Ancient Greek Divination: Cross-cultural Cognitive Proclivities, Cultural Patterns of Practice and Social Interactions[1]

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Introduction

The term 'divination' defines a conceptual category which contains multiple means and techniques used by people throughout history in order to gain access to the unknown, whether this has to do with the meaning of present unconceivable experiences or with the unpredictable future. This supposed knowledge is sought either through direct communication with superhuman agents or by detecting divine signs scattered in physical and cultural surroundings. In Greek antiquity divination was part of people's everyday management of their lives, intentions, goals and enterprises. Both individuals and official states were used to appeal to divination in order to explicate the meaning of a current event or experience, to predict the outcome or consequences of a certain choice or decision or before they procced to a certain action. Different divinatory practices developed which either presupposed the visit to a special center of divination (e.g. Oracles) or the consultation of local or itinerary professionalists (e.g. seers, prophets, priests and priestesses) who were available in the cities and offered their services for a fee. Other techniques gave the possibility to ordinary individuals or amateurs to take answers to dilemmas and questions about their possible decisions and actions.

Some modern historians (e.g. Johnston 2008, 4; Nissinen 2010; Ustinova 2013; Eidinow 2007) have attributed the universality of divinatory practices to the cross-cultural human uncertainty about the future and to their need to know the meaning of what it seems inconceivable and potentially threatening. Although such approaches trace the common origins of the culturally varied divinatory practices in the human mind, they remain commonsensical and do not proceed further to explore the cognitive mechanisms and processes that generate the sense of uncertainty and the need for overcoming it. Further since antiquity there is a discussion about the different types of divination with the most famous classification, which largely tend to dominate modern views, to be the distinction suggested by Cicero in his *De Divinatione* (II, 48–49) between natural (*naturale*) and artefical (*artificiousum*) divination.

This paper intends to provide some insights into those cognitive processes that generate to humans a sense of uncertainty both about the present and the future, considering divination an effective means for resolving the entailed uncomfortability. It further explores the cognitive mechanisms that underlie the different modes of divination, based on Cicero's distinction and taking into account modern classifications. Main goal is to show how universal

cognitive proclivities interact with varied cultural contexts generating seemingly different practices which however follow highly predictable patterns. In this light, ancient Greek divination is approached as a pattern of practices that developed through interaction between the people of the ancient Greek world and their specific social and cultural surroundings.

Common origins in mind: Fear of the Unknown, Intolerance of Uncertainty and the Heuristic of Divination

Humans we need to know. We need to know not only the past and the present, but also the future, and everything that is kept hidden from our perception and conception of our world makes us feel uncomfortable.

Our bodies situate us in the world and our brains constantly receive sensory inputs from our surroundings through our bodies. Recurrent inputs form elementary image-schemas of our percepts which are encoded and stored in memory and may be further transformed into explicit concepts (see Turner 1987; Johnson 1987; 2007; Lakoff 1990; Cervel 2003). Our image-schemas and concepts comprise a mental inventory that enables us to recognize and categorize future perceptions (Burgess 2006, 557; Evans 2010, 39–40).

In parallel with real-time perception, our brain operates like 'a sophisticated hypothesis-testing mechanism' that constantly strives to fill in the gaps in our current percepts, to make predictions about what it may come next, and to minimize the errors of these predictions (see Hohwy 2013). Our proprioceptive system enables us to be aware of our bodies and bodily parts, to situate and navigate ourselves in space and to interact with external objects. We continually receive information from both our bodies and our surroundings, and we use our intuitive understanding of the physical world in order to predict the movements of the perceived objects and the destinations of these movements (Goswami 2008). Even our own most trivial decisions, choices and motions are moved by specific goals and are governed by our abilities to predict the outcomes of our actions and interactions with the extrinsic world (Iriki 2014, 439). In addition to our intuitive expectations about perceptible reality that includes both ourselves and the other, we continually update our stored inventory of percepts, image-schemas and concepts during cultural learning and social interaction in order to make sense of our current experiences and to estimate their potential meanings and outcomes.

