# Introduction

As a way to question and derail Western philosophies tradition of materialist explanation of the consciousness/mind, Edward A. Shanken's notion of a para-rational model describes complementary modes of inquiry, of both the rational and the irrational in forming a cohesive application to alternative ways of knowing (Shanken, 2010). The divination paradigm is one such example that actively and equally involves both reason and intuition to deal with uncertainty and unforeseen future events. These practices have been employed since our ancestors as a means of spiritual, temporal guidance and knowledge making and with these beliefs, the universe was codified with meaning and knowledge that informed subjectivity and objectivity. The weather as the ultimate spirit of uncertainty is perhaps the first earthly manifestation of irrationality and consequently the fundamental force to be reckoned with. (archetypal symbol of chaos) Needless to say the weather has played a pivotal role in shaping human history, entire kingdoms and battles have either collapsed or prospered depending on the basis of accurate weather prediction. Divination's basis uses *irrational* means to get hold of something irrational, while basis of modern science using *rational* means to get a hold of something irrational. In its acceptance of paradoxes, irrationality in the divination paradigm is used as a tool and practically accounted for, far from lingering on the stigmatised fringes of rational logic in the hegemonic Western model.

The esoteric terminology of specific techniques, for example, scrying, geomancy, aeromancy, horary and genethliacal astrology are however, deemed in the our modern era as 'superstitious', a term that came to mean 'misplaced assumptions about causality stemming from a faulty understanding of nature' since the late 18th century when rationalism was the governing hegemony. Epistemological undertakings of 'acceptable' knowledge and how its value is constructed is underpinned by social and economic endeavours lead by political agenda. In *Reform of Time. Magic and Modernity,* Maureen Perkins, draws examples from 19th century Britain and shows that what counted as 'knowledge', the value of information, was dictated by doctrines of progress; a project that had implications in the development of modern consumerism. Against this backdrop of growing industrialism ever since, a steady shift towards favouring rationalism over other forms of inquiry have dominated scientific discourse. Bygone practices nonetheless have been superseded by statistical calculations, something that modern forecasting technologies and algorithms rest on. Today the divination spirit of the past can still be witnessed in the likes of mainstream political and economic forecasting, science fiction, and weather forecasts issued by government meteorologist. This reflects how the tradition has not so much as survived, a term that suggests persistence of old forms, but rather continued, a term which suggests new meanings and boundaries. As a continuation of older forms, techno-scientific predictive practices such as weather forecasting have abandoned intuitive forms of inquiry to superstition and history, relying only on the systematic deployment of rational and quantifiable methods. The idea of irrationality arose out of what laid outside the socially acceptable.

Synchronicity as the meaningful chance gatherings of events as complementary to the mentally graspable notion of linearity in causal thinking can thus be thought of as *thinking in fields.* In a similar encompassing para-rational approach, synchronistic thinking as C.G. Jung describes it, "is the acausal complement to causality, a system of explanation equal to casuality but differing from it in its understanding of space and time as elastic with regard to the psyche." (Shanken, 2010). As such, divination's synchronistic time conflicted with rationalism's linear time, making it more difficult predict in a linear way. Prediction, once the preserve of magic and prophecy, however has perhaps even more importance to modern secular society. Centralising the linearity of time was also vital for the advance of progress in the rising of a planning culture, as a kind of social time management. According to Max Weber, accurate calculations as a strategy of *social action* is the foundational principle of development inherent in the process of 'civilisation'. What this implies is that forecasting as a consequence can be mobilised to *cause* action in the present. If we consider forecasting through a sociological view on the scientific discourse as producing its 'facts', then one can say that through the projection our desires, we prepare the environment in which to facilitate it, allowing for our interpretations of the future to become possible. Katherine Hayles

