won't get out of your body she is the wonder of it it's your trade but she is the owner. .and she can say I don't love you and she can leave you ... but your child can't say that.'

(Parkin 1982, 74)

This is an exercise in generating many potential connections, and thus meanings, through spontaneous associations prompted by a rapid succession of ideas — moving, for example, from the subject being troubled by his trade, which is carried out from his home, where his wife is, with whom his relationship is analogous to trade, and so on. While Parkin's focus is on the role of different metaphors, what is of interest here is the clear role of intuitive associations (trade and the home, the home and marriage, etc). This is given voice, and thus also becomes subject to reflection — here indicated particularly by the phrase 'I mean', demonstrating that the diviner is actively considering the intuitive association he has just produced. In this case, the diviner pays attention to the reactions of the client, determining that his son is the victim of possession; Parkin describes how the diviner sequentially considers each part of the victim's body to locate sickness, a reflective process involving separating different ideas and followed by a shift to the location of the client's home, and arrival at a cause, an intrusion of spirits:

- 2. The diviner says:
- (a) I am looking at the (victim's) head, circling around, going now to the stomach, to the joints, circling all the time...and the child is suffering in all parts of the body head, heart, stomach, but the stomach pain is ceasing, now it is the back which is troubling

...

(d) You saw something astonishing in his house, didn't you – like a wild animal from the forest going in? Now that animal came up to the child ... even the next day, when he's about to recover, the sickness goes away a little but then comes right back. The disease then comes and foes every two days...there are spirits active there, which must be seen to quickly.

(Parkin 1982, 75)

This section of dialogue suggests a greater degree of reflection focused on excluding certain possibilities, but is accompanied by the intuitive shift to the question of the home's location. In the section quoted above, there is an obvious intuitive link between the arrival of the animal and the arrival of the sickness, but this is then subject to reflection on the sickness's character (returning after two days) and the underlying cause (spirits). Systematic reflection predominates in the final part of the consultation (not quoted here), in which an explanatory sequence is presented for the child's possession and specific ingredients described as a cure. This example provides an excellent illustration of how intuitive association and reflective ratiocination work together to reach divinatory verdicts.

Notably, intuition in Parkin's example takes the form of spontaneous associations; the distinction between generative and reductive interpretation hinges on the role granted to such associations. It is emphatically not the case that generative interpretation refers simply to intuition and reductive interpretation to reflection. Both necessarily involve both processes; the key determinant of the mode of interpretation is the degree to which intuition and reflection, in the form of spontaneous association and ratiocination, are themselves *reflectively* elaborated. Insofar as intuitive and reflective cognition are described or given voice in divinatory dialogue, they are themselves considered reflectively. Generative interpretation relies primarily on reflecting on the possibilities afforded by intuitive associations, or 'running with' them to create new meanings, whereas reductive interpretation operates by reflective denial of the validity of intuitive associations in order to minimise room for interpretation. We see this in Parkin's example above, in which intuitive associations are a core feature of interpretation and consequently subject to reflection.

At the same time, the above example highlights a key feature of Parkin's 'sequencing' as a reflective cognitive process: the impact the accrual of additional information has on the range of valid interpretations, or the interpretive potential (Matthews n.d.), granted by the initial result of a divinatory procedure. In mechanical forms of divination, the mechanism itself imposes limits on interpretive potential (Zeitlyn 1990),4 typically based on some set of established rules or physical properties of materials (such as entrails, coins, or cards), which 'constrain which statements generated...can be meaningful or meaningless' (Abbink 1993: 720). Each additional piece of information gained by the diviner (such as, in Parkin's example, the victim being the client's son, and the location of his home) reduces the potential range of solutions by further specifying the problem and allowing the diviner to better tailor the diagnosis. This is the case for any divination technique, or indeed any procedure involving the gathering of information in order to solve a specified problem. However, generative and reductive interpretation differ in the means by which such specificity is arrived at, in terms of the role accorded to intuitive associations in arriving at a verdict.⁵ This is important to recognise for the wider anthropology of divination, as the role of intuition has often captured the imagination of anthropologists, perhaps because it seems so different from the systematic reflection characterising scholarly approaches to epistemology. Indeed, it is the aspect of divination on which Philip Peek (1991) places particular emphasis in his discussion of 'non-normal modes of cognition', in reference to various ritual procedures and substances used to enhance the creation of intuitive connections. The next sections examine what is specific about the interplay between intuition and reflection in generative and reductive interpretation.

⁴ Parkin provides few details of the 'Arab' diviner's procedure, other than that it involves the use of a pocket watch, and thus appears to be mechanical.

⁵ As will be seen from the arguments below, Parkin's example of the 'Arab' diviner's procedure can be characterised as generative, according a central role to intuitive association.

Generative Interpretation, with Cuban Ifá as an Example

Most classic ethnographic examples of divination appear to rely on the generative mode of interpretation, with intuitive associations being allowed to play a key role in deriving meaningful diagnoses (Abbink 1993; Graw 2009; Holbraad 2012; Joseph 1980; Parkin 1982; Swancutt 2006). This is arguably why anthropological analyses of divination repeatedly return to the distinction between intuitive and reflective thought processes, as the former become ethnographically visible, so to speak, primarily by being subject to explicit reflection. Even forms of divination which rely on presenting the oracle with a series of yes/no questions, as discussed below, can leave a generative role for intuitive associations in order to resolve contradictions or perceived errors (which may well be influenced by interaction with the client as an integral component of the divinatory procedure).

