

**THE ART OF HIDDEN CAUSATION:
MAGIC AS DEEP MEDIATION**

By © Peter George Alexander Duchemin.

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“Fake becomes true, it depends on you.”: A sculpture bearing an aphoristic rhyme that bears no relation to the Chinese text above it: 動物要成真 (animals become true), 自然要關心 (care for nature); Trans. Dorion Berg. *Nam Shan, Lantau Island, Hong Kong*, 2018.

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Preface

We can take this entire work to be stratified. It was developed over a decade, in several different registers, each of which leaves a trace on the final text. It is inseparable from my intellectual, philosophical and material development during the time of writing. At the outset of the project, I had been working freelance as a magician and circus performer, and I considered myself an esoteric practitioner. Furthermore, my undergraduate and master's degrees involved a high degree of involvement with a *post-structural*, or *aperspectival* writing and thinking style that is best ascribed to the work of Gilles Deleuze, Felix Guattari, Michel Serres, and Henri Bergson. So, the base stratum in this text is comprised of: 1) The proprioceptive understandings of a circus artist, soft martial arts practitioner, sleight of hand magician, and illustrator;¹ and 2) an evolving esoteric meditative practice that focused on contemplating *I Ching*, *Tai Hsuan Ching*, *Tarot*, *Tzolkin*, *Thelemic Qabalah*,² and other systems, largely from an experimental "Chaos Magic"³ point of view. Finally, 3) I had developed a basic philosophy of "Difference and Repetition"⁴, in which I

¹ These experiential understandings were essential in informing my basic attitude towards the world as rich, embodied, and largely phenomenological. Many of my attitudes and assertions in the text come from this experiential domain, to which no citation can be given.

² A modern esoteric "current", drawing on the turn-of-the-century work of the Hermetic Order of the Golden Dawn, influenced heavily by Aleister Crowley, and with an emphasis on the Tarot deck.

³ Another current of contemporary esotericism, influenced in particular by the British Occultist, Austin Osman Spare, and by his later interpreter Peter J. Carroll. It is characterized by a DIY approach to magical systems thinking that breaks in large part from the more "traditional" approaches such as those of the Dawn and the O.T.O. (The organization which represents "mainstream" Thelema.)

⁴ Given my exposure to Gilles Deleuze, Felix Guattari, Henri Bergson and Michel Serres during my Undergraduate, and Master's degrees.

construed the aesthetic spaces of esoteric systems as virtual negentropies,⁵ emergent from basic flux, and ranging to some degree (but not absolutely), over them, as facilitated by the system of signs.⁶ These three parts of my basic world-understanding allowed me to be at once a performer, an occultist, and a philosopher, and to base my assertions on that fundamental experientiality.⁷ These three major aspects formed the attitude which I brought with me into the dissertation, and act as the base layer of the text. My initial scholarly goal of reconciling the magic of prestidigitation with the magic of esotericism on the level of general definition was thus inseparable from my personal and professional desire to resolve the cognitive dissonance of being at once a performer in a stereotypically skeptical field, and an esoteric contemplator. This is the first stratum.

The second stratum of the text is composed of my thinking as it developed after 2014, during which year I cemented a decisive break with my self-conception as

⁵ For which concept I drew largely on Michel Serres' *Hermes: Literature, Science, Philosophy*. (Serres 1982)

⁶ This latter notion, of the memorial spaces, as they operate to encapsulate the temporally entropic physical body in a kind of negentropic mythopoesis, enabled me to conceive of myself as essentially a magician of time.

⁷ It is not a coincidence, either, that one of the first systems to which I turned my attention, during this PhD was the art of Ramon Llull, for the simple reason that in its full logical expression, the ternary of nine elements derivable from his wheels comprised 729 possibilities. My initial interest had been piqued in this regard from having taken the time to familiarize myself with the Neo-Confucian *Tai Hsuan Ching*, of Yang Hsiung, which also was fully expressed as a 729-figure system. This number is $9 \times 9 \times 9$, or 9^3 , and was thus both attractive to my *Thelema*, as well as in-itself, as a large, cubic memorial system. Despite learning quite early on that Llull's work was not conceived of by him as "magic", it is often the occultist's self-appointed prerogative to mix systems, to syncretize, and to find isomorphic "fits" between different mnemonic architectures, so to me this represented a powerful bridge between Chinese and Western contemplation, even if I was not to be allowed to claim as such in the context of scholarly work. Ironically, and yet aptly, taking a deeper look at Llull could be considered the bridge that ultimately began to undermine my confidence in occult meditations as I had construed them to myself.

an occultist. This break was facilitated by several factors. Firstly, I had increasing exposure to *etic* perspectives as they emerged in my contact with several scholars in the Academic Study of Western Esotericism. Secondly, I began to explore the writings of George Lakoff, Mark Johnson, Jesper Sørensen and others which laid bare a mechanism through which I could see how esoteric thought patterns would naturally form as conceptual blending operations, governed by basic metaphors, and under the function of my neurological brain's adaptation to its environment. This put sufficient challenges to my essentially panentheistic/pantheistic attitudes and intersected with a body of skeptical inquiry that came from another quarter: *legerdemain*. Specifically, I had focused more and more on developing my work with card magic in the school of Dai Vernon, Juan Tamariz, and Arturo DeAscanio. The essential lesson - that a miraculous appearance (no matter how "accidental") *always* has a mechanical cause - in combination with the cognitive approach, was enough to purge me of my previous attractions to image and symbol as "magically potent" communications with a pan-temporality that I had come to see as involved and benevolent.

The fallout from this crisis (of *etic* proportions) cannot be overstated. I had invested considerable time and energy into my contemplations, and I had created considerably elaborate systematic syntheses, which had themselves become highly personalized structures. In order to make a move to a world in which I did not ascribe to a fundamentally benevolent pan-psychic divinity, I needed to become "fundamentalistically agnostic", about the status of my own magic. The second stratum is thus the *etic* thinking that accompanied this shift, in which, without jettisoning my interest in the systems I had worked on, I became far more interested in their potential refurbishment as "technologies". For this reason, I turned toward

science fiction modalities to re-frame the work that I had accomplished. In particular, I became interested in the notion of the *mentat* as developed in Frank Herbert's *Dune*, as it exposts a kind of development of the Lullian Program. Paulo Rossi's *Logic And the Art of Memory*, gave me the basic outline of a continuity of development in which I could construe fundamental combinatorial mnemotechnics as having evolved from Lull, through the Agrippan/Brunaic stages of its articulation, into the post Leibnizian/Boolean/Peircean conception which develops the art of memory into a cybernetic, and ultimately external apparatus: the computer and its networked extensions.⁸ From here, I began to think about how, if the rational program of computational thinking bore a lineage from the memorial traditions, structural elements of my esotericism could be salvaged by reconceiving them as attempts to develop an *analog* strategy of thought that was at once computational, but consciously so. I began to play with the idea of being a *mentat* operating an orally-transmittable computer, and found myself resonating with the following words of Leibniz:

My invention contains all the functions of reason: it is a judge for controversies; an interpreter of notions; a scale for weighing probabilities; a compass which guides us through the ocean of experience; an inventory of things, a table of thoughts; a microscope for scrutinizing things close at hand; a telescope for discerning distant things; a general calculus; an innocent magic; a non-chimerical cabala; a writing which everyone can read in his own language; and finally a language which can be learnt in a few weeks, travelling swiftly across the world, carrying the true religion with it, wherever it goes. (from unpublished journals, cited in Rossi 2006, p191)

⁸ This might be indicative of a general development of "spiritual concretion", proposed by Jean Gebser in *The Ever Present Origin*, in which many aspects of the inner life of humankind's past become more and more concretely real, as we build a technological infrastructure that feeds them back to us in discrete, programmable, and quantifiable ways. Ioan Coulianu has also suggested this. The message may be that our current economic state of affairs is working to make pre-enlightenment magics and mythology *literally true*, using contemporary technologies of immersive simulation.

This is to indicate that the “revolution” of my thinking that began in 2014, and which was triggered by a need to develop a more refined elimination procedure in terms of hypothesis formation and testing was nevertheless still engaged with how this might be achieved by means of constructed or architected systems. This period was exceptionally creative of such systems, to the point where I have developed and proposed several for inclusion in the PhD.⁹ In this basic frame of thought, I therefore assembled the textual fragments and meditations which had gone into formulating the *Art of Hidden Causation* into a text which I polished and submitted as my PhD thesis. The text was reviewed by external readers, who ultimately determined that, while intriguing, it lacked sufficient engagement with the scholarly conversation to which it was aimed.¹⁰ I was given a year to re-work and re-submit the document.

What you are holding, reading, is in fact a very refined slice, of a very large body of writing and research dating back ten years, and recorded in files marked with a “version number”: 1.5, 7.8, and so on. There are many many different files, all from different time periods, many with entirely different foci. Add to this the multitude of copies that have been printed and the side projects which intersected and branched off from the thesis, and we can consider that as a whole, this work has a contemporaneous, physical body of related, tangential, or parallel versions of itself. The cross section, or fold, which you are currently reading is, in volume, I would

⁹ These were eventually rejected, for the purposes of the initial submission, to enable the work to be focused enough, and small enough to submit. This omission, however, had the opposite effect, and left the thesis without a clearly stated trajectory. For this reason, the *current* RE-submitted version includes a basic discussion of the most promising of these systems (an experimental “neocalendrical” apparatus and its attendant “visualization frames”), as well as a more explicit account of how free play with esoteric and post-esoteric systems constitutes a desirable and natural outcome for the project.

¹⁰ Perhaps the fundamental question was “to whom is this text addressed?.” I have made this clearer, I hope.

estimate, less than 5% of the whole extant body of physical and digital traces, that the work has accrued. The stratifications are literal and material. The “flattening effect” of presenting this final version is akin to the flattening of layers in Photoshop. It selects and ‘canonizes’ the precise angle of viewing. It fixes and memorializes the total image. It seems to flow. This should be considered a magical effect.

This final stratum, then, completed in several stages between Hong Kong and St. John’s, is one possible crystallization of all the strata: their composition and integration. It is both an unstratified image of stratification, and it is one of the strata itself. In this vein, we can consider, that the text has a “full body”, composed of all its versions and copies existing at once (as an *average*), and a “selected body”, which consists of this particular version (or a copy of this version). Several different versions will contain the previous sentence, so what I am writing now, as I write it, will not necessarily be strictly true by the time a reader reads it, but acknowledging this fullness of the text, beyond the presented document, is an instructive exercise. The full body is also a passive/potential/virtual body, while the selected body is an active/actual body. The full body of the thesis in time and space, acts as a *durée* with a relaxed or extended corporeal presence that mostly exists as the “past” of the currently active present, the selected body, which is a kind of “hot” contractile point of revision and action. “This final stratum”, will always constitute the document’s present, and its presence. In this present version of the thesis, then, a sense of the magical has returned, aided by a concept of magic as play between multiple layers of depth, *topoi* over which rational, irrational, and a-rational mediations all range, to different degrees. If the various mechanisms of magic are understood, it is contended, then the

relation to the territories which those magics in question pertain to is made clear, transparent, and the overall movement tends towards a post-rational “aperspectivity”.

The overall investigation is also impacted profoundly by a tension between the *emic* and *etic*, and my methodology is a result of that tension. I am herein exploring the question of whether or not we can we blur the *emic/etic* divide in order to explore the subject of magic actively *and* critically, and I am attempting to ameliorate the apparent alienation that exists between those who practice as insiders, and those who study as outsiders. It involves me asking the question: Should we be simply describing and analyzing magic as if it were a pacified, or pacify-able subject, or can we take illumination from it, and even contribute to its growth, by applying our insights in active and experimental ways, in art, poetics, music, or what have you? This thesis in its deepest sense is about demonstrating and performing magic, at the same time as it is about explaining at least some of its more ubiquitous elements.

The final resubmitted text, then, is as close as possible to the previously submitted document, while seeking to make more explicit the “hidden vectors”, of that document: to wit, the creative intentions that the work is meant to support. The production of magic shows, calendar designs, science fiction stories, fables, and philosophical explorations of the ways that society is, or could be enchanted, are fundamental options for the future of this work, and will likely be the main kinds of project that will follow it. By raising (as I do throughout the thesis), such playful notions as that of constructing an *ars magna* against the prevailing forces of information ubiquity and confusion; or exploring the insight, so important to Philip K. Dick that “the empire never ended” and that Roman state time is STILL having some kind of magical effect on us; or that certain *arrangements* of cognitive spaces might

have startling, emergent, “frozen musical” properties such as those we see in magic squares, or Chladni patterns; or even that through a closer ontology of time we might find ourselves capable of *retreating* from foreclosed linear narratives altogether and moving towards a more oceanic synthesis of temporalities, I am setting up a wide field of potential creative interventions, albeit one not necessarily restricted to “etic” scholarship. Instead, I wish the reader to be left with a sense of how they might engage with magic by entering into it and then coming back out of it: an “enic/exic” respiration. All the myriad purposes converge on this movement of creativity and analysis: succeeding one another, wave after wave, and in the process, altering the world. For this reason, the thesis is framed NOT as a discursive intervention into the extant fields of Sociology, or Western Esotericism, or even Philosophy, but as an informed extrapolation of magical themes, with a call toward play, and a call toward the use of magical insights in the production of works of art, and acts of creative communication. This thesis is like a world-maker’s manual, suggesting how mnemonic systems, engineered spectacles, carefully chosen metaphors, and even calendars might be used to envision radically new and different world-pictures. It sets up lines of flight both political and artistic, and it develops them as magical processes. It is a step towards an art of time: by no means final, by no means exhaustive, by no means exclusive, but by every means creative.