also maintains that, "visions of the future, especially in technologically advanced eras, can dramatically affect present developments" (quoted in Hollinger). Perhaps due to computer 'precision', Perkin's argues that statistical calculations are a powerful measure of excluding alternative interpretations of the future. In a sense, this can be regarded as deterministic, insofar as it sets the limitation for other potentialities to form by defining what 'may' happen. The probability of social action in the now by manipulation of the future, or what futures studies call the "colonisation of the future" along with the restriction of alternative undesirable narratives, is exactly what makes modern prediction as both an phenomenon and a discourse so powerful.
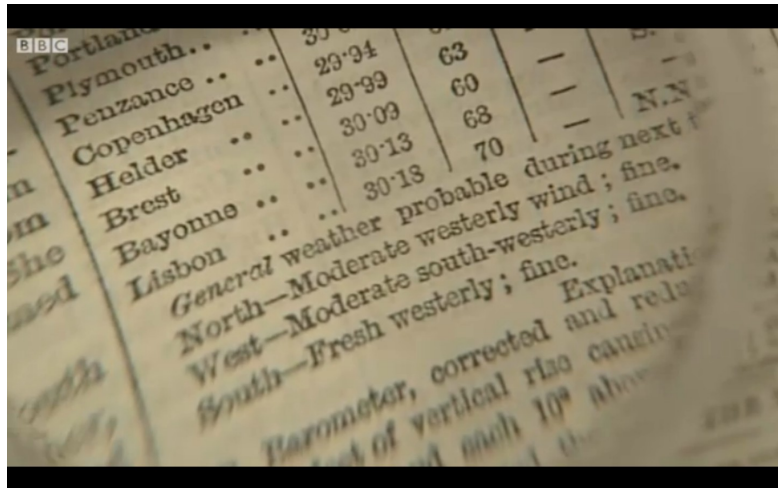
North—Moderate westerly wind ; fine.
West—Moderate south-westerly ; fine.
South—Fresh westerly ; fine.

In 1865, Robert Fitzroy, the first head of the new governmental department of meteorology in England committed suicide on the tragic account of depression caused by inaccurate weather predictions. Fitzroy, most notably recognised as the captain of Charles Darwin's voyage, also invented new barometers and introduced synoptic maps based on telegraphic collection of data from widespread areas which allowed him to pioneer the new science of meteorology and organise Britain's first official weather service. On 1st August 1861 the Times newspaper published Fitzroy's first ever weather 'forecast' and miraculously had a 100% success rate. This was to remain, however, a one-hit-wonder. Unfortunately the following predictions proved to be disastrously wrong and consequently suffered parliamentary criticism and journalistic scorn which would eventually end sadly. Perhaps Fitzroy's fatal mistake was to underestimate the extreme volatility of public judgement in as much as the weather. As a new science, departing from non-scientific methods of 'astro-meteorology', the meteorology department became highly sensitive to using terms such as 'prognosticate', 'prophecy', and even 'forecast' to avoid any associations with the more 'dubious' kinds of prediction made by astrologers that assessed lunar and planetary influences. Set against the backdrop of a time when acceptable knowledge was dictated by doctrines of progress that propagated scientific rationalism and applications of useful statistics, while prosecuting those 'pretending to tell Fortunes' under the 1824 Vagrancy Act, Fitzroy advanced to cross the dividing-line between superstition and rationality.

At first glance, this event underlines the pangs of societal intolerance of 'wrong' knowledge and suspicion of deviations from 'right' knowledge. However, at the heart of this story is one that re-tells a timeless tale of people grappling with the sublime uncertainty of the environment. In public parlance, uncertainty is a negative thing, implying a lack of rigour and predictability. In many fields of science today, particularly in meteorology, uncertainty is something that is to be contained so that it provides a measure of control over it. The weather, at foremost, is a primordial force that underpins the struggle to come to terms with the chaos of world manifested originally in its natural phenomena. Its infinitely unpredictable behaviour once embodied God. This mythical association reveals the attribution of weather to divine order because of the sheer lack of order or structured pattern, a phenomenon so incomprehensibly beyond human range and untouchable that it was appointed to the realm of the heavens. Our relationship with the omnipresence of weather is one that has moved from full of awe to an antagonistic dynamic, in spite of