Holbraad characterises Ifá as relying on 'truth in motion' (2012), providing a good example of generative interpretation, and one which is associated with a body of cosmological knowledge of comparable complexity, though of very different character, to that employed in the reductive interpretation of six lines prediction. Ifá is based on a system of 256 signs (*oddu*) associated with cosmogonic mythic verses or stories; these encompass all phenomena insofar as 'each constituent of the world relates to a myth that describes its original birth' (Holbraad 2012, 116), and are associated with particular divinities (*oricha*). Divination involves a series of elaborate ritual preparations followed by the casting of nuts (Holbraad describes the process in detail). The diviner presents a series of questions to identify a suitable offering, and to identify the deity responsible for the client's fortune; this is followed by 'interpreting the paths', characterised by less ritual constraint and increasing scope for interpretation on the part of the diviner (2012, 185–91). This involves, in the words of diviners, explaining the myths of the *oddu* in such a way as to relate them to the life of the client to produce a specific and relevant verdict – depending on 'the scope of the data that they can draw upon interpretively [from the myths and knowledge of the client] and their ability to "make the most of it" (2012, 190).

Holbraad presents an example used by a diviner to illustrate the interpretive process. Several diviners were interpreting an initiatory consultation when one of them, famous for his skills, suddenly proclaimed to the neophyte (correctly) that his fridge was broken. He later explained this in terms of the oddu concerned, involving a story of using snow to prevent fish rotting. Nothing in the myth itself, presumably, says anything about fridges, but the myth provides obvious material for intuitive association based on the use of snow to preserve food. This serves also to inspire the verdict that the fridge is broken, in conjunction with the neophyte being in the negative condition of osobbo - as Holbraad points out, it is not only the myth itself that forms the basis for interpretation, but any other information at hand. Whilst the myth identified by the procedure does constrain interpretation by offering a limited pool of polyvalent images, the diviner is then free to associate these intuitively until he arrives at interpretations which meaningfully connect the myth to the client's situation. This is notably similar to Audrey Joseph's (1980) description of self-diagnosis using the Yijing. Unlike six lines prediction's elaboration on the Yijing to produce a reductive system, reliant on fixed correlates rather than the text itself, Joseph describes direct consultation of the text; arriving at a hexagram, one of the sixty-four signs indexing possible states of the cosmos, one's pool of images is constrained, but the terse, abstract nature of the text has similar polyvalent properties to Ifá's mythic imagery and allows similar intuitive associations to come to the fore and make the imagery relevant.

Ifá relies on an open-ended interpretive process. Nothing about the myths as sources for interpretation, or the interpretive process itself, preclude the ability of the diviner to draw any number of associations between the mythic symbolism and the client's situation; instead, they generate novel associations, the hallmark of generative interpretation. The Ifá myths are so polyvalent, held to describe past, present, and future (2012, 191), that they present a vast pool of potential meanings, giving scope for any number of verdicts. This does not mean that the verdicts themselves are necessarily polyvalent – as the examples discussed show, they can be highly specific. The difference

from reductive interpretation is that that specificity is derived from polyvalent procedural results. Thus generative interpretation in Ifá stands in direct contrast to that of the similarly complex, and similarly specific, method of six lines prediction. It also forms the basis for Holbraad's contention that truth in Ifá is 'motile' rather than representational, returned to in the final section.

Reductive Interpretation, with Six Lines Prediction as an Example

Six lines prediction, and arguably related Chinese mantic practices reliant on common correlative principles, such as *fengshui* geomancy (Feuchtwang 1974) and eight characters (*bazi*) horoscopy and purple star astrology (*ziwei doushu*) (Homola 2013), stand in marked contrast to generative forms of divination by minimising the possibility for intuitive associations. This section describes the correlative system on which six lines prediction is based, alongside the method of divination and interpretation to illustrate its reductive character.

Six lines prediction is based on the classical Chinese divination text the *Yijing (I Ching* or *Book of Changes)*. This is itself the canonised version of a text known as the *Zhouyi (Zhou Changes,* after the Zhou dynasty), ⁶ comprised of the sixty-four six-line hexagrams (*gua*) alongside terse, obscure descriptions. During the Han dynasty, many centuries after the composition of the original text, it was combined with a number of commentaries providing interpretations of its imagery and integrating the hexagrams into a coherent cosmological and taxonomic framework. This consolidated existing correlative systems found in technical practices into an integrated understanding of the cosmos as based on the flow of *qi* as its basic energy-substance. This underpins six lines prediction, *fengshui*, Chinese medicine, various martial arts techniques, and so on. *Qi* is understood to flow through five phases (*wuxing*), metal, wood, water, fire, and earth, which interact according to fixed principles of production and conquest. This is understood in terms of *yin* and *yang* as yielding and active principles respectively, and in relation the sexagenary calendar, based on cycles of sixty days, months, and years, themselves understood in terms of the five phases of *qi*.