Where the work ultimately finds magic to be inevitable, it is not the case that magic must necessarily be construed as a unidirectional and abusive power dynamic. This work has been written with the central notion that we need to develop a greater literacy in order to recognize magical structures in general, and that, where necessary, domineering and patriarchal enchantments (such as the Gregorian/Julian Calendar)

should be exposed and subjected to a democratization. The intention of this work is to acknowledge the ubiquity of magic, acknowledge the necessity of magic, and democratize the means of magic, so that selfish, cruel, and oppressive magical forms can be undermined, and those that bear more scope in terms of the cultivation of collectively joyful encounters can be developed in their place.

Opening Bracket (

Magic is an art of hidden causation, transcendental metaphysics is an architecture of absence, and calendrics is a work of forging storms. The dissertation is in four major parts with numerous chapters. The text initiates with a theoretical engagement with magic, understood as the causing of effects in such a way that the causes are obscure. My overall approach embraces elements of both the *emic* and the *etic* methodological modalities, and seeks to play with their fusion, along *enic* and *exic* lines.

Part 0, “What is Magic?”, constitutes a preliminary survey of the main line of sociological theories pertaining to magic, that have set, to a great degree, the stage for contemporary discourse on the subject. Drawing from Jesper Sørensen’s *Magic in Theory*, I have used his typology of “four approaches” to the study of magic, which culminate in a fifth (the cognitive approach). To these five approaches, I have appended a discussion of “post-structural” approaches, which I believe also contribute significantly to the discussion. In this chapter, I raise the issue of “emicism” and “eticism” (insider discourse/outsider discourse) as a problematic barrier for the study of magic. I follow Marilyn Walker in proposing that we supplement this dichotomy with the concept of an “enic” methodology, such that the vital experiential and creative dimension of magic as a field might be made accessible to scholars, and furthermore, I propose an “exic” approach to allow for practitioners who undertake to expose their own foundational practices to scholarly rigor. This chapter, then, having signaled my intent to produce a work with creative, poetic, and speculative elements

(partly as a demonstrative example, and partly as an *exposé*) leaves us ready to explore “magic in general”, from the vantage of this “eni-exicism”, in the first Part.

There is a concluding chapter to this section which is an important precursor to the systems we will subsequently study, particularly in the second part, and particularly with regards to Ramon Llull. In this chapter, I will create a bridge between the sociological theories of Emile Durkheim, and the chronological constructions of both “magical” and political calendrics. Durkheim is very specific in terms of laying out the fundamentality of the chronological matrix, a form of mediation which allows pure, unbounded duration to become captive to a clarifying set of temporal boundaries: the calendar. What is more, by looking at these formations as mediations, we can bring in the thought of media theorist Marshall McLuhan, whose famous maxim: “the medium is the message,” becomes particularly relevant when we look at the work of “Doctor Illuminatus”, Ramon Lull, which we will do in some detail in Part II. Llull’s system is a cognitive mediation *par excellence* and might be seen as a fundamental predecessor of modern computer science, insofar as it involves the combinatorial manipulation of information. Furthermore, if a modern computer network is viewable as an apparatus that allows for a fully immersive, phantasmagoric simulation, then it is through McLuhan (who also speaks lucidly on the role of the alphabet, and of print, on the evolution of “the extensions of man”), that we can consider the contemporary age as “profoundly religious,” profoundly magical.

Part I, ‘The Art of Hidden Causation,’ sets the stage for understanding magic in its relation to language, memory, metaphor, and agency. This part also deals with several contrasting definitions of magic and introduces my own treatment of the subject. The concept of the magic word and the concept of the true name are

especially important here, since they expose the fact that phenomena are drawn into and out of magical relations by means of how they are “called” and positioned: their taxonomical status is critical. Finally, I discuss the inherent plurality of magical practices, their logical dependence on temporality, and their fundamental implication: that a magician need not worry about what is true in any absolute sense: it’s the *effect* that counts. Magicians are world-makers, practitioners of causal methods which are largely aesthetic in nature. The works of Gilles Deleuze and Felix Guattari contribute significantly to the discussion, as do the cognitive approaches of George Lakoff and Gilles Fauconnier. Michel Serres’ work on time and his engagement with *gnostic* ideas is also introduced in this section, alongside contributions by Giorgio Agamben, David Abram, and others.

Overall, Part I is a wide-ranging, playful engagement with “forking paths”, the diverse, labyrinthine expressions of the *experience* of magic, as conducted by a participant-observer. There are loose ends, dead ends, and red herrings. It is a mystery in the process of development, and a thought process going through its paces. It is important to leave a trace of this development, however, as it is meant to create an atmosphere of rich connective possibility, a rhizomatic field-of play, which will allow us to have more to say when we go deeper into the metaphysics of magical systems, in Part II.

Part II, ‘The Architecture of Absence’, turns firstly toward the classical philosophical question of the relation between Being and Nothingness, and seeks to provide a vision of thought-as-intagliation: which is to say that we are treating conceptuality itself as an “engraving”, or imprinting of an abstract surface, or *topos*. In this way, I view magical systems as carvings-out, burrowings-into the flesh of the

world, whereby the full spectrum of sensory experience is channeled into mental spaces, metaphysical cavities, and networks of interiority, whose architectural dynamics are arranged to facilitate hidden causal practices. “Ideas”, in the Platonic sense (self-identical generalities) are considered as “container schemata”, and the problematic world-pictures descendent from the notion of “Being”, are thus treated as chambers, or *camerae*, facilitated by the assumption of nominalized essences. Magical thought tends to operate within closed (or at least modular) systems, mental spaces and frames, and those same spaces and frames establish structures of memory. Aleister Crowley is invoked as a philosopher. Zero and one are compared to Being and (non)Being, and a theory of emptiness is introduced. Stable linguistic ideas are treated as a kind of abstract “tunneling through” the thickness of a first order *plenum* of embodied forces. Thought relies on mental spaces and frames, and those same spaces and frames establish the structure of memory. Magical systems such as the Tarot, the Qabalah, the I-Ching, and the Lullian Art¹¹ are viewed in this light. This latter system is given pride of place in the second section, because it is a crucial and yet overlooked moment in the development of the figurate assemblage of mediating systems which has influenced the emergence of modernity and post-modernity. It is contended that a comparable striving for a comprehensive “key of all things”, based

¹¹ It should be noted that this section on Lull was written as an independent piece, for a graduate reading course, and was adapted into the thesis. This is significant because it sheds light on several aspects of the method through which this work was developed. Parts of the text were treated like “tubers”, in the sense that they were substantial, internally consistent chunks of integrated thought, and they were to a certain extent transportable, modular. When I assembled the text into its final form, these tubers were put into an order which allowed them to grow into the adjacent sections, and become suggestive contributors to the overall expression of the text in and across those sections. In this way, I have also treated several large block quotations from various authors as such rhizomes, and have, accordingly populated the text with various different densities, textures and thresholds, for the purpose of rewarding a proactive and creative reading of the text.

on figurate logic, lies behind many of the modern attempts to systematize and automatize memory and categorization,¹² and qualifies as a valiant, yet deeply problematic effort to make the entirety of existence comprehensible as a closed system.

The difficulty here is that what I am now inclined to call “the figurate assemblage”¹³ is, in essence, the result of the *failure* of any one of these closed systems to achieve comprehensive totalization. The heterogeneity of extant “systems”, and the needs that they supply, disrupts closure. Within this un-closeable space of inter-cultural and inter-relational systematic accretion, syncretisms, both inter- and trans-cultural, allow a fertile sub-layer of magico-rational categorical matrices to form novel ideological crystallizations within sectors of the cultural “unconscious”, crystallizations that are highly influential in terms of how we think, act, and organize. While they may be subject, on the level of the full assemblage of figurate systems, to phenomena such as paradigm overlap, cancellation, interference or contradiction, I argue nevertheless that each individual magical system works on its own turf or *topos*, to overcode the spaces of encountered meaning and acquired memory with theatrically induced, and intricately architected constructs that economize thought, and fortify the imagination: they *frame* the state of affairs so that it may be viewed in a light that is managed *by* the magicians (or more neutrally by “operators.”) Constructs of this kind are various, and include memory palaces, astrological firmaments, mythopoeic and mathematical networks, alphabets, cryptographic enigmas, and combinatorial *opi*.

¹² And is thus the progenitor of modern computer science.

¹³ And a concept that is now a key component of the second Part.

Belgian thinker Luce Irigaray tackles transcendentalism from the point of view of a feminist linguistics in a treatment of Plato's cave analogy that highlights the oppressive magicality of language, symmetry, and gender. Thomas Kuhn supplies insight into the deep framings which support science, and we continue to engage with Serres on time, on categories, and on the Roman practice of augury, or soothsaying-by-means of birds. Jean Gebser provides an account of the role of magic as initiator of a series of overdetermining "mutational structures" positing the *magical* structure as the first human response to the *ground* of consciousness (and embodiment) which he terms "Origin". He goes on to articulate how myth and reason (as well as "aperspectival integration") also arise as independent "mutational" overdeterminations of magic. The Deleuzian notion of a plane of immanence or consistency (which is populated by semiological "machines" that articulate expressions of power, desire and intensity) connects to the concept of hidden causal theatres that are carved out, *intaglio*, of the surface of direct, immersive, proprioceptive experience. Topology is key, because it enables us to envision the plane of inscription and intagliation. This is equivalent to a dimensional leap of thought, whereby thought understands itself as being underwritten by inscribers/architects/magicians, but at the same time, underwritten *upon* a heterogeneous, non-magical ground. Exposing the mechanisms of magic provisionally disenchant the framings but opens up a greater surface area for new framings. The cacophony of frames across this surface constitutes the "assemblage of figurate systems."

Part III, 'The Work of Forging Storms', engages with the magical nature of calendars, and interprets the calendrical act, that of designing and implementing a shared social chronology, as the most quintessential act of state magic: framing time.

Institutions which support the frame acquire privileged access to the *socius* and the socius becomes subject to such institutions. Calendars are treated as privileged “zones”, within the figurate assemblage. They are among the deepest of the cuts that thought makes into the world. They appear to me to be installed in the very threshold of social mediation, stabilizing the formation of societal and sub-societal identities over time. This recognition will allow us to conceive of playful meta-magical interventions into the deep framing of the world, and will let us consider what options a creative, neo-calendrical discourse, makes available to us.

I explore in Part III how the calendar reforms implemented by Julius and Augustus Caesar, and the subsequent convention of dividing time into A.D. and B.C. affect the experience of time. I will discuss the concept of an “Image of Time”, the idea of “Axial Additive” versus “Moment Focal” chronologies, and the medieval practice of the *computus*. I will revisit Henri Bergson’s notions of quantitative and qualitative time as they pertain to calendrical reckoning, in order to introduce a theory of time-as-a-turbulence around a singularity. As Phillip K. Dick wrote, in his

Exegesis:

Our linear time is exactly an analogy of the straight line of a small body near a dense star; we, as part of the Earth, moving through time as the axis, do not realize that our time is being warped perpetually, back onto itself in a great circle, a vast cycle which will one day to our surprise, like an early sailor who sailed west across our oceans and eventually, incredibly, found himself back where he began- circumnavigated our round world which he did not understand was round... it looked and felt flat; the universe looks and feels as if it extends analogously; Einstein showed us that space is curved through the force we call gravity; so time, unrealized by us, undetected by any of our earth-bound instruments, carries us inexorably in a sweep which we will not recognize... until we actually see a familiar landmark. Suddenly there it will be: ahead of us in time will be something which we know from our historical record we left behind us in time. And this follows logically, since time and space are a nexus-continuum, cannot be separated. Thus, orthogonal time: lineal in the sense that all objects move in a straight line through space, too:

cyclic, if there is enough of what equals gravity in respect to time, whatever that force may be; analog of mass. As mass affects space, warps it, curves it, bends it- what would warp, curve, bend time, to bring it back? (Dick 2011, p 119)

Part III is an attempt to address Dick's question by suggesting that the "mass" which warps our experience of time is the narrative chronology of our dominant social institutions: the calendar. The socio-ontic *inertia* of our calendar. We contrast Dick's visionary work with the perhaps soberer engagements of his contemporary, the feminist science fiction luminary Ursula K. LeGuin. Through the lens of a "constructed calendar", we contrast a linear image of time with a concentric one. We explore how calendar reform initiatives often seem to intuit the "hidden causality", or magic, of calendrical time framing, and seek to challenge, reframe, or replace the dominant set of frames with revised, rethought, or competing framings. Initiatives such as this have a surprisingly long history, albeit one littered with failed attempts at reform. I conclude this part with a description of some of my own creative attempts to make an intervention into this state of affair, and I discuss, briefly, some of the various calendar and memory systems which I have designed in order to affect this intervention.