Thus, our embodied perceptual abilities, intuitive expectations and learning mechanisms generate mental representations that attribute shape to the phenomenal world and put natural surroundings, cultural settings and social contexts into order. But when sensory inputs and information received from our surroundings are not certain and sufficient enough to give us a complete image of the present conditions and their future outcomes, the entailed realization of the unknown may disturb this order and may sink us into chaos.

Cognitive scientists define the feeling experienced by humans in the absence of enough 'perceived information at any level of consciousness or [cognitive] processing' as 'fear of the unknown' (Carleton 2016). And the experience of the unknown entails the perception of uncertainty that we can hardly endure. Recent research in cognitive neurosciences has shown that humans manifest varied degrees of intolerance of uncertainty that may be accompanied by different degrees of emotional (e.g., anxiety, fear), cognitive (e.g., worry, disorganization) and behavioral reactions (e.g., inaction), and may reach pathological

disorders (see Carleton 2016). In any case, it seems that we are all predisposed to seek information, to fear what we do not know, and to hardly tolerate conditions of uncertainty.

We perceive uncertainty and experience fear of the unknown, when we do not have enough information to predict and control the potential outcomes and consequences of various situations that involve natural phenomena, social conditions and individual behaviors (Huettel, Song and McCarthy 2005; Yoshida and Ishii 2006, Mushtaq, Bland and Schaefer 2011). In short, uncertainty harms our inherent desire for predictability and controllability of the experienced situations, and our ability to make decisions that can lead to desired or expected outcomes (Carleton 2016). In order to cope with these difficulties and to minimize the aversive emotions that uncertainty entails, we have developed various heuristics that facilitate decision making under uncertainty (Volz and Gigerenzer 2012). Experimental data throw light in such heuristics that depend on our learning and reasoning capacities and include recognition-based heuristics, equality-based heuristics (weight reasons equally), one-good-reason heuristics (take-the-best; fast-and-frugal trees),social heuristics (imitate-the-majority) (cited by Volz and Gigerenzer 2012; for more details, see Gigerenzer and Gaissmaier, 2011). Although such simple heuristics may be effective strategies in every day decision making under uncertainty are not always sufficient to drive our choices, decisions and actions, especially when important matters are at stake.

Our world is more complex that we can handle with our cognitive capacities alone. Especially our social world is full of situations, in which we are called to make decisions without being certain about their outcomes. Even in cases in which potential outcomes and probabilities are quiet clear, e.g. when we confront dilemmas and we need to choose between two options, we want to control and predict the final results. Thus, in cases in which uncertainty transcends the powers of our minds, we create cultural heuristics that help us cope with this uncertainty. We can see divination as such a cultural heuristic that covers our need for information, controllability and predictability.

When natural phenomena occur that our intuitive physics and cultural knowledge cannot explain and predict their consequences, the thought that a supernatural agent controls them and can affect them may moderate our fear of the unknown and provide a recipient for our requests for protection and salvation from the aversive outcomes. When we confront social situations in which we are called to make decisions that involve other human agents whose thoughts, decisions and actions we cannot know with certainty and control, the idea that a superhuman agent can have access to these hidden from us information give us an opportunity to unravel the unknown. In other words, in a world of uncertainty it is a relief to know that someone has access to the unknown that can reveal to us and help us to predict and control its probabilistic outcomes.

In this light, the multiple divinatory practices flourished in Greek antiquity can be seen as a particular cultural set of patterns of practice that developed through the interplay between the universal fear of the unknown and intolerance to uncertainty and the specific cultural contexts of the ancient Greek world. The Olympian gods as well as other local deities were considered to be the superhuman agents that controlled the human world in the present, could affect and predict the future, had access to hidden information and could reveal the unknown to their supplicants.