Six lines prediction does not refer to all systems of divination based on the Yijing, some of which, as mentioned above, rely on polyvalence and generative interpretation. The specific method discussed here, and the interpretation of its results, typically involve no mention of the textual content of the Yijing or associated historical narratives (though these are important for diviners and students outside the realm of consultation). Six lines prediction has experienced a surge of popular interest in China since the 1990s (part of a wider phenomenon of 'Yijing fever'; Redmond and Hon 2014), and this has spawned a range of popular manuals specifically focused on the 'six lines' method (e.g. Wang Bingzhong 2010) as well as contemporary interpretations of other methods, and the Yijing itself. Whilst such works represent contemporary syntheses of techniques, and are explicitly connected to aspects of contemporary life and modern scientific knowledge, they do not fundamentally differ in interpretive methods from earlier techniques. The account presented here is based on my work with a diviner, Master Tao, and his students and clients in Hangzhou (Matthews 2016; 2017b; n.d.). Contemporary six lines practitioners like him position themselves in a technical tradition going back to the work of Jing Fang, a 1st century BCE Han scholar who married the Yijing's trigrams to the cosmology of qi and five phases, creating the 'attached stem' (najia) system of divination. Master Tao was taught the method by a master in the early 1960s, and emphasised in particular the importance of Wang Weide's eighteenth century text Orthodox Divination (Bushi zhengzong), which presents many of the key correlative concepts employed in contemporary six lines prediction. Although today six lines prediction is frequently presented by practitioners as 'scientific' (kexuede; Matthews 2017a),

⁶ Yijing and Zhouyi are used more or less interchangeably in common parlance, but in the sinological literature Zhouyi typically refers to the original Zhou text of hexagrams and their descriptions, while Yijing refers to the version canonised in 136 B.C. which incorporates ten commentaries elaborating on the meaning of the hexagrams and their cosmological and epistemological basis.

the correlative systems with their fixed referents, whilst evolving since the time of Jing Fang, demonstrate historical continuity. As it is these correlates rather than ideas derived from comparison with science, which determine the reductive character of contemporary six lines interpretation, we can reasonably assume that earlier uses of such methods similarly involved reductive interpretation.⁷

The six lines method as practised today proceeds as follows, The client shakes three coins together, either in their hands or in a turtle shell; they are typically instructed to focus on their problem but not to say what it is until after the resulting hexagram has been carefully annotated with its correlates. The coins are shaken and thrown six times, the results each time forming each of the six lines of the hexagram. The fall of the coins is considered to be determined by the local *qi*-field (*qichang*); the resulting hexagram thus indexes the general state of the cosmos at that particular spatiotemporal point, from the perspective of the client.

The diviner, having noted each hexagram line, proceeds to annotate them with their cosmological correlates⁸ – all of which, crucially, are fixed rather than polyvalent. Each hexagram has a 'generation line' (shiyao) and a 'resonant line' (yingyao) which index the client and the object of enquiry or opposite party. The sixty-four hexagrams are divided into eight 'palaces' (qong) based on the eight trigrams, each palace being associated with a phase of qi. Meanwhile, each line in each trigram has a fixed correlate in the form of one of the twelve Earthly Branches (dizhi) of the sexagenary cycle. The Earthly Branches are themselves correlated with the five phases; the relationship between the phase of each line and the phase of the hexagram's palace determines the kind of relationship in the client's life that that line refers to. These correlates are known as yongshen, and group all relationships with people and things into the following categories derived from Confucian filial and gender norms: parents (corresponding broadly to protective authority), officials and ghosts (authority with capacity to harm), wives and wealth (assets), sons and grandsons (objects of protective authority), and brothers (people of equivalent status). Each line is then correlated with the date of prediction in the sexagenary cycle, which assigns correlates (the six beasts *liushou*) determining the character of these relationships. Once these annotations have been made, the diviner may also ask for the date and time of the client's birth (the eight characters of the year, month, date, and two-hour period), which are translated into the sexagenary cycle allowing an examination of how their phases, governing the client's overall fate, interact with those associated with the lines of the hexagram based on the relations of production and conquest.

Having fully annotated the hexagram, the diviner then remarks on salient aspects of the client's situation, beginning with the relationship between the generation and resonant lines, and often suggesting a diagnosis (this varies, depending on whether the client does say something about their situation first, whether they are a return client with an ongoing problem, and so on). What is key to the reductive mode of interpretation is that this diagnosis is highly constrained by the principles of correlative cosmology and fixed correlates of the hexagram – a destructive phase relationship between two lines necessarily indexes a destructive relationship in the client's life, within fixed parameters of type of relationship, other party, and consequence as indexed by each line's phase, yongshen, and beast. Other lines apart from the generation and resonant line provide further contextual information, which can be drawn upon also if the issue indexed by the generation and resonant line is not that with which the client is primarily concerned.

This is best illustrated with an example; rather than presenting one which yielded a straightforward answer, the following serves also to illustrate how even if the diviner's initial diagnosis based on identifying salient features of the hexagram is incorrect, he remains constrained by the correlates.