The thesis has been driven, from the start to the finish, by a desire to reconcile several accounts of magic which are typically polarized and antagonistic. My intention was not to valorize or condemn any of these accounts, but to come up with a model and method that might ameliorate the antagonisms. A combination of secular and sacred magic suggests an understanding of human autopoiesis; the art through which we present worlds-of-meaning to ourselves and others. With this understanding, we develop a clear, "aperspectival", magical thought-mode, that focuses on new, and polyvalent combinations of figurate assemblage.

We can understand this re-thought “natural” magic as a circuit, flowing through three levels of application. The top level is that of spectacle, where the events engineered by magicians take place. Prestidigitory magic operates for the most part, here. The middle level is a series of semantic “spaces”, intagliations, or hollows that are overcoded by the figurate systems. Here is where esoteric magic shines: networks of symbol and system provide a support for spectacle and form the labyrinths of meaning that the esotericist explores. The base level is occupied by a calendrical magic that directly interprets the cosmos into the realm of humanized meaning. This is the space of interface and memorialization, where practices such as astrology, *computus*, and calendrics directly translate the non-human movements of cosmos into the basic narratives of state, religion, and socius. All three levels of magicality are constantly active, and the flows that connect them are the binding agents of meaning that give rise to a working, multi-tiered enchantment-complex that is synonymous with the human experience.

Finally, the thesis concludes with a reflection on its own aims. The principal aim, is of course, a creative one. The purpose is to construct a playful enough engagement with magic and magical systems to demonstrate the validity of the “enic/exic” strategy which I have taken. This being achieved, then, we are given substantial leeway in terms of what future projects might emerge from this work. Modes of chronology, modes of poetry, modes of dance, modes of classification. Granted that we have developed a set of heuristics for understanding *how* magical systems and spectacles influence becoming, we are left with a body of possibilities that we might explore from a mode that does not seek either to valorize or paralyze the use of magical mechanisms. Although such concerns as the ethical, political, and

metaphysical, do find themselves entangled to some in this initiative, they are still subordinate to the principal aim of the text: to open, through theory and discussion, a significantly larger space of play for the magically inclined artist, a set of guidelines for the neo-calendricist, and a significantly sharper set of self-critical tools for the magician-scholar who is engaged in examining the illusions and mis-perceptions that magic can engender, and who is involved in teasing those integuments apart from the substantial insights and veritions that are equally nascent within the magical labyrinth.

Part 0: WHAT IS MAGIC?

Whence did the wond'rous mystic art arise,
of painting SPEECH, and speaking to the eyes.

That by tracing magic lines are taught,
How to embody, and to color THOUGHT?

(McLuhan and Fiore 1967)

Chapter 1: Key Questions

The subject of magic is a contested field, with many different stakeholders, and many different claims. It is difficult to decide, at first glance, even how to start. Do we investigate magical belief as a historian might? As a theologian? A practitioner? Do we evaluate it as a pragmatic exercise, or as an escapism? Do we entertain ontological notions of magic, or do we restrict ourselves to epistemological ones? Is magic an atavistic hold-out from a “primitive” stage of human experience, or a key to transcending the despotism of rational intellect? Does it exist? Is there “such a thing” as magic? These questions can only start the ball rolling, as they are followed by many others. Is the modern magic of prestidigitation even a magic, or is it an anti-magic? Should we spell it with a K at the end, in order to affiliate it with a philosophy of will? Can we ever reconcile the myriad interpretations of the word, or are we doomed to simply enumerate the phenomena that have been given that name, leaving ultimate definitions empty, like contending armies without a field, chessmen without a board? Do we stand back from it to furnish it with a description, or do we dive into it, to draw out experiential and experimental insights? Is it psychological? Metaphysical? Mnemo-cultural? How can we model all magics at once, while leaving room for the non-magical (even if *that* is ALSO, from one point of view, a kind of magic)?

“What is Magic?”, establishes the background of the most common contemporary sociological theories pertaining to magic, that ground the contemporary discourse on the subject. It begins with a taxonomy attributable to Jesper Sørensen, in order to present a framing of the literature leading up to the development of the cognitive linguistic approach, which I thread together with a diverse post-

structuralism on the one hand, and a McLuhian reading of “media” as “extension of the human” on the other. Woven into this conversation is a discussion of methodological “vectors”, namely the well know *emic* and *etic* modes alongside two others: an *enic* and *exic* mode.

This project began as a conundrum that I had no answer to: as an interdisciplinary thinker, prestidigitator, and esotericist, I was concerned with seeking to address the question: “Granted that multiple, contesting fields self-describe as ‘magical’ how are all these magics related?” This was both an academic and a personal question. As such, what the *Art of Hidden Causation* represents is an attempt to articulate a generalized (and generalizable) socio-political psychology of magic. It is meant to function on both macro and micro scales, and in particular reference to schemata which operate to re-present, or *mediate* unprocessed, direct experience to language-using, abstraction-wielding, human minds. I wanted to cover all bases in one heuristic. This has proven challenging, but there have been some promising developments. Despite the multi-layered, and sometimes divergent nature of the text, the methodological apparatus remains simple enough, and I think, because of that simplicity, flexible enough to range across diverse magical fields.

The thesis’ principal claim is that, at its core, magic is the process by which an effect of any kind has its causes obscured and subsequently re-attributed to a fictional cause (or fictionally, to a “new” cause), in such a way as to reify a power narrative. The ubiquity and final inescapability of this process is the subject of this work.

Chapter 2: Methodology: Emic/Etic or Enic/Exic

The terms “*emic*” and “*etic*” refer to two well known modalities of discussion and experience when it comes to studies bearing upon human social practices. We can understand them as “research trajectories”. Briefly put, *emic* discourse is *insider* discourse: using terms, ideas, and patterns of thought that are linked to experiential practice and which denote how practitioners define themselves. *Etic* discourse is *outsider* discourse: using terms, ideas and patterns of thought that are meant to allow an insider discussion to be explicable to outsiders, and to be presented in a generalized way. Inherently this is a contentious dichotomy. A purely *emic* understanding might feel threatened in the light of an *etic* analysis, since it explicitly *others* the *emic* discourses. An *etic* discourse makes no commitments to belief and practice, and so seeks in a sense, to objectify the *emic* understanding.¹⁴ I am not alone in feeling, however, that a balance might (and must) be struck that allows practice to continue within a larger space: an aerating effect, perhaps, of allowing ourselves to view our own practices as intelligible within a larger analytical frame, yet conducted in such a way that does not usurp the relevance and continuation of practice itself. In other words, *emic* discourse evokes *etic* discourse, but *etic* discourse, fed back into the space of open discussion necessitates something new: something neither purely *emic*, nor purely *etic*.

¹⁴ Marilyn Walker writes: “‘Outsiders’ are used to conceptualizing indigenous music, analyzing and objectifying it. By doing so, we distance ourselves from it. It is difficult for us as westerners, scientists and academics, used to relying on our powers of observation, to become engaged in its multisensory and holistic nature. We can teach ourselves to become so, however, not through study but through the experience of indigenous music. This deep experience of music is characteristic of indigenous cultures.’ (Walker 2005, pp 146-7). The same logic applies to magic.

It is indisputably true that there is an *emic* and an *etic* conversation about the status of magic, and that scholars are typically expected to operate through *etic* modes of articulation. I am presented with a dilemma. Because of the nature and context of this document, I will need to situate myself (provisionally) within that *etic* discussion whether I continue to practice or not. Consider my coordinates as a thinker: I come OUT of an *emic* engagement with magic. I come out of a background in sleight of hand, circus arts, and physicality. I also come out of an *aperspectival* attitude that language is inherently ambiguous, and laden with power, even when it is most clear. Nevertheless, I am asked to present my findings in a “detached” fashion. But detachment also falsifies. It is not enough. The observer is *part of* the experiment. Looking for magic with only a set of analytic tools, is in my opinion, like looking for ants in the desert with a magnifying glass. My true coordinates, in this respect, are thus best described as “*enic*”¹⁵:

Emic and *etic* (commonly used approaches in ethnography) are dualistic terms that ignore the underlying unity of existence which is as the basis of indigenous music. I suggest a new term “*enic*”, meaning “entering into” which provides for an experiential understanding of indigenous music. (Walker 2005)

Here, we may replace “indigenous music” with “magical praxis”, in order to gain clarity into my approach to this topic: I bring a body of theoretical and methodological knowledge with me into an experiential engagement with the subject, which I then use to revise the same knowledge, and commit that revised understanding to words. It is

¹⁵ If we follow the full logic entailed by the fact that there is an inside and an outside, and movement between the two, then our terminological lexicon would have to be *fourfold*: Insiders (*emic*). Outsiders (*etic*). Outsiders becoming Insiders (*enic*). Insiders becoming Outsiders (*exic*). Let me float the notion that we can even push this concept towards a five-fold dynamic: inside, outside, outside to inside, inside to outside, and the advanced combination and interplay of all these research trajectories: *emic*, *etic*, *enic*, *exic*, *epic*, respectively.

therefore a process that is both personal and academic. It is a dance between insider and outsider narratives, and one which cannot help but end up informing and evolving *both* discourses. The *etic* may be personally possible, at least contingently, but I think in the larger sense, it is itself a paradox, and we must go one more step, at least, if our study is to be wholly genuine, wholly appreciative of the lived and living nature of its subject matter. No *etic* description of magic will be final, because magic will always answer back. The *etic* and the *emic* mutually appropriate one another, and the resultant conversation is therefore best dealt under a different rubric altogether.

Non-indigenous researchers working with Indigenous People can do a lot of(*sic*) acknowledge and legitimize indigenous music as a field of inquiry. And while we must continue to look for ways to integrate indigenous knowledge and scientific knowledge in addressing problems of common concern, we must also value indigenous music as a body of knowledge in its own right. It is valuable for us to study it in an academic sense. It is also important that we enter fully into the experience of it, and if we can, that we do so within the ecological and spiritual context that generates it. An *emic* perspective offers the possibility of blurring the boundaries between insider and outsider. (Walker 2005, p 146)

Over the course of my learning, the texts and praxes which I have been exposed to are myriad, and I wish to avoid the charge of eclecticism. I have perused many manuals on sleight of hand and taught myself the maneuvers. I have read and employed texts on angelology, demonology, alchemy, divination, and what have you. I have designed calendars and memory palaces. I have participated in rituals of different kinds. At one point during the writing process, I was employed as a Tarot reader on the Hong Kong bar strip known as Lan Kwai Fong. At other points, I was performing magic and circus shows and workshops for children and adults from Newfoundland to Cambodia to Siberia. So much of what I think comes from experiences, and despite my provisional turn, midway through the dissertation towards a more rationalistic

perspective, I find myself re-discovering the validity of the very practices that brought me to the question, precisely on the other side of that rationalism. “*Enic*” is apt. An account of magic, then, that comes out of this, but is not “eclectic”, must come to a definite statement of purpose, a definite program of action, or at the very least settle on a model that contextualizes the praxes. This thesis is precisely that effort.

In terms of the context, then, we can let it be what it is. There remains, however, the theoretical, anthropological, and philosophical writings on magic, that over the course of the last century have been instrumental in forming the discussion which is now lively within the academic fields of esotericism, magic, religious studies, anthropology, and philosophy. My position, model, and program will need to be located somewhere in respect to these discourses. Here, then, is a basic literature review of the views raised by scholars concerned with positioning and defining magic, which have built up to the conversation to which I, in turn, am now responding (at least in part).

In the opening of his important text on the cognitive study of magic, *A Cognitive Theory of Magic*, Jesper Sørensen traces a history of the development of the academic approach to magic within the social sciences. In outlining this history, Sørensen identifies four principal (*etic*) approaches to theory on the subject: the Rationalist Approach, the Symbolist Approach, the Pragmatic and Performative Approach, and the Emotionalist approach (Sørensen 2007, p 9). His aim is to set the discussion for the Cognitive approach, which he practices, and for which he argues. We will briefly survey these approaches.