Modes of Divination: Natural and Artificial Divination

Already from antiquity there was a discussion among the intellectuals regarding divination: its origins and effectiveness, its different modes and methods, its multiple practices and means that were employed to interpret current experiences and their meanings, and to predict future events and their outcomes and consequences (e.g., Hdt 8.77; Pl. *Tim*. 71e-72b; Plut., *Or.* 404e–f; Luc. 5.88–99; Ap. Rhod.   ap. scholiast on Hes. *Op.* 828 [p. 259.3–5 Pertusi = Hes. testimonium 80]; Artem. *Oneirocritica*).

The most popular classification of the ancient divinatory practices was suggested by Cicero (*Div.* 1.2.115) who made a distinction between natural (*naturale*) and artificial divination (*artificiousum*). According to Cicero's schema, natural divination, on the one hand, was achieved through divine inspiration that was experienced by individuals as an 'exaltation of the spirit (concitatione mentis)' (cited by Ustinova 2013,) induced either in wakefulness or in sleep. This mode of divination included enthusiastic prophecies directly given by the gods in the oracular sanctuaries and oneiromancy. Artificial divination, on the other hand, was mainly based on the observation of the signs that the gods scattered in the perceptible word, manifesting their will and the future, and on the interpretation of the meanings of these signs by humans. In this mode, the various divinatory practices employed by professional seers or individual amateurs were classified, like extispicy, cleromancy, hydromancy, pyromancy, ornithomancy and the interpretation of almost every object, action or condition that could be perceived as carrying a divine sign (see, e.g., Aesch. *PV* 484–499).

Many modern scholars adopted Cicero's classification of the multiple divinatory practices of Greco-Roman antiquity and explored their common features and operation (e.g. Bouché-Leclercq1879-1882, vol. 1, 107-110; Flacelière 1972; Dodds 1973, 70; Manetti 1990, 19; Karp 1998, 13; Dietrich 1990; Rosenberger 2001; Burkert 2005a; 2005b; Belayche and Rüpke 2005, 80; Johnston 2008, 8-9). Cicero's distinction provided also the ground for further classifications suggested by other historians. Among these we can briefly mention the proposed distinctions between ecstatic or intuitional and technical or scientific divination (Magnus 1975, 225–243), between evoked and unprovoked divination (Beerden 2013), between oblative and impetrative divination (Lisdorf 2007; used also by Larson 2016) or the threefold distinction between possession divination, technical divination, and intuitive divination (Flower 2008, 84-91).

Despite the different terminology and the criteria of classification of the various divinatory practices – constructs that are useful indeed –, all the classifications of Greek divination suggested both by ancient intellectuals and modern scholars seem to reflect common cognitive processes that underlie human thought, reasoning and dealing with uncertainty and the fear of the unknown. Using conventionally Cicero's distinction, we can take some glimpses on the cognitive processes that would have mediated the development and flourish of natural and artificial divinatory practices in Greek antiquity.

As most scholars have pointed out, natural divination (or whatever they choose to call the relevant category) presupposes a direct communication with a deity who would reveal information hidden from mortals. Such direct communication could be achieved either through a medium, that is an individual who becomes the god's mouth on behalf of a petitioner, or during dreaming. In both cases, the divine revelation occurs when the person – the medium or the dreamer – are in an altered state of consciousness, that it could be mania, ecstasy, possession or sleeping. Cicero underlined that 'natural divination comes from the spirit seizing and obtaining information from an external source, from the god...' and 'is incited

or induced by the exaltation of the spirit (concitatione mentis), or produced in sleep by the soul liberated from sensations and troubles (*Div.* II, 11, cf. I, 6; I, 18).