⁷ Notably, the question of reductive interpretation in arriving at verdicts is quite separate from that of how, outside divinatory consolation, the process is imagined to operate cosmologically, which is of course affected by comparisons with science.

⁸ A more detailed account of the technicalities of annotation, along with key processes of reasoning involved, is given in Matthews (n.d.).

That is, the mode of interpretation remains reductive. I consulted Master Tao wishing to know when I would recover from a mild illness. The resultant hexagram's generation line corresponded to 'wives and wealth', as did one of the adjacent lines, and Master Tao pronounced that the issue of concern must be financial. When I said this was not right, he suggested the problem was to do with 'emotions' (ganqing) or friendship, because the resonant line, and the other line adjacent to the generation line, correlated with 'brothers'. These possibilities derived directly from the correlates of the lines; when Master Tao focused on the wrong aspect, he then had to search the hexagram annotations systematically to find another focus. I said that I was enquiring about a health issue, and Master Tao used the correlates of the hexagram to (accurately) identify it, observing that the earthly branch of the generation line corresponded to the earth phase, which correlates with the digestive system. The resonant line's correlation with brothers can also refer to financial transaction, and another line's referent of 'sons and grandsons' can refer to medicine; Master Tao interpreted this as meaning that my purchasing medicine would be sufficient to resolve the problem.

This was a relatively simple diagnosis; in other cases, further correlates are taken into account if greater specificity is needed. For example, a client went to see Master Tao about an ongoing issue involving buying a new shop unit for her business (see Matthews n.d. for detailed analysis). The resonant line, corresponding to the object of her enquiry and the opposite party, correlated with the earth phase. The generation line, indexing herself, correlated with the water phase; in the five phase system, water 'conquers' earth, indicating a destructive relationship and thus potentially damaging relationship with the owners of the shop she was seeking to buy. However, the resonant line's six beasts correlate indicated 'false alarm' (xujing) and the generation line's was 'auspicious' (jixiang) with proper caution, according to Master Tao, the shop would be hers. These examples serve to illustrate how interpretation is tightly constrained by the correlates, which limit the potential for generating new meanings through spontaneous association. Indeed, the only allowance for overriding correlates that I know of is the possibility for the subject of enquiry to override the yongshen of the resonant line, otherwise being interpreted in accordance with the rest of that line's correlates (this was the case in the shop example). It is true that the yongshen correlates do each index a range of relationships. However, these are fixed based on the qualities outlined so interpretation remains highly constrained (they still have fixed referents based on their relation with other correlates, meaning there is a strictly defined 'correct' reading, rather than true polyvalence). As additional correlates are taken into account, interpretation is increasingly constrained (Matthews n.d.), the entire process militating against the generation of novel meanings and compelling a highly specific diagnosis.

Like Ifá, six lines prediction involves interpretation of an index, in this case of wider cosmic conditions rather than divine intelligence. However, the above account should serve to show how the interpretive process differs significantly from that described by Holbraad. The polyvalence that characterises the Ifá myths and which promotes intuitive association as the means of arriving at specific verdicts is absent here. Instead, the correlative system dictates the scope of possibilities at every stage, each further correlate taken into account eliminating possibilities. In this sense the logic resembles that found in yes/no methods, discussed below. However, because what the procedure yields is not a direct answer to a question but an index of overall cosmic conditions, it offers a (fixed) pool of information. It is up to the diviner to identify salient patterns within that pool, and to make them relevant to the client, but doing so is a matter akin to calculation (and indeed, six lines and related practices are referred to as 'fate calculation' suanming) as each correlate has a fixed and narrow set of referents. This is influenced by the materials used; mechanical forms of divination introduce the problem of incorrect procedure, which promotes ratiocination (Zeitlyn 1990). By itself, this is not sufficient to promote reductive interpretation (consider the casting of nuts in Ifá). However, the effect is enhanced by the use of certain tools – in the case of relying on coins falling heads or tails, as in six lines, the range of possible results is mathematically constrained. This is also true of the possible correlates referred to in six lines interpretation, with their formalised fixed combinations,

relationships, and effects (so it is in fact, not just in theory, readily possible to calculate the probability of a specific result). At the same time, the verdict itself results entirely from interpretation according to this system – factors outside the derived hexagram and formalised, predetermined correlative system are not permitted to interfere with producing the verdict (even if they might influence which correlates of the hexagram are analysed, or the practical advice the diviner offers after the verdict has been reached). This is clearly very different from a generative system like Ifá, which relies on the intuitive associations the myths provoke with phenomena beyond their own content. The reflective process involved in interpretation is thus not one of elaborating on intuitive associations, but of following the predetermined logic of the correlative system to relevant but highly constrained conclusions. Meanwhile, in contrast to a yes/no procedure like Mambila spider divination, discussed below, the fact that six lines produces an index which must be interpreted rather than a direct response means that despite its reductive logic, enough information is yielded to counter the possibility of contradiction and consequently eliminate the need to employ associations beyond the constraints of the procedure.