Chapter 3: Historical Approaches

At the cusp of the nineteenth and twentieth centuries, during the birthing-stages of modern anthropology, we find the historical approach to magic being articulated, principally by James George Frazer, and Edward Burnett Tylor (Sørensen 2007, p 11). The essential notion is that magic occupies the place of a kind of naive science: that is to say, that magic is empirical in terms of its approach to the world, but that it draws conclusions based on faulty, “primitive” reasoning. It assumes sympathetic links and relations of contagion within which it operates. The former posits that “like can affect like”, and the latter posits that a thing, once in contact with another thing, remains so for the purposes of manipulating those things. Magic is evaluated as a kind of pre-scientific, pre-philosophical attempt to explain and guide the phenomenal experience of the world by means of methods that exploit these semiotic relations. In such a scenario, according to the Intellectualists, a magical belief is rational, but flawed, precisely because it is short circuited by the erroneous methods that the more contemporary methods (empirical and rational science) have surpassed. More recent scholars have used this approach to try to pinpoint more precisely where the rationales of magic fall short of being fully rational:

Jarvie and Agassi distinguish between three types of rationality: (1) *weak* rationality pertaining to actions explained by reference to goal-directed actions; (2) *relatively strong* rationality where the standard of rationality evoked is that of one’s community; (3) *very strong* rationality, where the standard of rationality is the highest known, especially that of critical thinking. Analyzed through this distinction, they claim that the rationality of magic is based in the first two types. Magic is a goal-directed mode of action based on an internal standard of rationality. In short “magic is false theory, no more no less”, which makes it “science *par excellence*”. (Sørensen 2007, p 13)

This is an attitude taken up by many (but not all) stage magicians, and despite its insights, is open to criticism for, amongst other things: imposing a colonial-style

hierarchy upon its subject matter by means of a patronizing notion of progress, ignoring the role of emotion, ignoring the role of ritual, and ignoring the social character of magic. How best to respond to these shortcomings is the subject of several subsequent discourses.

For the Symbolists, a diverse bunch, the main problem with the above approach is that it fails to recognize the inherent sophistication of the ritual structures themselves. By focusing on individual goal-seeking, ostensibly by means of faulty logic, the Intellectualists are ignoring the socially cohesive aspects of magical and religious ritual. Goal-attainment is not the sole, or even the most important facet of magic. For the Symbolists, a magical ritual is far less about achieving an end than it is about embedding intentionality itself within a web of culturally relevant symbols.

Magic should not be understood as based on intellectual mistakes or wrong theories about the world, but rather as symbolic expressions that one must place in their proper symbolic environment in order to interpret. Systems of classification are a major concern as they are understood as a fundamental constituent of the symbolic system, and language is understood as its most direct expression. (Sørensen 2007, p 18)

This school is much more diverse than the Intellectualist, including the works of such thinkers as Émile Durkheim, Marcel Mauss, Henri Hubert, John Beattie, and Sir Edward Evans-Prichard. There is a tendency to use the same tool-kit to define religion and magic, with magic being defined as “outsider religious practice”. Mauss and Hubert, for example, consider magic to be a kind of “de-formed” religion:

Mauss and Hubert turn to the classificatory system, and social representations utilized by and surrounding magic. Magic can be recognized by its application of the margins of both the classificatory and the social system. The agents, actions, and social representations appearing in magical rituals all share a common characteristic of marginality and classificatory ambivalence. The magicians are for instance recognized by their strange deformed physical appearance, their liminal position, or their tendency to enter into ecstatic states. (Sørensen 2007, p 15)

The weakness of the Symbolist approach is that in privileging cultural meaning over magical intention, it makes a similar (or even worse), “primitivizing” mistake: “In trying to save the ‘primitive man’ from being wrong... the symbolist ends up making a much graver allegation, namely that ‘primitive man’ does not even know why he is doing what he does, and needs the observer to tell him.” (Sørensen 2007, p 18) In other words, the flaw in the Symbolist argument is that it ignores intentionality altogether. What is more, in portraying magic as marginal religion, it makes magic into nothing more than an epiphenomenon, or a socially unacceptable side-effect. This is empirically false.

Neither Durkheim or Marcel Mauss and Henri Hubert question the dichotomy between religion and magic inherited from the Victorian rationalists and from the European conceptual structure. They merely reverse the evolutionary sequence. As religion is intimately related to the very foundation and emergence of society, religion must necessarily precede magic, and magic is understood as a later and immoral exploitation of the socially generated sacred domain containing *mana*. (Sørensen 2007, p 15)

The next approach, that of Pragmatism, seeks to find a middle-ground interpretation that is neither skewed towards the magician’s rational ends, nor toward their categorical schemae.

The Pragmatic and Performative approaches blend, in some sense, both the rationalist and symbolist theories. Key theorists include Bronisław Malinowski and Stanley Tambiah. Sørensen writes:

The primary question raised by the pragmatic and performative approaches to magic is, in what way knowledge about pragmatic situations and performative repertoires can help explain what goes on in magical actions? How do people actually behave while performing magical rituals, and in what way are these actions related to the purported goal of the whole ritual: that is, how does the ritual action relate to the context of the ritual? The question is built on the simple but pertinent observation that magic primarily is a specific type of action employed in specific pragmatic situations with specific goals in view. Contrary to the symbolist approach, the pragmatic approach thus

acknowledges the instrumental character of magical actions but relates this instrumentality to certain performative aspects of the action in each specific case. (Sørensen 2007, p 19)

From a pragmatic/performative point of view, magical rituals appear to have two parallel layers: one is a pragmatic layer which serves to pursue a specific goal of some kind, while the other is a performative layer that expresses this desire, at the same time as it weaves an almost symbolist web. This web is designed to enhance belief, intensify attention, and focus desire such that the pragmatic goal is approached in part through available options, but in part through the limitation of “noise” in relation to intention. Participants are “nudged” towards the desired focus by the ambient features of the performance itself, which is then released in the performative utterance. In effect, the performative aspect of magical language and ritual is a form of speech act,¹⁶ in the sense that a ritual for ordaining someone into priesthood subsequently empowers them performatively to accomplish acts, such as conducting marriages, or performing the sacrament. Magical or arcane utterances are thus partially explained by this heuristic:

In magic rituals a “sacred language” is easily distinguished from ordinary language by its strange linguistic forms. It has an effect, not on the superhuman agents invoked, but on participants’ motivation and belief in the future, and this effect does not depend on the semantic meaning of the words used but rather on the immediate ritual context, a context created partly by the strangeness of the linguistic forms utilized. (Sørensen 2007, p 20)

We no longer need to rely on the idea that magic is undeveloped, inadequate reason. By using this approach, we can now model magic as a kind of “high-stakes” social theatre:

¹⁶ See John Austin and John Searle.

...such a pragmatic optic precludes that magic is understood as a general “mode of thinking” characteristic of “primitive”, “undeveloped”, or “traditional” societies. Instead magic is a specific form of *action*, performed in specified pragmatic situations and employing certain linguistic devices, and acknowledged by participant and observer alike as distinct from mere practical action. According to Malinowski, the function of magic is to relieve anxiety by filling the gap left by technological or scientific insufficiency and its practical aim makes it distinct from religion as well. (Sørensen 2007, p 20)

Finally, because it is double, we can recognize active and passive modalities within magic itself: a force-releasing linguistic component, and a protective theatrical mesh that supports and incubates the agent-driven, magical intentionality.

Tambiah argues that all humans possess two modes of approaching the world. One based on causality, clearly expressed in distanced scientific reasoning, the other based on performativity, a mode of thinking clearly expressed in ritual action filled as it is with performative utterances... Tambiah argues that magical rituals should be analyzed as performative actions that obtain their objective due to their very enactment. (Sørensen 2007, p 22)

While this is a strong, and promising approach in many ways, it is still flawed. The Pragmatist/Performative approach falls short, according to Sørensen, in two key ways. First, he sees a danger in overgeneralizing the notion of speech act, and therefore categorizing all magical acts as such, and second, he feels that by over focusing on performance and aesthesis, the mistake can be made that these rituals are somehow only loosely representative of the “instrumental intentions involved” (Sørensen 2007). In short, the pragmatic/instrumentalist approach overgeneralizes, and draws untrue, or unverifiable inferences. For Sørensen, too, the approach obscures the fact that it is not always clear who or what is the actual agent operating within a magical/ritual context. Without a clear agent, pragmatism and performance carries less force. Ambient magicity is difficult to assess from this point of view.

Finally, Sørensen identifies the Emotionalist approach to magic. This approach may be considered (at least in part) to follow as a response to the Intellectualist's, principally insofar as it recognizes that the use of magic is directed towards ends, goals, and desires. In contrast, however, the Emotionalist approach emphasizes the irrational and emotional drives that often incept magical actions over and above the notion of the magician as a reasoning agent, with striking similarities to the Symbolist approach, especially as pertains to the claim that the magical operators are not actually doing what they think they are doing. Emotionalists include Robert Marett, Lucien Levy-Bruhl, and Sigmund Freud. Unlike the Intellectualist, the Emotionalist seeks to recognize that motivations for the use of magic are not merely calculated (and flawed) attempts by rationally "cool" agents. Instead, magic is often driven by intense feelings of longing, desire, rage, etc.... This can then be explained as a kind of displacement-performance, where the deep drives are given free play within a fantasy environment, as per Freud:

Magical actions are displaced behavior functioning as a substitute action aimed to satisfy unreasonable desires or wishes, just as we find substitute ritual actions relieving sexual desires and anxieties in the case of obsessional neurosis. Obsessional neurosis is actually a re-emergence of primitive magical thinking in people that belong to more developed cultures. (Sørensen 2007, p 27)

Nevertheless, there is room in the Emotionalist approach for integrating social and pragmatic aspects of magic, insofar as social life and desired outcomes are usually conditioned by social constraints:

... emotions are not created in a void. People live in groups, and social conditions will to a large extent determine the form and content of magical actions thereby relating the emotional aspects to the symbolic forms in a given society. Finally, emotions are shaped by and expressed in pragmatic situations thereby relating the emotionalist approach to pragmatic descriptions. (Sørensen 2007, p 24)

In its extreme forms, however, it can point to an emotional determinism that veers towards the pathological, equating magical activity unequivocally with pathological neurosis. What's more, it also makes the same basic error that the Symbolist approaches do: it reduces magic to a primitive impulse which is not itself understood by the magicians. In the end Emotionalism is as primitivizing as Intellectualism or Symbolism.

This completes Sørensen's general survey of key anthropological theories of magic. It furnishes a great deal of information on the overall problem: where some approaches succeed, others fail, and vice versa. Clearly, there is a developing search for just precisely what the best questions are, for us to be asking about magic, and about magicians. Finally, as these four approaches were framed as a lead in to Sørensen's own approach, we can read them as necessarily furnishing the various strengths and weaknesses that he wishes to address in the proposing of his own, Cognitive adaptation to the question(s).

Chapter 4: The Cognitive and Post-Structural Approaches

Sørensen's formulation of magic from a cognitive point of view is an attempt to extract the most relevant questions from previous approaches and answer them under a new rubric. Cognitive science can be understood in part as the approach of breaking down complex developed concepts into their basic and unconscious "building blocks". These are formed during the biological brain's sensory encounters with external material circumstances and constitute empirical data. A difficult, abstract concept, such as magic, understood as a cognitive network, might thus be broken into its necessary inferential prerequisites in order to analyze how it came to be "constructed", or synthesized bio-noetically in the first place. Sørensen extracts from the four Historical approaches to magic the crucial requirements for a contemporary, Cognitive model. In this way he intends to show that the Cognitive approach he constructs comprehensively covers the principle problems.

As a point of departure, all four positions can be reformulated as asking specific types of questions in relation to a cognitive explanation of magic. The rationalist approach concerns the cognitive mechanisms responsible for the performance of magical actions. Of particular interest is the explicit use of relations of similarity and contagion, or metaphor and metonymy, and how perception, categorization and conceptualization constrain magical performance. The symbolist approach concerns the interface between the symbolic or conceptual structures and human cognition. How does human cognition constrain, appropriate and reformulate the pre-established systems of signs that precede all individuals? What cognitive principles will help us explain the formation of such semiotic structures? And how do these structures influence individual cognitive development? The pragmatic and performative approach concerns how different pragmatic repertoires such as magical rituals influence perception and cognitive processing. An important question is how specific pragmatic frames influence epistemic evaluation; that is, whether structures of externalized beliefs relate to intuitive assumptions. Finally, the emotionalist approach concerns the relation between cognitive processes and emotion, for instance the emotional or affective valuation of different parts of

the conceptual system, in this case especially religious concepts. The emotional or affective value plays an important part in facilitating belief in ritual efficacy to elements used in magical rituals and in motivating the performance of numerous magical rituals, whether for hate, love or fear. (Sørensen 2007, p 31)

The cognitive methodology for which these questions are tailored focuses on analyzing the domain-general and domain-specific cognitive structure of magical rituals, actions and beliefs. What does this mean? It means that Sørensen is looking for a theory that is sufficiently universal, *etic*, and global, which can also be inclusive of local features so as to closely model very specific examples of perceived magical events. Magical events as interpreted and processed by the brain. The brain operates by networking discrete modules, and so the cognitive picture is one made up of these modules. For Sørensen, the cognitive approach thus synthesizes elements of the Rationalist, Symbolist, Pragmatic/Performative, and Emotionalist approaches, and seeks to build up modular models that can demonstrate which cognitive mechanisms are at work in assembling which magical beliefs. It seeks to show that very basic, universal inferential moves, such as scanning a horizon, moving along a path, or putting objects into and out of containers can be combined in ways that add up to even the most extra-ordinary of magical experiences and beliefs.