that, it's one that's so deeply and unconsciously ingrained in our imagination, psyche, and body gradually stretching out into collective complex and abstract bodies of constructed systems. In simple terms, one can say that the ambition of Fitzroy is one of many attempts in history to make order from chaos by aspiring to rationalise a universe that is fundamentally unpredictable. Like many before and after him, the legacy of his desperate act reveals both fears of irrational thinking associated with superstition and frustrations with humanly limitations to deal with the inherently ungraspable. In trying to understand the underlying order of the weather in the early 1960's, the meteorologist Edward Lorenz came to identify chaotic events in the atmosphere arising as consequences of the attempts to computationally model systems mathematically. The chaos theory as it was to be called, focused on chaos concepts to refine matters of structure, prediction and control, and further theorised in other fields for example, sociology, economy and philosophy.

Like many things, the weather has also been harnessed for both hostile and utopian means throughout history and it undoubtably shapes us and despite contentious political debate, we also shape it. Lucian Boia highlights the historical relationships to climate as once being the arsenal of the forces of divine justice and how it became demoted, due to The Enlightenment, to 'natural phenomena' (Boia, 2005). The contradictory periods of 18th and 19th century saw on the one hand, strong sentiments towards the progress of science embodied by growing industrialism and on the other, the rejection of the rationalisation of nature evoked by the spiritual and emotional sensibilities of Romanticism. The sublime, the aesthetic mode explored by Romantic artists and scholars saw the forces of nature to represent fear, uncertainty and doubt, however in the 19th century this idea of the sublime threatening mankind detaches from nature to become culture. The beginnings of meteorology was a fundamentally scientific attempt to separate the natural from the realm of the supernatural, to bring it into the light of the observable and thus knowable. Prediction in this new scientific light is the attempt to eradicate irrationality and chance as a means to tame it.

Divination as one of the earliest practices dealing with uncertainty, explores the uncharted in order to seek answers to questions beyond the range of ordinary human understanding. These practices are as universal as the weather itself, playing a critical catalytic role for example in war and revolution in many parts of the classical and ancient world. It concurrently had an indispensable function in all parts of daily living, for example from political decision making, healing of illnesses, determining the times and modes of religious worship to making choices for personal inquiry. Divination's equal and unifying inclusivity of complementary modes of cognition, can be described as para-rational as it traverses through various facets of consciousness in it's far-reaching methods of inquiry. As a continuation, divination in its fluid paradigm and modern prediction belonging in its divisive paradigm, share the practice of meaning construction from a chaotic or random pattern. However varying mental processes such as *presentational* —primary process using intuitive techniques, and the *representational* —secondary process of thinking such as inductive techniques, and interpretative narrative techniques are used during a divination. The simultaneous recognition of these modes in the process of knowledge making have been exercised by diviners in their native language when elicited to form a theory of divination(Tedlock, 2001). Empirical evidence and rational induction is as significant in representational symbolism as the meaning grasped from emotion and intuition in presentational symbolism. During a divination, the diviners individual creativity constructs usable knowledge from oracular messages by self reflexively connecting these realms, inductive reality embodies the emotional experience allowing for interpretation and implementation. What we have is a continuum of rational and non-rational mental processes and behaviour, ultimately a larger scope of ways to arrive at forming knowledge.

Chapter 2: Separating modes of inquiry in the West, truth as a model.