Interpretation and the Need for Alternatives to Yes/No Answers

The methods so far considered – Ifá, six lines prediction, and the 'Arab' diviner – all have in common that the results that they yield require interpretation by the diviner. However, this is not true of all divination systems, some of which produce simple yes/no answers without any interpretation required so long as one knows which result indicates which answer. Yes/no methods might be described as 'maximally reductive' as almost no further input is required to proceed from result to verdict. Ethnographic reports suggest, though, that an interesting feature of these systems is that they appear to be relatively less adequate than interpretive systems for resolving problems. Where reductive interpretation nonetheless yields a pool of information which produces nuanced verdicts, potentially on a range of aspects of a client's life, yes/no divination leaves no such room for manoeuvre if it produces an ostensibly 'inaccurate' result. In such circumstances, as the following cases demonstrate, some form of generative interpretation must be introduced.

Swancutt (2006) describes how Mongolian divination can yield results which appear self-evidently impossible, such as indicating that 'everything is fine' when the client has a crisis (2006, 331); these require innovations to get around. Some of the techniques Swancutt describe involve presenting the oracle with a series of true/false questions, which 'progressively...eliminate all but the most relevant information' (2006, 332); she refers to these as 'conjectural'. Swancutt compares divination to games, arguing that a key difference between the two is that in games, 'people have less control over random elements that may repeatedly block their strategies and suppress their opportunities to carry a plan of action further' (2006, 350). In her examples, divination in contrast presents opportunities for revised enquiry. Rosary bead divination, for example, is a mechanical method which can only answer questions in a yes/no format, imposing an 'eliminative logic' (2006, 346) which excludes certain causes of a problem. This has two effects. First, it massively reduces the number of possible questions that can be meaningfully put to the oracle (they must concern 'what', answered in terms of true/false or yes/no, and cannot answer questions of when, why, or how unless those are broken down into dichotomies; 2006, 345-46). Second, by virtue of its answers, such a divination system does not require interpretation in the same way that Ifá or six lines prediction do, as the very limited answer is evident in the result. As Swancutt shows, such limited results may well be of limited utility, and therefore combined with other divination methods including generative mechanical forms such as 'twenty card' and mirror divination, or emotive forms such as shamanic séances in which the spirit appears to provide readily-understandable answers without need for further interpretation.

This though is not the only solution to such limitations. Zeitlyn (1990, 660–64) describes how Mambila spider divination relies on posing a series of yes/no questions, either to one spider in succession or to

several simultaneously, the answers being determined by how the spider moves a set of leaves placed over its burrow. As in the Mongolian rosary bead example, answering several yes/no questions involves reductive interpretation, because each successive question can further exclude interpretive possibilities and, as such, the scope for intuitive association. However, a problem arises if the succession of questions yields contradictory answers. Zeitlyn presents a case concerning whether a child's illness had been caused by witchcraft and whether taking a certain oath would prevent further attack. Separate questions yielded contradictory responses to whether or not the oath should be taken, prompting the assumption that there was a problem of witchcraft. The next response identified the witch as female, the response understood as identical to an earlier diagnosis of "problems among the women in [the client's] house" (Zeitlyn 1990, 662), taken to identify the witch as one of those involved in that dispute. This resolved the contradiction by indicating that the oath would be appropriate, allowing resumption of the earlier line of questions. This suggests that whilst such interpretation tends towards a reductive logic, it nonetheless leaves room for the incorporation and subsequent ratiocination of results from other procedures to the exclusion of 'incorrect' results, something which would not be possible within the methods of six lines prediction (though appears to be in Ifá). Thus, the immediate response to the problem of contradiction in spider divination is to search for a way out external to the current procedure, in this case the earlier result regarding the dispute.

This problem for yes/no divination systems, when considered in comparison with a more elaborate reductive form like six lines, stems from the way in which the result is considered to answer the question. Six lines prediction avoids this by not providing a direct answer but instead yielding a large amount of information which is then subject to reductive interpretation. Generative interpretation, as in Ifá, presents an alternative solution to the problem. Whilst six lines produces a wealth of information in its results (the hexagram and its correlates) which must then be reductively sifted through according to fixed formal rules to provide a specific verdict, Ifá produces a particular myth as a result, but one which is polyvalent, generating a broad range of associations which can then be used to arrive at a specific verdict. In six lines, the 'work' of getting from result to verdict is done by the correlative system itself, whereas in Ifá, it is done by intuitive association. Yes/no systems, however, must either supplement their reductive methods with generative alternatives (as in the Mongolian example), or reject results based on outside factors (as in the Mambila case). Nonetheless, all these systems yield specific verdicts. In the final section, I explore this in relation to the generative/reductive distinction and debates concerning divinatory truth.