This is a highly *etic* methodology and yet, there appear to be developmental options, or “lines of flight”¹⁷ that it opens up which might be intriguing to follow from an *enic* point of view. I have therefore brought this approach (for which I draw mainly on Sørensen, George Lakoff, and Gilles Fauconnier) into communication with the post-structural approaches of Deleuze, Guattari, Serres, Giorgio Agamben, and Luce

¹⁷ A Deleuzian concept which we will encounter later.

Irigaray, and to a lesser extent, the phenomenological approaches of David Abram. In this way, I wish to articulate a more *emic/exic* version of the same basic outcome: to treat magics both domain-generally and domain-specifically, and as composed largely of modular systems.

The Cognitive approach opens the door, I think, to a meta-magic.¹⁸ The output of cognitive findings can be aimed towards re-combinations that might not be possible from the Historical approaches.¹⁹ A meta-magic is also made accessible through post-structuralist and phenomenological approaches, and it will be my goal in this work to show how all these may be used productively in tandem, in such a way as to challenge the *emic/etic* dualism. I have at times dubbed my own formulation of this meta-magic, “clear magic”, which I understand to be a comprehensive topo-inscriptive account of magical theory and practice. I understand it to be sufficiently lenient as to include both practitioners and non-practitioners in the discussion.

¹⁸ Douglas Hofstadter’s *Metamagical Themas: Questing for the Essence of Mind and Pattern* (1985), a is a hefty tome containing numerous puzzles, rebuses, conceptual paradoxes, and musings on self-referentiality and memetics, all conceived of as post-magical mediations. “Metamagical Themas” is an anagram for “Mathematical Games”, the name of the *Scientific American* column from which these meditations were culled.

¹⁹ In Egil Asprem’s work, for example, we find an allowance for reverse-engineering “Complex Cultural Concepts” (CCC’s), such as magical and esoteric formulations, not only to enable their reconstruction, but also to enable new constructions. But what would this mean? Would this entail new *emic* approaches, on top of novel *etic* ones? Have we gone beyond the *emic/etic* divide simply by considering this? Magic, after all, is a discipline that “stares back”, in the Nietzschean sense.

CCCs are defined as abstract nouns with unstable, overlapping, culturally determined meanings that vary within and across formations. A (socio-cultural) formation is defined as any social entity (e.g., social movement, network, school of thought, academic discipline) in which CCCs are temporarily stabilized and given specific meanings. The process of dis- and re-assembling CCCs is also referred to as reverse engineering. This term is intended in rough analogy to procedures better known from software development, industrial design, and biology, by which researchers break down a ready-made design and study how it was assembled in order to learn how to recreate it. (Asprem 2015)

Contemporary approaches are plural and varied. They range from the historical, to the cognitive, to the psychological, to the socio-anthropological, to the radically deconstructive. Unfortunately, the label of “postmodernist”, or “continental”, embraces an enormous variety of approaches that are best left unburdened with the generalization, and instead should be treated text by text, author by author, discipline by discipline. This being said, while “post-modern” is not a methodology, “post-structural” is. My own, multi-disciplinary approach blends elements of the post-structural philosophy associated with Gilles Deleuze and Felix Guattari with elements of the cognitive linguistics associated with George Lakoff (and Sørensen). These two approaches seem to be remarkably congruent in terms of outlook, if not in terms of writerly style. In terms of methodology, they have several overlaps. Each is interested in the modular formation of concept-structures, in their analysis, deconstruction, and reverse engineering. Each is interested in the hidden or buried structures which make up the naive world-pictures that we typically accept as true. Each is immanentist, and basically materialist in outlook. Each is concerned with constitutive categorical illusions imposed on thought by tacit, conditioning factors. They diverge, of course, as well. Speaking very broadly, cognitive science appears to deliver its outcomes towards applications in the sciences, and post-structuralism towards applications in the arts, but this of course is an oversimplification. Both are considerably critical of magical thinking, without being dismissive in a pre-emptory manner.

Because I want to achieve, on some level, a multidisciplinary, *enic/exic* meta-magic, I draw from an interdisciplinary pool that encompasses a wide variety of both primary and secondary sources. The secondary sources fall loosely within the three domains of cognitive science, post-structuralism, and phenomenology, with the

heaviest emphasis falling on the post-structuralism of Deleuze. The primary sources range from science fiction to performance magic, to oracular systems, to combinatorial matrices, to films, television shows, and songs. In some cases, a secondary source will act in proxy as a primary source, and a primary source, in proxy as secondary. In these cases, we are drawing insights, patterns, inferences from the texts that we have recombined in isolation, to further the larger discussion. So, what is a metamagic? By definition, it would be a methodology that surpasses magic, that explains it, and yet retains it. So, it is a magic, of a sort, but one that provides leverage, one that provides a synopsis of the magics it surveys, without, as I have said, destroying them. In this way a meta-magic both extends and transforms magic.

Chapter 5: Magics as Media

I am treating magics, in general, as media, and media, in general, as magic. We can gain some traction here by considering the production of enchantments in the light of Durkheim and McLuhan. According to Durkheim:

At the foundation of all systems of belief and all cults, there must necessarily be a certain number of fundamental representations and modes of ritual conduct that, despite the diversity of forms that the one and the other may have taken on, have the same objective meaning everywhere and everywhere fulfill the same functions. It is these enduring elements that constitute what is eternal and human in religion. They are the whole objective content of the idea that is expressed when *religion* in general is spoken of. (Durkheim 1995, p 4)

This theme, of basic representations, basic moves which in combination come to be configured as variously magical or mythical accounts of the real, comes up again and again: in sociology, in cognitive linguistics, and in psychology. These are mediations: middlings which transport the most basic perceptions into the most sophisticated assemblages. Furthermore, as will become evident later, at a very deep level, these fundamentals are entwined with our composite perception of time:

The category of time is not simply a partial or complete commemoration of our lived life. It is an abstract and impersonal framework that contains not only our individual existence but also that of humanity. It is like an endless canvas on which all duration is spread out before the mind's eye and on which all possible events are located in relation to points of reference that are fixed and specified. It is not *my time* that is organized in this way; it is time that is conceived of objectively by all men of the same civilization. This by itself is enough to make us begin to see that any such organization would have to be collective. And indeed, observation establishes that these indispensable points, in reference to which all things are arranged temporally, are taken from social life. The division into days, weeks, months, years, etc., corresponds to the recursion of rites festivals, and public ceremonies at regular intervals. A calendar expresses the rhythm of collective activity while ensuring that regularity. (1995, p 10)

Besides calendars, we can include graphological technologies such as pictographs, alphabets, and numbering systems as magics, precisely because they fit the criteria of a) hidden causation, and b) deep mediation. All these apparatuses have another thing in common: they are dependent on the principle of self-identity as their fundamental affordance. They are deep, order giving mediations, which call for a concept of essence to be presumed or constructed. They surreptitiously ask us to believe that a state of unchanging self-consistency is desirable, and they require this assumption to be presupposed in order to achieve their maximal affect of giving conceptual order to the uncertain. Thus, Durkheim, however, has doubts when it comes to magical and mythical modes:

Today the principle of identity governs scientific thought; but there are vast systems of representation that have played a major role in the history of ideas, in which it is commonly ignored: These systems are the mythologies, from the crudest to the most sophisticated. Mythologies deal with beings that have the most contradictory attributes at the same time, that are one and many, material and spiritual, and capable of subdividing themselves indefinitely without losing that which makes them what they are. These historical variations of the rule that seems to govern our present logic show that, far from being encoded from eternity in the mental constitution of man, the rule depends at least in part upon historical, hence social, factors. (1995, p 12)

For Durkheim, these modalities are more dynamic in their basic building blocks, as if the blocks pertaining to magic are somehow irreducibly contradictory, like sense perception itself. In this work, however, I tend towards including the positing of self-identity amongst the magics, precisely because of the illusionism that this apparently basic principle of semantics entails. A self identical “shoe” is just the concept of a shoe: the general, empty category. But surely a category is in itself an affordance to thought, a mediation, which, while erasing the primacy of heterogeneity, allows the contradictory elements (many different shoes), to be evaluated in that light. As such, there is a less stark divide in my thinking between magical and non-magical social

modes. But Durkheim wants to press this further, to allow us to recognize that at a certain threshold, self-contradictory systems, which are unfalsifiable, have a social truth to them:

Fundamentally, then, there are no religions that are false. All are true after their own fashion: All fulfill given conditions of human existence, though in different ways. Granted, it is not impossible to rank them hierarchically. Some can be said to be superior to others, in the sense that they bring higher mental faculties into play, that they are richer in ideas and feelings, that they contain proportionally more concepts than sensations and images, and that they are more elaborately systematized. (1995, p 2)

This leads me then to the concept of mediation, and the importing of hierarchies, ranks and schema, which, far from being perceived as merely pragmatic innovations, become naturalized as metaphysical “actuals”, and as such go about doing their work, causes obscured. These mediations are cognitive, technological, and categorical.

Marshall McLuhan writes:

Our very word "grasp" or "apprehension" points to the process of getting at one thing through another, of handling and sensing many facets at a time through more than one sense at a time. It begins to be evident that "touch" is not skin but the interplay of the senses, and "keeping in touch" or "getting in touch" is a matter of a fruitful meeting of the senses, of sight translated into sound and sound into movement, and taste and smell. The "common sense" was for centuries held to be the peculiar human power of translating one kind of experience of one sense into all the senses and presenting the result continuously as a unified image to the mind. In fact, this image of a unified ratio among the senses was long held to be the mark of our *rationality*, and may in the computer age become so again. For it is now possible to program ratios among the senses that approach the condition of consciousness. Yet such a condition would necessarily be an extension of our own consciousness as much as a wheel is an extension of feet in rotation. Having extended or translated our central nervous system into the electromagnetic technology, it is but a further stage to transfer our consciousness to the computer world as well. Then, at least we shall be able to program consciousness in such wise that it cannot be numbed nor distracted by the Narcissus illusions of the entertainment world that beset mankind when he encounters himself extended in his own gimmickry. (McLuhan 1994, p 60)

We can see that here, by means of mediation (whether that be via metaphor, or

machine), the immediacy of the senses is extended into a new world of potential human operations. I am hereby concerned with how these extensions are first *implemented* and *then* invisibilized, creating what I will call a magical theatre of perception. In this theatre even the “modern”, the “rational”, and the “scientific”, are dependent on subtle, and erased acts of physical or virtual transport. Even the most factual statements are dependent on an invisible, mediative ecology. A world dominated by hypermediated projections of ourselves: “narcissus illusions”.

If a technology is introduced either from within or from without a culture, and if it gives new stress or ascendancy to one or another of our senses, the ratio among all of our senses is altered. We no longer feel the same, nor do our eyes and ears and other senses remain the same. The interplay among our senses is perpetual save in conditions of anesthesia. But any sense when stepped up to high intensity can act as an anesthetic for other senses. The dentist can now use "audiac" - induced noise- to remove tactility. Hypnosis depends on the same principle of isolating one sense in order to anesthetize the others. The result is a break in the ratio among the senses, a kind of loss of identity. Tribal, non-literate man, living under the intense stress on auditory organization of all experience, is, as it were, entranced. (McLuhan 1962, p 24)

McLuhan himself connects this movement of extension with magic, and with religion, and gives an account of how, by affecting our temporal framing, we find ourselves even post-enlightenment, looking towards the mysterious and the “impossible” for guidance in the face of omni-presence:

...I think that we live in post-history in the sense that all pasts that ever were are now present to our consciousness and that all futures that will be are here now. In that sense we are post-history and timeless. Instant awareness of all the varieties of human expression reconstitutes the mythic type of consciousness, of *once-upon-a-time-ness*, which means all-time, out of time. It is possible that our new technologies can bypass verbalizing. There is nothing impossible about the computer's - or that type of technology's - extending consciousness itself, as a universal environment. In a sense, the *surround* of information that we now experience electrically is an extension of consciousness itself. What effect this might have on the individual in society is just speculation. But - it *has* happened: it isn't something that is going to happen. Many people simply resort instantly to the occult, to ESP, and every form of hidden awareness in response to this new surround of electric information. And so we live, in the vulgar sense, in an extremely religious age. (Macluhan 1999, p 88)

How might magic have to be re-thought in the contemporary age, as virtuality increases in extension?