To understand the changing perspective on external and internal modes of inquiry in the West, one must consider the history of the English word 'divination' of Latin origin *divinus* meaning divine, as an improvement on the original Greek word *mantic,* meaning madness, raving, insanity or inspiration. In contrast, *oionistic,* another Greek term referred to the inductive art of the uninspired and sane who inquire purely from human reasoning. Plato concludes that "both in name and in fact, madness is nobler than sanity [for] the first proceeds from a god, the other from mere men" (Helmbold and Rabinowitz quoted in Tedlock, 2001). Later in the 19th century, at a time that was establishing authority on scientific rational knowledge, the perception towards reason and intuition becomes inverted. What was once seen as dull and an uninspired way of inducing a conclusion came to be understood as acceptable knowledge guided by reason, while intuitive forms became ungodly and heathenish.

In relation to conspiracy theories, Florian Cramer describes the invisible and hidden countercultural undercurrents which contradict official history as 'esoteric' in contrast to 'exoteric' as the visible and official acceptable knowledge. In much the same way that conspiracy theories can be perceived as an esoteric undercurrent having the potentiality of hacking our understanding of truth because they construct alternative realities and disrupt common sense truth, the divination paradigm too offers a space to contemplate upon causal factors that so do subscribe to a scientific paradigm. Similarly, statistical narratives which pervade scientific inquiry can be considered exoteric, in as much as an exclusive bias towards reason and rational logic. Thus underground esoteric narratives such as conspiracy theories or divination practices, "could in the very best cases, be practical and philosophical or epistemological critiques" (Cramer, 2006). However Cramer simultaneously warns of the dangers when it turns into official politics, for example, The Protocols of the Elders of Zion being disseminated by the Third Reich of Germany where such a fabrication fuelled by paranoia, grows into an overground belief system. Let's consider Cramer's definition of paranoia in this context as the only form of irrationality that is perfectly rational, if not overly rational. More specifically, its determination to rationalise every irrationality to such an extent that one's rationalisation becomes irrational again because it cannot fit it within a framework of logical methods, eventually becoming paranoid or literally speaking, beside one's mind. *Paradoxically, could this not be also said about the mainstream scientific paradigm?* This model of truth seeks to rationalise unexplainable phenomena insofar as it's observable and measurable, however ignores the irrational because it can not deal with it, for example anomalous phenomenons such as psi. The mechanism of probability in mathematics also reflects this inability to deal with the irrationality of single random events or individual qualities. The German mathematician, Hermann Weyl, once said "ignore the single integer" regarding precisely this unpredictable individual as an "aspect of something abysmal which we cannot grasp" (quoted in Von Franz, 1980). Scientists thus needs to project them by a specific procedure onto the background of the possible to cope with them, and the secret in probability is repetition; the more repeats, the more accurate the probability. They ignore the individual and simply deal with it as a class, a group. This powerful mathematical tool is thus, nonetheless a mental artefact. The concept of an average is an abstraction existing only our in minds as it doesn't actually exist, for the actual accumulation of people is a sum of unique cases. The International Encyclopaedia of the Social Sciences defines a 'structure' as a pattern, i.e. an observable uniformity, in terms of which action (or operations) takes place (levy quoted in smith, 1998). In the same manner as a mathematical tool is constructed to create and observe patterns, other abstract mental devices also necessarily need to separate out irrational factors to simplify and make conceptually manageable structures for the ease of practical implementation. Lucian Boias tries to emphasise that we are tempted to confuse 'existing reality' with the 'virtual reality' of (scientific) models, as they are "...simplified, coherent and synthetic versions of a certain dimension of reality or determined process. They are extremely useful as long as we remember that they are not the real thing: they are methodological fictions" (p.177).

Chapter 2: Blind spots of rationalism.