Intuition, Reflection, and Truth in Generative and Reductive Interpretation

Despite divination's cross-cultural recurrence as an intuitively authoritative source of knowledge about the world, anthropologists have often avoided treating it as such, instead preferring to focus on its social position or function (Abbink 1993; Boyer 2020). However, other anthropologists who have taken on the question of divination as a source of knowledge about the world have argued instead that it is concerned with *metis* ('cunning intelligence') rather than objective knowledge (Willis and Curry 2004), or that the notion of truth involved in divination is radically (or 'ontologically') different from that which 'we' might hold (Holbraad 2012). These positions stem from a mischaracterisation of the roles of intuition and reflection in divination and its relationship to generative and reductive interpretation. The theoretical claims made by Willis and Curry (regarding Western astrology, reductive) and Holbraad (regarding Ifá, generative) are examples of an analytical aestheticisation of divination which is at odds with its actual practice as attested by the ethnographic record. This stems from a desire to take divination 'seriously' (Holbraad 2012, 16), by which is meant not so much a desire to take the practice seriously as motivated by a desire to garner information about the world, but to universally take its verdicts seriously as 'truth' claims. This presents a problem, in that taking every specific divinatory truth claim 'seriously' – that is, taking the verdict as true as first principle and then

generating an analytical construct of a world in which that would be the case - inevitably results in failure to take seriously the epistemological claim that divination indexes real-world conditions and, typically, justifies this based on universalising principles (meaning that it is inevitably speaking to the same basic epistemological concern as, for example, scientific investigation). For Willis and Curry, this problem arises because they overly focus on intuition at the expense of reflection, leading them to reject reductive interpretation in astrology; for Holbraad, it is because he extrapolates the generative interpretation of Ifá to the verdicts themselves, assuming that the verdicts as arrived at by the diviner are themselves generative, failing to pay due attention to the implications of their specificity.

Willis and Curry' arguments focus on Western astrology, but they extrapolate from these to make claims regarding divination as a whole. Astrology is an example of a reductive form of divination which, like six lines prediction, relies on a correlative system in which a wide range of fixed associations are taken into account to describe the personal tendencies and more or less auspicious actions of individuals. Also like six lines prediction, in the modern era astrology has been increasingly described as 'scientific' by its practitioners, including attempts to rigorously demonstrate some of its key principles (see especially Curry 2004e, 71–72). This approach is anathema to Willis and Curry, who contrast 'scientific' astrology with what they see as its true 'divinatory' character. This is significant, because as the example of six lines prediction above shows, the reductive mode of divination exhibits an unavoidably calculatory quality based on the specific application of universal constant principles; this, combined with the origin story of the hexagrams as derived from natural observation (another similarity to astrology), facilitates the ready creation of close parallels between it and physics (Matthews 2017b; 2017a, 183–87). It is unrealistic to contend, as Willis and Curry argue is the case for 'true' divination (e.g. Curry 2004c), that six lines prediction is not considered by practitioners to produce propositional knowledge based on universal principles.

Willis and Curry nonetheless contend that *metis*, a form of active, particularistic knowledge distinct from universal, propositional knowledge (identified with *episteme*), is 'the "natural" mode of divination, and therefore an appropriate way to approach its understanding' (Curry 2004c, 106). Divination, in this view, concerns not 'what will happen', but rather 'what should be done' (Curry 2004b, 57). This distinction is misleading; divination is clearly concerned with both, precisely because it is about applying propositional knowledge based on an epistemological method understood as valid to the situation of an individual client, who can then answer the ethically-imbued question of what she should do based on that propositional knowledge (even if those principles are as pared back as 'this method yields reliable knowledge about the state of the world', or if the 'truth' involved is divine truth, as in their examples – it is still a propositional claim about the state of the world). This holds for any form of divination. The paradigmatic case of Zande divination (Evans-Pritchard 1976), for example, relies on the propositional claim that the poison oracle produces knowledge which enables correct diagnosis of witchcraft.

Ultimately, Willis and Curry's argument comes down to a moral-aesthetic opposition to what they see as 'disenchantment', associated with Christianity and to a greater extent science as the ultimate form of (reductive) universalisation and systematisation — accompanied by an implicit insistence on a fundamental contradiction between intuition and reflection. They adopt an essentially Romantic opposition to scientific modernity, and in so doing necessarily reinterpret divination to fit with this

⁹ Willis and Curry's book consists of separately-authored chapters which they ask to be cited individually, which I have done here, though these are presented as a joint overall argument.

¹⁰ Whilst this can also confer legitimacy in contexts in which 'science' is a venerated form of knowledge, the parallels drawn are only possible because of genuine structural similarities between these divination methods and scientific knowledge conceived as a product of observations of natural laws and associated classifications. It is difficult to imagine such analogies being drawn for forms of divination lacking these features without appeal to explanatory factors extrinsic to the divination system, such as the electromagnetic fields invoked by practitioners of block divination in a Chinese temple described by Adam Chau (2006, 98–108).

argument. For instance, Curry (2004a, 87) quotes J.R.R. Tolkien's distinction between 'enchantment' and 'magic', the former being marked by the creation of a 'secondary world' which is primarily artistic, an exercise in imagination and wonder. The latter, meanwhile, refers to a technique which produces effects in the primary world. To be enchanted has no use, in this view, but does have value (ibid.). The problem is that divination is very much about the primary world, and is absolutely considered useful by its practitioners! Willis and Curry's objection to 'scientific' astrology is rooted in the claim that if astrology is about propositional truth, then it cannot possibly compete with science. In Curry's words, astrologers' claims that their craft is a 'religion/science/truth' 'simply concedes the grounds of the argument to their opponents' (2004d, 52). That is, their aim is to make astrology 'make sense' in such a way that its knowledge claims are insulated from competition, focusing on the specific claims themselves as the object of theoretical salvation rather than the express purpose of divination.