Societies have always been shaped more by the nature of the media by which men communicate than by the content of the communication. The alphabet, for instance, is a technology that is absorbed by the very young child in a completely unconscious manner, by osmosis so to speak. Words and the meaning of words predispose the child to think and act automatically in certain ways. The alphabet and print technology fostered and encouraged a fragmenting process, a process of specialization and detachment, electric technology fosters and encourages unification and involvement. It is impossible to understand social and cultural changes without a knowledge of the working of the media. (McLuhan and Fiore 1967, n.p.)

But how deep is “the media”? That is the question that I hope this thesis will equip me to one day answer definitively. For now, it remains an open exploration, but one which I would suggest goes as deep as our interventions into time itself go. Recalling Durkheim’s notion that “[time] is like an endless canvas on which all duration is spread out before the mind's eye and on which all possible events are located in relation to points of reference that are fixed and specified.²⁰”, consider that magic as ‘deep mediation’, especially insofar as it is a mediation of *difference*, is precisely the making of marks upon that canvas; marks which accrete in layers, like thick dobs of paint. The model of mediation, should, I think, be trained on as wide a variety of world-forming frames as possible, and for this reason, I feature numerous examples: Alphabets, Tarot, Magic Squares, I Ching, and mnemotechnic “memory palaces”. In this way, we can both apply ourselves to the task of understanding the art and its traces and equip ourselves to practice it.

²⁰ See p 20, above.

How do deep framings, such as Lull's *ars magna* - which will occupy a substantial portion of Part II – function? If we can see them as *media* or mediations, particularly of *becoming*, then we are free to analyze, reverse-engineer, and synthesize *refinements* of them in an enic mode. These refinements could take the form of games, AI experiments, etc.... If we consider magics as instances of mediation, of transport, “*mediae*”, we obtain more leeway in terms of how we might engage with them, and that, ultimately, is the purpose of this work. As we will see in Part II, Lull in particular can benefit from being viewed as having produced matrices of mediation. In Lull's case, we see a method of memorizing and framing thought that has been developed initially to enable Catholic missionaries to convert their audiences using subtle shifts and maneuvers across a presupposed triadic matrix. In subsequent centuries the method becomes elaborated so as to allow it to host alchemical ideas, elaborate Bruneian memory palaces, *clavis universalis* and critical elements of the logic behind modern computing. Lull's art as a mediation is thus, arguably, now, an omnipresent fact of our contemporary lives.

The submersion of this mediation bespeaks traditional philosophy's inability to see a connection between its conclusions and the media which supported their discourse. Whereas in practical terms technologies such as the alphabet, the combinatorial wheel, binary, Boolean logic, and the like are seen as things we think *about*, the shifts in thought that occurred in the twentieth century began to expose the fact that we were not just thinking about our technologies, we were thinking (naively) *in the terms conditioned BY those technologies*. From the camera obscura to the television to the internet: unless we can somehow think reflexively about our own thought, we will invariably be involved in the surreptitious inscription of a medium's

operational parameters into our own conceptual parameters. Media philosopher

Friedrich Kittler writes:

It is precisely because the opposition of form and matter stems from technology, not from natural and living forms, that ontology systematically excluded media technologies from its domain. The togetherness or concrescence of these two categories in one and the same present thing suppresses all distance, absence, and nihilation from its entelechy. (Kittler 2009)

It should become clear that a key component of the illusionism inherent in ‘hidden causation’ and our vulnerability to that illusionism *relates to this omission*. Exposing deep mediative structures will demonstrate the manner in which magical thinking very naturally proceeds from unproblematic internalization of these methods insofar as they have been transported into thought by metaphor. Media are magics, and magics are media.

Part I: THE ART OF HIDDEN CAUSATION

Magic is no more than the art of employing consciously invisible means to produce visible effects. Will, love, and imagination are magic powers that everyone possesses; and whoever knows how to develop them to their fullest extent is a magician. Magic has but one dogma, namely, that the seen is the measure of the unseen.

The Magician, W. Somerset Maugham

(Maugham 1956, p 34)

Glossary

The Two Magics Problem: The misleading assumption that there is a “real” and a “fake” magic, typically divided between the camps of occultism and prestidigitation. It is a false problem, over-conditioned by a tacit rationalist dualism, which, when exposed becomes **The Many Magics Problem**.

The Many Magics Problem: The legitimate problem of providing a general definition (or heuristic) to the myriad phenomena deemed “magical”.

Para-Optic: Pertaining to the optics of imagination. Similar to “virtuality”, while emphasizing a visual dynamic, subject to trickery and illusion in the same way that the eye is.

Natural Magic: An early name for science, and a forerunner to the concepts of clear magic and meta-magic.

Clear Magic implies a “diaphanous” understanding of illusion and fiction, how they condition us, and how to reduce their influence without eliminating them, in order to encounter phenomena of the world with minimum bias, and yet with a retention of the capacity to communicate, a necessarily illusion-producing activity. **Clear Magic** exposes the **Two Magics Problem** and resolves the **Many Magics Problem**. It is an updated, *aperspectival* form of **Natural Magic**.

Meta Magic is synonymous with **Clear Magic**.

Chapter 1: In the Garden of Forking Paths

There is no direct, single route that will take us to the heart of the question “what is magic?” It is not an idea that, at the end of the day, will find repose in a definition. And yet, despite this, I am seeking a general account: a point of convergence where the many magics agree. The very idea of the art necessarily side-steps definition because, as we know from its storied past,²¹ the act of *defining*, of *delimiting*, of *naming* is a magical act. The giver of designations, the setter of parameters, the framer of frames, we will often call a magician, but even that label is provisional. The function may be just as adequately performed under other names, through other titles, and in other contexts than those deemed “magical” in the popular sense. But still, we wish to give a general account of magic. Not even the wielder of magic *has* to consider it by that term, for it to still be what it is. Magic disappears and reappears, as that is its nature. In all cases of its appearance, whether the title “magician” is embraced or rejected, magic plays out differently, because the arranger and the arrangement are differently disposed by virtue of their context. The term “mercurial”, applies, both as a descriptor of the topic’s elusiveness, and as an explicit nod to Hermes, the god with whom the Greeks associated the subject. The masks and draperies of the theatre of knowledge, memory and meaning are all so many magical props, regardless of how the show is being billed. All the shows are different, and yet the fact remains: mediation. Magicians are middle men: they intercept the world at the level of its most basic rawness, they dress it up in costumes and they put it onstage,

²¹ The most common perhaps, being the story of the Egyptian god, Thoth: lord of magic, and inventor of the alphabet; equally pertinent is the so-called “Adamic” language, which in Abrahamic mythology proposes a unique human moment in which all the things under heaven were named, and ordered, in a language that now, if we were to understand it, would be the key to controlling those same beings. (Agamben 2009, p 35)

effectively creating a world of meaning for their client. They engineer miracles from the imperceptible to the audacious. Magicity, on this level, is ubiquitous.

This Part, “The Art of Hidden Causation,” which bears the name of the thesis itself, establishes, through a plurality of nonlinear approaches, an understanding of magic in its relation to language, memory, metaphor, and agency. There are contrasting definitions of magic, there are comparisons between magical genres, there are diverse ideas drawn from fields both academic and popular which form a polyphony of insights. The aim is to weave a ball of considerations, alive and dynamic, and to tease out tensions and lines of inquiry that are latent, potential, and creative. The labyrinthine vignettes of Jorge Luis Borges haunt this section, both tacitly, and at times, explicitly. If magic is mediation, and mediation is the means by which we scaffold a world, then this is a strange world, constructed by strange workers, designed by strange architects.

When we consider that worlds of meaning (nationalities, identities, social narratives, calendrical devices, metaphors, idioms, etc....) are crafted rather than discovered, we are thinking as magicians. When we accept them as *natural*, we are essentially *fools*, in the sense that a fool is the audience, the innocent, the enchanted. There are no pure magicians, and there are no pure fools: life is a turbulence of guile and belief. We need folly on one level to entertain the idea that our language means something, and we need magic to produce those meanings. Thinking about magic, writing about magic, re-presenting magic *changes magic* by feeding its image right back into the maelstrom. Magic cannot be pinned down because it dwells at the threshold of our capacity to represent. It is in the volatile space that connects to our various drives, before we have come to terms with, before we have named and ordered

them. Magic hovers around the body, haunting the flesh of things: neither completely manifest, nor completely abstract. It pertains to acts carried out through the medium of communication, presentation, and performance; acts performed invisibly, such that the results wind up appearing spontaneous and effortless. Charms, sleights, incantations, advertisements, symbolisms, anthems, evocations, projections, codes, and secrets: tools to fabricate worlds. All the fields of magic converge on this point. Magic is the art of hidden causation.

Reminiscent of Jorge Luis Borges' short story, 'The Garden of Forking Paths', the subject is labyrinthine, turbulent, and never alike twice; each investigation explores it, expresses it in part, and leaves a wake behind it that disturbs the subject itself, changing it for the next explorer.

The Garden of Forking Paths is a picture, incomplete yet not false, of the universe such as Ts'ui Pên conceived it to be. Differing from Newton and Schopenhauer, your ancestor did not think of time as absolute and uniform. He believed in an infinite series of times, in a dizzily growing, ever spreading network of diverging, converging and parallel times. This web of time - the strands of which approach one another through the centuries - embraces *every* possibility. We do not exist in most of them. In some you exist and not I, while in others I do, and you do not, and in yet others both of us exist. In this one, in which chance has favored me, you have come to my gate. In another, you, crossing the garden have found me dead. In yet another, I say these very same words, but am an error, a phantom. (Borges 1962, p 100)

Magic's nature is chaotic. It embraces contradiction, and fuels itself on anecdote: it is *universal method*. It attempts *complete* adaptability. Magic is the psychology of the simulacrum. A process that lives in the vertiginous possibilities of thought. It keeps possibilities open and in motion, even as it calls on magicians to conjure and to spell, to gain some temporary grasp on unending flux. Magicians are turbulences: eddies in the stream of time. This fluid theatre is erected on change and simulates stasis. It cultivates encounter on its own terms and lends itself to the universalization of

principles: a magical illusion that deemed (by many) to be the essence of the human.

We are simulation, knowingly or not. Consider the following description of the simulacrum from Deleuze:

There is no longer even right opinion, but rather a sort of ironic encounter which takes the place of a mode of knowledge, *an art of encounter that is outside knowledge and opinion*. Plato specifies how this non-productive effect is obtained: the simulacrum implies huge dimensions, depths and distances that the observer cannot master. It is precisely because he cannot master them that he experiences an impression of resemblance. This simulacrum includes the differential point of view; and the observer becomes part of the simulacrum itself, which is transformed and distorted by his point of view. In short, there is in the simulacrum a becoming mad, or a becoming unlimited... (Deleuze 1994, p 258, my italics.)

An art of encounter that is outside of knowledge and opinion, a tacit stagecraft on the level of metaphor establishes the theatre of relations, in which terms like “truth” become meaningful. We animate the world with our imaginations. This is sorcery. *Episteme* and *ontos* are indistinct here. Knowledge and reality merge, in a dizzying abyss. *Force* suffuses both in a dance that is at once tangible, consistent, *and* dream-like: infused with imagination, memory, and yet beyond us, real. Illusions have a pragmatism that allow us to buffer ourselves from the deep noise, to filter a live-able illusion. We forge the world out of illusion. Out of magic. The important thing for magic is not *how* we obtained a world, but rather *that* we have one, and that it keeps us safe from chaos. The effect is all important. The cause can be forgotten.

Magicians are notable in seeking to become the flux, embrace it, ride it, even if for an ephemeral moment while their spells and spellings hold. Such experiments offer newness, novelty. *Become unlimited*, the art promises. Magic can, in the throes of its dance, bring about wholly new constellations of thought and experience. Magic, in its

live state, is powered by *difference*,²² expressed in change: the order of the simulation overcomes its own limits. If, for the sake of resting its turmoil, magic allies itself to the *same*, it becomes ideology; still *illusion* but now entrenched, now fixed like a gnomon, under the evaluative regime of Truth and Falsehood:

Ideology only corresponds to a betrayal of reality by signs; simulation corresponds to a short-circuit of reality and to its reduplication by signs. It is always the aim of ideological analysis to restore the objective process; it is always a false problem to want to restore the truth beneath the simulacrum (Baudrillard 1983, p 48)

Magic is simulation; virtuality; phantasm: it is the affirmation of simulation as the basic state of human meaning.