In general terms, one can say that there are always attempts in history to make order from chaos by aspiring to rationalise a universe that is fundamentally unpredictable. On a psychological level, it has been said that the human brain is hard-wired for pattern recognition, a reality producing engine with an internal built-in function to systematise the disorder of the outside world. This seemingly prosaic reason nonetheless, offers some insight to why prediction is so intrinsically embedded in the negotiations between subject and object. Pareidolia, a psychological phenomenon belonging to a larger family called Apophenia, is used to describe the fanciful perception or 'misperception' of a pattern or meaning in something that is actually arbitrary in patients of certain mental illnesses. It's responsible for experiences ranging from seeing bulls and virgins in the constellations of stars, the construction of conspiracy theories, to the vernacular and yet mythical constructions such as 'nephelococcygia', the practice of seeing shapes in clouds. It is not however just confined to such a group, it affects everyone; "a superstitious athlete sees a connection between victory and a pair of socks, a parent refuses to vaccinate her child because of a perceived causal connection between inoculation and disease, a scientist sees hypothesis-confirming results in random noise, and thousands of people believe the random 'shuffle' function on their music software is broken because they mistake spurious coincidence for meaningful connection". (Pizarro, 2011) Furthermore, this tendency is becoming more frequent as ever-increasing illegible algorithms pervade in the paranoid world of stock market predictions. In the recent 'Flash Crash' of 2010, enigmatic algorithms were discovered and plotted in the aftermath and christened with names such as 'The Knife', 'Cathedral' and 'Mountain Range', a familiar practice that has been with humans since astrological narratives were told. This case was tellingly nicknamed 'Crop circles in Cyberspace' the in the media. One can come to think of pareidolia or cognitive blind spots as an synonym of imagination, the act of imagining beyond what is objectively there, or as children say to 'make believe'. Perception is thus an active process filtered by a projection of the viewers intentions, desires and anxieties. More precisely, "seeing is constructed belief"(Marsching). It is exactly this unstable nature of perception that makes seeing the most suspect of the sensory apparatuses, and why we have culturally relegated the phrases like 'seeing things' or 'hearing things' as irrational. From a scientific view, this default pattern-making mechanisms is regarded as a defect, a betrayal by our own overexcited perception. While this view is relevant insofar to guard against blind faith and unquestionable dogma, it need not be considered inherently dangerous. It is this strong dichotomy between subjectivity and objectivity in Western epistemology that has created binary oppositions, rather than seeing them as having contextual relevance; what may be dangerous in this situation, may not be always dangerous. Additionally, this split has fostered a disregard of the study of what Pierre Bourdieu called the practical mastery or practical knowledge and precludes altogether the development of a theory of practice (Tedlock, 2001).

Where does the deep-rooted irrational fear of the irrational nature of paradox come from? As Douglas Hofstadter speaks in his book I am a Strange Loop, "Why does the thought of a self-referential system scare the pants off of highly educated and sensible people?" In the early 20th century many mathematicians and logicians, including David Hilbert and Bertrand Russell made big efforts to resolve the internal contradictions of the fundamentals of science by constructing a solid foundation based on few axioms. It was their conviction that this constituted the deepest bedrock of human thought thus the *Principia Mathematica* was created to barricade out paradoxes. What Gödel showed in his incomplete theorem was that the basic axioms on which mathematicians depended on contained an irrational factor which could not be eliminated. As such, what he unearthed was as aspect of something abysmal which could not be grasped, and realised that the foundations were in fact built on air. In its pursuit to attain absolute knowledge, the dream of the Enlightenment to prove all things mathematically and logically was to turn in on itself and eventually to be eaten up by its own reasoning. Similarly, Gödel, used numbers to reason about the nature of mathematics and revealed instead the limits and blind spots of formal systems. As if in an act of defiance, uncertainty, incompleteness and irrationality had seemed to pervade at the foundations of 'human thought'.

In a not too far parallel universe, these irrational numbers or natural integers (irrational elements), are what precisely makes it a good tool with which to grasp something irrational, and that is the basis of divination. (irrational in the sense that is can deal with contradiction and paradoxes, not seeing it as a problem) Divination's basis uses *irrational* means to get hold of something irrational, while basis of modern science using *rational* means to get a hold of something irrational. In its acceptance of paradoxes, irrationality in the divination paradigm is used as a tool and practically accounted for, far from lingering on the stigmatised fringes of rational logic in the hegemonic Western model.