This means they must deny astrological interpretation's reductive character, such that the systematic correlative system and extensive data involved in consultation become solely a 'ritual' requirement (Curry 2004c, 100). But it is not that they simply recast astrology as generative, turning highly specific fixed indices into polyvalent ones - generative divination still yields concrete diagnoses about the world (consider the broken fridge example). Willis and Curry, having made the implicit concession that science is the only valid form of propositional knowledge, attempt to cast divination as an entirely intuitive process, in the sense that it is about spontaneous aesthetic judgments the rationalisation of which is to be resisted as a form of 'imperialism' (Curry 2004a, 90). In light of the ethnographic evidence this is clearly an inadequate characterisation of divination, an enterprise wholly geared towards solving mysteries by providing a means of reliable knowledge production. If divination owes its success to its being perceived as a reliable source of information (Boyer 2020), then presented with more reliable sources, it can either attempt to make itself more like these (perhaps partly explaining the continued success of reductive interpretation in six lines and cognate methods in China), or transform itself into an entirely different aesthetic enterprise whose claims to truth are limited to subjective self-knowledge (akin to Jung's (1989) arguments in his foreword to the *Yijing*).

Holbraad's argument that divinatory truth is 'motile' rather than 'representational' follows similar lines, and stems from a focus on the position given to intuitive association in generative interpretation, the polyvalence of which is taken to indicate a radically different conceptualisation of truth. However, his approach differs in that rather than attempting to extirpate systematic reflection from divination, he attempts to take divination seriously by presupposing a model of cognition in which all thought coherent and based on consciously-represented concepts. Holbraad starts from the implicit premise that apparently contradictory or false statements (such as that divinatory truths are indubitable) cannot, in fact, be contradictory, and that the anthropological task is thus to transform 'our' thinking until their real coherence becomes apparent. This is integral to his casting the supposed 'alterity' of divination in terms of 'apparently dogmatic stipulation' (2012, 71 emphasis removed), that the premise of divination is an analytic statement: divination is indubitably true by definition. As it is for Willis and Curry, to construe divinatory truth claims as 'representational' – that is, true or not by virtue of comparison with some other criterion – or simply as assertions (let alone metaphors) is to do 'violence' to the ethnography (Holbraad 2012, 158).

The idea of divinatory truth as 'motile' stems from Holbraad's understanding of Ifá interpretation in terms of paths of meaning, truth following interpretation and consisting in the linkage of a myth to a client's situation (2012, 194). Indeed, it is clear ethnographically that emphasis is placed on interpretation. Now, if all that divination consisted of was this interpretive process, then it would be correct to claim that Ifá is non-representational, in the sense that the myth itself does not purport to represent the situation of the client, and that it deals in a different kind of 'truth', one more akin to the sense of spiritual oneness found in Willis and Curry's *metis*. But this neglects the verdict. To return to Holbraad's example discussed above, the claim that the client's fridge is broken is representational through and through even if derived via 'motile' divinatory interpretation. A verdict about the world,

which has value only if it represents the world, is arrived at here by a generative process of interpretation relying on maximising opportunity for intuitive association.

The fundamental insight of dual process theory of relevance to anthropologists is that human cognition, operating on intuitive and reflective levels, is frequently inconsistent, and reflective thought often serves to rationalise intuitive judgements. Whilst Holbraad's analysis makes for insightful and entertaining 'anthropology as philosophy', it does not provide a convincing account of actual behaviour. The indubitability of divinatory truth is a reflective assertion based on the intuitive authority of divination as a source of knowledge; Holbraad's exegesis notwithstanding, this authority is not the product of sustained philosophical reflection. Rather, it provides the starting point. Many divination systems appear to require no further elaboration to remain convincing, and we should expect the reflective elaboration of those forms like Ifá, astrology, and six lines to primarily serve to justify how the intuitively compelling truth of divination can be arrived at. It is not realistic to imagine that such elaborations invariably cohere with how intuitively authoritative a verdict appears to be in practice, and it should be acknowledged that, as with any epistemological system, the starting point is an assumption which cannot be directly proven. In the case of divination, that assumption is that the procedure produces reliable information. An acknowledgement of the dual-process nature of cognition provides a way around anthropological conundrums of the 'twins are birds' order which remains true to the ethnography, avoids incredible assertions of cognitive difference, and avoids ascribing greater or lesser degrees of 'rationality' to different groups – by embracing the potential for contradiction between intuition and reflection. It thus allows for the possibility of intuitive association playing a crucial role in divinatory interpretation whilst also facilitating reflection which produces specific, propositional verdicts, and for the possibility of divination systems which emphasise reflection in reductive interpretation over intuition.