These “postmodern” approaches, and others, contain the seeds of our budding contemporary magical philosophy. Magic has been re-awakened to activity by the facts of mass mediation, propaganda politics, proliferate technological gimmicks, and the realities of global warfare. Christopher Lerich writes:

I have tried to show that magic continually manifests similar impulses and constructions to those we associate with mainstream philosophical intellectual trajectories, particularly those loosely called “theoretical”. By encountering magical thought *as* theory, rather than as an object to be analyzed through theory, we come to a new understanding of thought that looks back at us from a fun-house mirror.... let me note the problem with mirrors: barring an external certainty not to be found in differentiation, one cannot know which is the original and which the distorted reflection. To exclude from philosophy, the vast range of endeavors to which the sign “Magic” has pointed requires that we already know how to distinguish. (Lerich 2007, p 182)

Magicians of the stage are tasked with portraying miracles by means of elaborate special effects. How can we reconcile “fakery”, of this sort with the esoteric magics which draw on symbol, dream, and vision? “Special effects” have a renewed role in a

²² “...[T]he first difference between magic and other types of intellectual system is that magic takes irreducible difference, as between sign and referent or signifier and signified, as a principle object of thought”. (Lerich 2007, p 166)

depolarized vision of magic, as they appear safely framed upon a stage, but also as infiltrate our social spectacle wholesale, finding expression in film, propaganda, war, and marketing. These effects can range from the audaciously visual to the subtly semantic, from eye candy, to hypnosis. In this space, where the external techniques of the prestidigitateur dance with the more internal techniques of esotericists, a substantially more un-nerving vision of the power and meaning of magicality comes out. Concerning this deeper, politically charged magic, which lurks behind and beyond the somewhat facile “Two Magics Problem”, Aaron Gach, co-founder of the Centre for Tactical Magic, in an online essay entitled *Raiders of the Lost Arts*, writes:

[T]he marketplace misdirects our inquest. If you walk into most any used bookstore and ask for books on ‘magic’, you’ll typically be asked, “What kind?” A response of, “Both kinds,” will get you a brief a look of surprise followed by directions to the “Entertainment, Games, Hobbies, and Pastimes” section as well as the “New Age, Occult, Mysticism, and Other Religions” section. This is your first clue along an adventuresome path that’s historically shrouded in mystery, deception, control, and secrecy (in no particular order of preference). It is also your first test as an aspirant in the realm of magic, a world that mixes entertainment and other religions into a powerful potion... From military manuals to marketing primers, we find evidence of the accumulation of a grand caché of magical knowledge derived from stagecraft and occult sciences. Why is it then that we so readily dismiss ‘magic’ in all of its abundant permutations? What are we taught about magic, and what examples are consistently peddled to us in the cultural supermarket?²³ (A. Gach 2000)

Distorted mirrors, refraction, labyrinths of quasi-representation all support a hyper-mediated apparatus of encounter. Those thinkers who have allowed difference into the heart of their ontologies have begun the work of thinking the infinite in its dynamic, cyclical, *realness*. It is a project at once realistic and surrealistic, embodied and virtual, and it holds out the eventual promise of a kind of master-arts science, an adept inter-disciplinarily. Lerich writes:

²³Quoted from “Raiders of the Lost Arts” appearing on the Author’s website, as of May 20th, 2015.

European historians distinguish among a range of magical modes, all in continual use throughout the occult renaissance. At the same time, we must not be blinded by the naive claim that such distinctions arise simply from the material. As we have repeatedly seen, these divisions were often mattering of contestation, whether in the service of further precision in classification or of synthetic overcoming. If historians hold to native disciplinary divisions, it is for reasons of methodological utility rather than accuracy as such - and the magicians themselves might rightly lay claim to interdisciplinarity. (Lerich 2007, p 159)

Magic eludes capture by blurring the lines between contemplation and action. There is no split, no mind/body divide possible in the embrace of the simulacrum, the phantasm. The simulacrum *is* the phantasm. It is none other; an intermediate zone of proliferate image: real, but not substantial, capable of displaying a logic, but not rational. Deleuze writes:

Simulation is the phantasm itself, that is, the effect of the functioning of the simulacrum as machinery - a Dionysian machine. It involves the false as power, *Pseudos*, in the sense in which Nietzsche speaks of the higher power of the false. By rising to the surface, the simulacrum makes the Same and the Similar, the model and the copy fall under the power of the false (phantasm). It renders the order of participation, the fixity of distribution, the determination of hierarchy impossible. It establishes the world of nomadic distributions and crowned anarchies. Far from being a new foundation, it engulfs all foundations, it assures a universal breakdown, but as a joyful and positive event, as an un-founding. (Deleuze, 1990, p 267)

Magic is a kind of infinite *ingress* of so-called “conjuring” (illusionism, phantasy) into the very foundations of perception, mediation and understanding; an act which casts all those foundations into doubt and forces us to rethink our relation to time, space, body, and language. A vertiginous delirium. Magic blooms in the space of a universal *un-grounding*. In this respect it is the ultimate first response to confusion. In the space of perpetual flux, physical and social bodies must negotiate the deepest of our mysteries: our relationship to *time*. We must learn again (and again, and again...) how to endure, how to command and exploit, how to *guide* time. We do this through

enchantment. Through the mediation of language, we construct semi-stable narratives within which we, and later generations, will think, act, live and die, live out the times of our lives.

If we are to truly engage with magic as interdisciplinary, then we are already de-facto magicians. We link, yoke, and explore diverse spaces without restriction. Limitation is a tool, far more than it is a rule²⁴. We are, as interdisciplinary “magicians”, seeking to probe a method of meaningful encounter that deals at once with the intrinsic features of human sociality (language, literacy, numeracy, belief), and the production of spectacle. The human and the non-human form a principal tension which, though not always discrete, seems to be at the heart of our striving for, and implementation of, meaning-by-means-of-magic.

²⁴ Take for example the mediative logic of names and naming, which pick out and delimit forms from flux, furnishing to us a graspable entity for our understanding. The malleability of names themselves: the variety of ways we can change them, load them, or erase them, seems to me to fold back into the primary matter, and to “cogniform” it.

Chapter 2: True Names

Consider that forces have a reality, and that naming captures that reality for use within a humanized method of meaning-manipulation. If so, we can say that magic is essentially the threshold discipline between humanized meaning spaces, and the wilderness of the pre-semantic. Magic guards the entrance to the specifically human environment, composed from abstract meaning and the assumption of essences.

Giorgio Agamben recognizes two modalities of the magical function of the “true name.”

Magic is essentially a science of secret names. Each thing, each being, has in addition to its manifest name another, hidden name to which it cannot fail to respond. To be a magus means to know and evoke these archi-names. Hence the interminable discussion of names (diabolical or angelic) through which the necromancer ensures his mastery over spiritual powers. For him, the secret name is only the seal of his power of life and death over the creature that bears it... According to another, more luminous tradition, the secret name is not so much the cipher of the thing's subservience to the magus's speech as, rather the monogram that sanctions its liberation from language. The secret name was the name by which the creature was called in Eden. When it is pronounced, every manifest name - the entire Babel of names - is shattered. This is why, according to this doctrine, magic is a call to happiness. The secret name is the gesture that restores the creature to the unexpressed. In the final instance, magic is not a knowledge of names, but a gesture, a breaking free from the name. That is why a child is never more content than when he invents a secret language. His sadness comes less from ignorance of magic names than from his own inability to free himself from the name that has been imposed on him. No sooner does he succeed, no sooner does he invent a new name, then he holds in his hands the *laisser-passer* that grants him happiness. To have a name is to be guilty. And justice, like magic, is nameless. Happy, and without a name, the creature knocks at the gates of the land of the magi, who speak in gestures alone. (Agamben 2007, p 22)

On the one hand, if you can impose a name onto a complex of forces, you can abstract it from its context, imprison it within a triangulation of dialectic analysis, and

bend it to your will.²⁵ On the other hand, knowing the name of a force (which is to say knowing how we have NAMED the force, picked it out, made it discrete and conceptually isolated), allows us to un-name it: to grant it its freedom and allow it to flow back into the field of interdependent relations, where we can go about thinking it, *encountering* it in its complexity. The capture flow moves from gesture into name, across the threshold of meaning, and the release flow moves from name back into gesture across that same threshold. Is this so different from a prestidigitation that relies on imparting crystal clarity, through word and gesture, to *some* facets of an act, while leaving key others unmentioned, unnoticed?

²⁵ Compare this to the account, given by Louis Althusser, of how the adoption of subjecthood operates to instantiate a pre-supposed Subjecthood, which functions as a constraining ideological matrix. He gives the following example: "I address myself to you, a human individual called Peter (every individual is called by his name, in the passive sense, it is never he who provides his own name), in order to tell you that God exists and that you are answerable to Him. It adds: God addresses himself to you through my voice (Scripture having collected the Word of God, Tradition having transmitted it, Papal Infallibility fixing it for ever on 'nice' points). It says: this is who you are: you are Peter! This is your origin, you were created by God for all eternity, although you were born in the 1920th year of Our Lord! This is your place in the world! This is what you must do! By these means, if you observe the 'law of love' you will be saved, you, Peter, and will become part of the Glorious Body of Christ! Etc...." (Althusser 1971, n.p.)

Chapter 3: Concealed Causes

The descriptive moniker, “the Art of Hidden Causation,” contains a nod to both the secular sense of prestidigitators performing illusions, and the sacred sense of wizards directing mysterious and arcane power. Although, on one level of analysis, these two magics would appear to be polarized ideologies supporting divergent world-pictures (materialism and idealism, to put it *very* roughly), I have found they form one practice: framing and presenting worlds of meaning, which appear to the observer as completely natural, though extraordinary. The hallmark of the magical is that it presents a clear effect or meaning, which has the appearance of having simply ‘happened’ or arisen without antecedent cause. It is in this sense that magic of *any* kind is an art of hidden causation²⁶. Magical effects have the appearance of instantaneity and effortlessness precisely *because* their causes are concealed.

We can view prestidigitation as having three general categories that cover the different possible means by which the antecedents to a state of affairs may be made invisible.²⁷ They can be extended as concepts to magics outside of the performance

²⁶ We can connect this to mediation by means of an account of *practice* as productive force. Mediation in this sense is more than a re-presentation, it is itself production *ex-occultum*: the emergence of worlds in the practice of world-systems: “...Deleuze’s work is concerned with the problem of practice: How can we set creative forces in motion? How can we make philosophy truly practical? Deleuze finds the key in the investigation of power... Deleuze’s ontology focuses on the movement of being, on its genealogy of causal relations, on its ‘productivity’ and ‘producibility’. The thematic of power and production, then, occupies an essential position.” (Hardt 1993, p 117)

²⁷ We can, of course, divide the conjurer’s craft up differently, as this has been the pursuit of several authors, most notably Dariel Fitzkee, who, in *The Trick Brain* (Fitzkee 1944), composed a remarkable “engine” for creating original magic routines. In this model, there are nineteen different possible effects. These have numerous physical methods of accomplishment. Fitzkee has tried to associate 52 methods of accomplishment (or so) for each of the nineteen effects, as well as several “sets” of 52 items or props. He uses the cards to randomly generate three (or so) values: a prop, an effect, and a method. Because he allows for redraws, this is not a high stakes “dice man” scenario, but a playful way of eventually coming to an interesting “magic problem”, which he will solve by crafting a routine for it. This system is not perfectly symmetrical, as Fitzkee makes numerous adjustments and accommodations

context. The term “misdirection” is a general rubric that covers methods which are delivered by the magician in performance, particularly in terms of how they manage the audience’s attention.²⁸ The term “gimmick” is the general term for a hidden device used to accomplish illusions, and the term “gaff” refers to an object that is other than what it seems. These are three possible starting points, not just for prestidigitary magic, but also for an analysis of deeper modes of illusionism: marketing, spying, film-making, and worshiping (as just a *few* examples). All such have their corresponding misdirections, gaffs, and gimmicks.²⁹

The deeper you go, the more that surfaces of what we experience as real seem to depend on the creative forces shaped by magic. At some point “creativity,” “inspiration,” “production,” all *self-assert* themselves into manifestation. Magic is not a category, but a modality: a means by which things come into and out of being; magic is the crossing of a threshold, a universal methodology of manifestation and de-manifestation. Mediate and immediate. Appearance and disappearance. Self-assertion IS spontaneous production: of a coin, a rabbit, a nation, or a *concept*. It is fundamentally the same operation, and it is illusory. When an assemblage’s entire deep infrastructure is ignorable, invisibilizable, it functions to the psyche as magic

to the form. It is a lived tool, pertaining to a specific real-world practice, quite similar (and may be an intellectual descendent of) to the great art of Lull.