*marie von franz theories about the number and non-number divination. --> can nicely lead to synchronicity

Chapter 3: Politics of Rationalism. Discourses shaping reality, mediating-experience and truth.

Foucault described discourse as production of knowledge in relation to power; that which constructs the topic. By defining and producing the objects of our knowledge, it also regulates its meaning and the consequent conduct of others. Just as it governs certain acceptable forms of truth, it also defines limitations and restricts the construction of knowledge itself —of how *reality* is perceived and produced. Discourse as the production of knowledge is also implicated by history; concepts of truth, representation and knowledge, are only meaningful within a specific historical context (Hall, 1997). (give some examples in science like the paradigm shift, smoking, lobotomy....etc) From a theoretical point of view, one can say that there is a strong affinity between the para-rational model of divination and postmodern understanding of reality as consisting of multiple truths. 'Truth as a model' can be a helpful notion to unveil the various ideological, economic, social mechanisms and discursive formations at work in the production of knowledge and truth and at the same time, remind us of the impossibility to fully grasp absolute truth and knowledge. Inversely this can be arguably problematic insofar that 'truth' becomes a mere rhetorical device competing by measure of persuasiveness. But yet again, the value in the notion of 'truth as a model' lies in the very idea of other possible solutions and modes of inquiry, moreover helps to move away from our preoccupation with what Bruno Latour has deemed "matters of fact" to "matters of concern" (Latour, 2004). By shifting from an object orientated view to a orientation towards what issues are at stake, I hope to introduce this text in this spirit. As we shall see, every knowledge, even the most solid, carries a margin of uncertainty.

*use the almanac, superstition to highlight the history of shifting agenda of politics and discourse.
*of centralising time, new order of the machine. ---> can nicely lead to synchronicity

Chapter 3: Algorithms and the engineering of the future.

'To foretell an event is to provoke it; in social psychology this is called "self-fillfilling prophecies.'
- Alejandro Jodorowsky

"If men define situations as real, they are real in their consequences"
-W. I. Thomas

*The tenacity of a largely technologically driven society with the exclusive teleology of progress to dominate and its following consequences are arising as shown by Kevin Slavin
*weather forecasts as 'our mediated-experience thermostat'. Olifar Ellison describes this as cut off from our emotions, from our ability to sense the environment (Weather project).
*dependency on prediction, technological narrativising and constructing truth, Apple siri- voice recognition, eliza
*Gladwell, and Brian Holmes text.
*new order of the network
*the social role of the diviner, the fortune-teller. vs. forecasts vs. algorithms
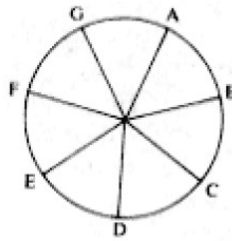
Chapter 4: Synchronicity

image: synchronistic thinking, or thinking in fields

To paraphrase Bruno Latours lament and question on the difference of deconstruction and constructivism: can we devise a powerful tool that deals with matters of concern in a way that doesn't *debunk* but *protects* reality from being chipped away (Latour, 2004)?

In a not too far parallel universe, these irrational numbers or natural integers (irrational elements), are what precisely makes it a good tool with which to grasp something irrational, and that is the basis of divination. (irrational in the sense that is can deal with contradiction and paradoxes, not seeing it as a problem) In this fluid paradigm, a paradoxical self-referential loop of reasoning doesn't render it inconsistent, but rather offers flickering glimpses to contemplate the synchronistic phenomena of meaningful chance gatherings of events that are not causally related. Synchronistic thinking as the "acausal complement to causality, a system of explanation equal to causality but differing from it in its understanding of time and space as elastic with regard to the psyche" (Shanken, 2010), transcends the space-time and physis-psyche divide of causality, and of rational inconsistency.

*Synchronicity = divination = transcending limits of mental and physical realm / tendency of things occurring together.