Ironically, whilst Holbraad insists on reconfiguring 'our' ontological assumptions by reformulating concepts until they make sense – that is, produce a philosophically coherent means of understanding - his own theoretical case rests not on a systematic conceptual foundation but on the assertion, not adequately supported by the ethnography, of radical alterity. Willis and Curry face the same problem, but more readily embrace being forced to make assertions, which fits more readily with their intuitive emphasis – 'astrology just is the experience of its truth – of it "working" – in practice' (Curry 2004c, 101 emphasis original). This aestheticisation of divination subordinates taking it seriously as a practice of knowledge production to preserving it as a possible alternate reality, like Tolkein's Middle Earth, which is mysterious or wondrous (cf. Scott 2013; 2014), its truth-claims insulated from the depredations of science at the cost of its intent and function. As Hans Steinmüller (2019) argues in relation to the 'ontological turn' in anthropological theory, such aestheticisation prevents the generation of anthropological theory which accepts and adapts to the constraints of reality ('serious play' in his words), forcing either a constant retreat into 'movement to the meta', such as insisting on motile truth which cannot be pinned down, or conversely a substantialisation of this as an ontology in its own right which concedes that such truth is indeed representational of at least one (if not the only) reality. The former relies more and more on the assumption of coherence I have described, and the latter is the inevitable product of this if, as Steinmüller points out, the anthropologist wishes to avoid 'conceptual colonialism'.

Conclusions

Divination fundamentally concerns gaining knowledge about the world, and as such has long raised questions concerning why it is considered authoritative. This is particularly so given the ethnographically salient role played by intuition, and the relative value placed upon it in many divination systems alongside its interplay with reflection. It is a mistake to view this as evidence of an unusual mode of cognition specific to divination. Intuition and reflection are universal components of

human thinking, and rather what often stands out in divination is the value reflectively accorded to intuitive association, which produces the two distinct forms of generative and reductive interpretation.

Generative interpretation maximises the role reflectively accorded to intuitive associations whilst reductive interpretation suppresses it, but both methods are used to the same ends of making propositional (or representational) truth claims. Attempts to reconceptualise truth in divination as metic or motile, whilst aiming to take seriously the truth claims of divinatory verdicts, do so by failing to take full account of the precise character of generative and reductive interpretation — either by denying the divinatory character of reductive interpretation or by extrapolating generative interpretation to verdicts themselves. Such attempts should be considered in terms of a modern context in which scientific knowledge is ubiquitous and trusted; Willis and Curry and Holbraad attempt to recast divination this way precisely because if taken as representational, they take its verdicts to be false and unable to compete with science. The ethnographic and historical records from other contexts, in which scientific approaches to knowledge are not ubiquitous, does not indicate that divination is primarily treated as a moral-aesthetic exercise in subjective self-knowledge. Indeed, it is likewise not treated as such in contexts such as contemporary China in which the politicised valorisation of scientific knowledge is taken to an extreme.

Both the comparative framework of generative and reductive interpretation itself, and what it helps to illuminate about anthropological debates concerning the character of divination, suggest further topics of research concerning how these modes interact with other features of divination (and, by extension, wider aspects of society). I outline a few of these here.

- 1) Given that divination is intuitively compelling in the absence of competing sources of information (Boyer 2020), we should expect it to change if more authoritative sources of knowledge about the matters attended to by divination become widespread. Perhaps with the spread of science, divination must be either recast as an exercise in self-knowledge more akin to art, or, as indicated by the continued survival and even flourishing of 'scientific' astrology and Chinese correlative techniques, can maintain its original purpose only if it maximises those features (such as reductive interpretation) that resemble science (Matthews n.d.).
- 2) As contradictory or incorrect verdicts appear to be more of a problem for yes/no methods, as part of the same process described in the above point we might expect interpretative methods to develop if their authority is increasingly challenged. In the absence of an existing basis for a complex reductive interpretation system, the incorporation of generative modes may be more likely.
- 3) The constraints imposed by mechanical procedures suggest that they are more likely than emotive methods to rely on reductive interpretation. By imposing limits on divinatory results, they also offer greater intrinsic potential for formalisation, which appears to be a key feature of reductive interpretation. In contrast, we should expect emotive forms such as spirit possession to be generative, unless such possession produces simple yes/no answers.
- 4) The above point does not mean that we should necessarily expect mechanical methods to be reductive indeed, all the examples discussed in this article have been mechanical. But we might predict that increasing formalisation will make reductive interpretation more likely. This hypothesis is partly based on the evolution of six lines prediction, which developed in the context of the formalisation of correlative cosmology as the basis for the legitimating ideology of the first Chinese empires, alongside the standardisation of writing and measures, following a long-term process of the decline of divine kingship. Earlier forms of *Yijing* divination, despite relying on the mechanical method of yarrow stalk-manipulation, appear to have relied on generative interpretation of the terse, abstract content of the *Yijing* itself rather than formalised correlative cosmology. Such formalisation may be more likely to develop in the presence of writing. We might likewise expect generative forms of divination to be more

prevalent in contexts where mythic traditions, or other systems relying on polyvalent imagery, are dominant.

These remain comparative hypotheses, but the distinction between generative and reductive interpretation offers a productive starting point from which they might be explored. It also provides a basis for comparison which is rooted in the crucial interplay of intuitive and reflective cognition, with implications beyond the anthropology of divination for wider questions concerning belief, reasoning and judgement, and cultural transmission.

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