Whatever was that altered state of consciousness (e.g., spontaneous, physical and physiological, psychological, pathological or pharmacological) and whatever were the means that induced it (e.g., day dreaming, sleeping, fasting, mediation, hypnosis, epilepsy, psychoactive substances) (see Vaitl 2012, 14), its major characteristic was that it differed from a normal waking state of the mind. That means that an individual who experienced an altered state of consciousness (e.g., a dreamer) or who observed another person to be in such a state (e.g., a supplicant of an oracular sanctuary) came in front of a deviation from the normal bodily experiences (e.g., embodied situatedness in the world) and cognitive processes (e.g., thinking, reasoning) that operate 'during alert waking consciousness' (see Ludwig 1966). People who experienced or confronted such a deviation would have attempted to make sense of it in wakefulness employing the common cognitive processes shared by humans and taking into account the available cultural beliefs and patterns of practices. Therefore, people of Greek antiquity would have been surprised by all those elements that contravened their intuitive understanding of the world and would have attributed the origins of those counter-intuitive elements to superhuman agents that were the gods, who transcended the human abilities and limits, and had access to hidden information and knowledge about both the present and the future. In this light, we can surmise that the attribution of prophetic powers to the gods and the beliefs that the gods could reveal themselves and directly communicate their knowledge to humans in an altered state of consciousness provided both a cognitive and cultural heuristic that justified abnormal states of the mind, relieved the potential accompanied anxiety and further attributed special meaning and significance to such experiences to which predictive qualities were attributed relieving human fear of the unknown and intolerance of uncertainty.

Technical divination, on the other hand, seemed to be based on the human tendency to seek causal relationships and to attribute meaning and significance to everything around them, even to seemingly random events and occurrences (i.e., attribution theory). In Greek world this tendency found a perfect expression in the idea that the gods scattered signs in the physical world, trying to communicate with humans. In this light, nothing was random and meaningless. All objects, entities, beings and events could be bearers of divine messages. Humans on their behalf should find ways to trace, observe and interpret these signs, if they wanted to decode the gods' messages, to know the divine will and to access the supreme knowledge about their present experiences and future events. The ability for observation and interpretation of the divine signs developed into specific crafts which included, for instance, extispicy, pyromancy, ornithomancy, cleromancy, hydromancy, libanomancy, reading textual signs and every kind of substances, appearances, movements and entities. Someone could study and learn these crafts or could consult a professional expert in each type of divination in order to be able to find the meaning of these signs scattered in the surroundings.

Therefore, although natural divination evoked a direct communication with the deities that considered to be achieved in an altered-state of consciousness, artificial divination presupposed that the gods attempted to communicate with humans all the time diffusing signs in the world that were at the humans' disposal for interpretation. In this light, artificial divinatory practices provided to people of Greek antiquity an inventory of accumulated cultural knowledge which covered their cognitive tendency to trace meanings in everything

happened to them. Especially, when they confronted dilemmas and should make decisions under uncertainty, reading the divine signs could relieve them from the burden of responsibility for their decisions, and motivate them to take action and proceed.

Conclusion

In this paper, I provided some insights into the cognitive processes that could have underlined the need for divination as well as the different divinatory modes that developed and flourished in Greek antiquity. Most of the ideas presented in this paper need further exploration that exceeds the limits of this presentation and are part of my postdoctoral research supported by IKY. However, my major suggestion is that taking into account cognitive theories may enrich historical knowledge and deepen our understanding of past practices and human agents. In particular, ancient Greek divination may be better understood if we trace the interplay between universal human proclivities and specific cultural contexts and practices.

Although my presentation was not about social network theories, I would be interested to know how I could use such theories in my study of divination. To this end, instead of a conclusion I would like to pose some questions:
→ Could social network theories help us trace the distribution of beliefs in the gods' prophetic powers and of the knowledge about the various divinatory practices?
→ Could they provide us an idea of how the great Oracular sanctuaries (e.g., Delphi, Dodona) become attractors of many supplicants?
→ Could they trace the network of itinerary seers and experts and their clients?
→ What other possibilities can they provide?

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