²⁸ We have another excellent example of systematization in Knowlin and Craver’s *The Secret Art of Magic* in which the authors give us the ancient Chinese texts *The Art of War* and *The Thirty-Six Stratagems* as organizational templates for a discussion of street magic busking, and misdirection. In the second of these texts, we are given a complete, thirty-six fold classification system for conjuring magic, which comprises a mapping of misdirection tactics onto ancient military stratagems, such as “clamour in the east, attack in the west”, where attention is overtly pointed away from the *location* of the magical move, and “cicada sheds its skin,” in which a decoy is used to misdirect the audience away from the *time* of the move.

²⁹ The cameras, lights, fake emails, elaborate cathedrals, and plastic hamburgers that these disciplines involve themselves with are all examples.

because it seems to self-assert in this way. In its subtle depths, magic goes unnoticed, and *yet* “normal” and “extraordinary” experience *alike* depend on it. If it feels like magic, works like magic, looks like magic, then it *is* magic.

The effect that there are non-magical human activities is in itself a magical effect. “Magick” is synonymous with a no-holds barred pragmatism, a universal method. If it is a *deliberate* act, it is a magical act. I am inclined to think that if it is *mediated* through a system of human meaning, then it qualifies as magic, whether it is being produced or consumed. This dissertation is particularly concerned with taking seriously this notion of magic as universally flexible method.

The supposed “two magics” are *both* fake, and also both *real*, and it is in the sense which this can be the case, that magic is best understood. For instance, despite the rationalist premise of performing magic - that an effect is shown which is apparently miraculous, and yet nevertheless has a rational explanation - performing magicians must rely upon intuition as a key part of the creative process, both in terms of effect design, as well as public presentation. The training of the intuition is as important an exercise as the training of the critical faculty. Dutch magician Tommy Wonder wrote:

Let's say that you want to work out a new effect, and at home you try various moves and sequences. You do it this way, you do it that way; and suddenly you feel that a particular way is, well - just right. This feeling that something is *just right for you* is, in my opinion, the primary basis for making decisions, and should never be ignored. Many great performers make decisions about their work solely on what they sense is right for them. They can't explain exactly why they do the things they do in a particular way - but it just feels *right*. This “right feeling” is a much better, more secure basis for deciding these things than any theoretical analysis can ever be. Of course, the amount of “feeling” you have will depend on how much natural talent you possess and how thoroughly this sense has been developed. If this sense is very small, then “feeling right” might be a shaky, possibly even a misleading basis for making decisions. If you should fail to develop this sense of rightness, it's probably better to forsake the performance of magic. Before you can hope that intuition

will lead you to correct decisions, it is first necessary to develop it as much as you can. The intuition, the feeling, must be developed by intensive practice and performance. If you fail to achieve this development, basing decisions on intuition will be an incorrect approach. (Wonder 1996, pp 2-3)

Intuition is only mysterious *because the body is mysterious*, and intuition is an embodied faculty. I consider that intuition is linked to an imagination that has been forged through a combination of experience and deduction, essentially the middle-space between induction and deduction. When it is properly fed, it can be an exceptionally accurate and rigorous tool for making informed decisions. For performers, for magicians, it is crucial, as Wonder has explained. For philosophers, as well, intuition is a crucial asset, and it casts the enterprise of thought in a strikingly lucid way. According to Henri Bergson:

“...an absolute could only be given in an *intuition*, whilst everything else falls within the province of *analysis*. By intuition is meant the kind of *intellectual sympathy* by which one places oneself within an object in order to coincide with what is unique in it and consequently inexpressible.” (Bergson 1999, pp 23-4)

Thought exists on a continuum between sensation, its most relaxed state, and reason, its most compressed. Where the channel between the two is well maintained, and sensory data is admitted, processed and ultimately used to fuel the generation of abstract ideas, intuition manifests as the accurate and direct engagement of the partially-mediate with the unmediated. This capacity to be *aware* of existential phenomena prior to conceptualizing them is related to an ethos of giving the sensuous its due, whilst still remaining rationally alert. It suggests precisely the state of affairs that Agamben indicated would be the result of freeing entities from the grip of *their own names*. It is the threshold magic that reconciles the “two magics problem.” It is the trained and embodied intuition: both rational AND imaginative.

Magic tricks, outside of the traditional boundaries of a show, can take on a level of subtlety that is both extraordinary and powerful. Learning to show tricks is a form of training for a skeptical adept-hood. The magician learns both rationally and intuitively how to work with individuals, and groups, and learns how perceptions are developed, effected, and transformed in an interactional context. Eric Evans, in his co-written text with Nowlin Craver, *The Secret Art of Magic: Strategy for Magicians*, writes: “When you begin to apply magic principles beneficially to your life outside of the performance of magic, then the title “magician” begins to acquire a much more profound meaning. You've stepped into the ranks of a very select few.” (Evans & Craver 2003, p 42). A master performer learns principles from their tricks that become life-affecting general strategies. In other words, magical knowledge is more than a segregated mode of entertaining spectators with tricks and illusions; it is, rather, a *general method of encountering events*.

An esotericist might agree. The techniques of ritual magic, the ceremonies, the symbols, impart an understanding of strategies and responses to life-events. The Tarot, for example, is best described as a memory storehouse of responses to a canon of scenarios, all of which people commonly experience: its divinatory function is secondary to its philosophical and mnemonic function. It is a play-book.

Ritual activity, be it esotericism or stylized magical performance, acts as an abstract pool out of which situationally relevant, pragmatic actions are drawn by the adept. It is the dramatic performance of a categorizational and taxonomic infrastructure. The magic becomes invisible, and yet the magician becomes increasingly able to master the situations of their world. In this way, play, illusion, deception, take on the role that they have always had in art and drama: they guide

what becomes *virtually*. The magician is a master of virtualities,³⁰ of illusions, but below the surface those illusions have a (kind of) reality.

Let us, then, entertain the possibility that magic, the *magicality* of magic, is neither “real” nor “fake,” as such, but something else. This is to propose an irreducible liminal category, one that exerts influence in itself, and is malleable to human agency. Commenting on the play between magic and illusion, Halifax lighting designer Mathew Downey Jr. is quoted as saying “Magic is not illusion, but illusion itself is *magic*.”³¹ Magic straddles the boundary between illusion and reality. It raises the question of whether a truth is worth positing in any absolute sense at all. Magic locates meaning in aesthetics and rhetoric. Especially in light of the pervasive nature of modern techniques of persuasion that use rhetorical and aesthetic strategies to form choices, a robust theoretical account of magic is essential to an understanding of contemporary, hyper-mediated life.

Magic tricks are fundamental to our thought. Virtually all that we have come to view as real is conjured into existence; not as a “fake,” necessarily, but as a partial truth. Magicians leverage hidden means of getting done what needs to be done, whether that is to entertain an audience, defeat an enemy, provide clarity to a community, heal, remember, or understand. Magicians of one stripe or another manipulate the appearance of reality, and in so doing *create that same reality*, insofar as it is a domesticated, human reality.

³⁰ And here we mean by “virtually,” what is through the medium of an indirect imaging system: the imagination, the para-optical, the phantasmic, the semiotic. The magician’s medium is the plasticity of thought in relation to imagination: control the imagination, and control the thought. *Control the thought, influence the behavior*.

³¹ A sentiment expressed in a personal conversation at “The Shoe” in Halifax, over a beer.

Magicians create worlds governed by principles which we do not find prior to the intervention of non-natural signs. I will put this differently: magicians have the ability to augment base level, phenomenological empiricism with virtual and actual structures that invisibly re-contextualize our experience and re-define the “real” on their own terms. Magicality envelopes experience in wonder, and then *steers* it from there. To *where* it steers it, depends entirely on the magician. To each their own ends, the magic is in the *method*. In this respect, magic is powerfully political, as its broader history will attest. Following *this* line of thinking, my work drew me toward investigating the most fundamental systems that allow for a collective world-view to be systematically composed, deployed, and propagated. These systems, broadly speaking operate on the level of social spectacles, analytic matrices, and world/human interfaces. We will explore many examples of magic at work on all these levels over the course of this thesis.

“Magic” is akin to a shadow, cast by an experience and modality of being that is incommensurable to the shadow. If we pick out the shadow in as much detail as possible, through as many of its different phases, then maybe, the right reader will go on to perceive the object that casts them: It is an immanent object, less of an object, even, than an event, and the site of an event.

Consider the following accounts of magic by Robert Neale, Jesper Sørensen, Ioan Coulianu, Aleister Crowley, and Arthur C. Clarke. Each is a different angle on magic, and despite that, they all have points of overlap.

Chapter 4: A Mesh of Magics

Dr. Robert Neale has a background in theology and psychiatry, as well as being a performing magician. He is a prominent voice for taking a deeper look into *all* magics, and expresses his interest in devising a universal system for a pan-magical understanding:

There are many kinds of magic-probably more than we could imagine. For this reason, I've chosen to refer to magic in the plural form, *magics*. This may seem a bit odd at first. But I think reference to magic in the singular, particularly among magicians has tended to limit our awareness of its depth and diversity. (Neale 2002, p 7)

Yet Neale affirms that the many magics are *themselves* illusions (p 7). They are nevertheless insightful. For our purposes, however, it is his definition of magic that is most important: “magic is play with mastery” (p 54). This being rather terse, he goes on to unpack it: “magic is the performance exercise of imaginative mastery that grants symbolic power over life and death by means of ritual control over change in the artful play of impossible effects of being, doing, and relating” (p 55). His definition, fleshed out, entails an emphasis on controlled imagination with relation to our fears and desires in such a way that we experience the “impossible.” The magician, like the therapist, is responsible for quelling and re-directing the anxieties of mortality. The magician is meant to be endowed with “mastery” over these forces, these anxieties. The key word here, however, is “play.” For Neale, magic is playful. It is about joy.

From my point of view, the performing or initiated magician is at least provisionally outside the magic during the production of it, but that state of estrangement is not a true, or final de-magicing of the magician. It is a bridge state, where the magician operates “out on a limb,” and if they successfully engage the

audience in the illusion, they receive prestige, and a mysterious power to extend their magical influence. Re-connecting the experience of watching magic with the experience of performing magic resurrects the *wonder*, which would otherwise be lost. To the magician, *this* connectivity with the audience is the true magic-within-the-magic. Magic is a phoenix: a magician steps outside of it in order to *perform* it, but then they re-engage it *within themselves* by satisfying the audience's need for *joy*. This response then empowers the magician, granting them *more magic*. It is a circulatory experience. The production and consumption of magic are thus part of an economy, and if you will recall our discussion of the Fool and the Magician, two venerable Tarot archetypes, you will remember that magic is not on either pole completely, but rather, it cycles through *both*, like a Juggler's weave. No one is pure on either side. Magic is there, is oscillating to some degree or other within *every* person: the capacity to create and experience magic; the capacity for make-believe, for *play*.

The field of cognitive linguistics, particularly what has been termed "second generation" cognitive linguistics, is a new one, with its origins in the work of George Lakoff and Mark Johnson. Cognitive linguistics is uniquely suited for studying magical systems. It focuses on embodiment and the role of metaphor in abstractions and in economies of mental space. Jesper Sørensen, in *A Cognitive Theory of Magic*, gives us his basic account of the function and nature of magical actions and thinking: "Magic is about changing the state or essence of persons, places, objects, acts and events through certain special and non-trivial kinds of actions with opaque causal mediation." (Sørensen 2007, p 32) Sørensen's emphasis is threefold: change of state, change of essence, and opaque causal mediation. The first two are necessarily entangled, but in different circumstances may be perceived as primarily the one or the

other. A change of essence is largely abstract: the target is now, following the magic, subsumed under a different category than it was previously.

Although Sørensen does not apply his methodology to magic “tricks,” his account is economical enough to apply to such secular magics, in addition to the sacred magics toward which it is primarily directed. I venture that “changes of essence” will be more commonly perceived in magic framed as *spiritual* and emphasized with an earnestness that is not usually present in secular magic. For sacred magic, essential change drives state change. In secular magic, essence change is also proposed, but it is almost always done with a level of tacit irony: the children say “abracadabra” and the magic coloring book has gone from blank to filled with colored pictures.³² There is an essential action that is playfully proposed as the cause, although in secular magic this is not usually believed. In spiritual magic, it is. The “essence” in secular magic is a fiction waiting to be exposed, implicitly expose-able. In either case, whether it is admitted or not, the magical moment has a discoverable cognitive structure, as Sørensen explains:

This manipulative and transformative aspect of magical action will place a substantial part of the analysis of magic in the realm of psychological or cognitive theories and explanations. Therefore, an analysis of the cognitive mechanism underlying human categorization and conceptualization is necessary in order to explicate what makes magical action special and to expose the systematic character of the actions described. (Sørensen 2007, p 32)

³²It is worth noting, nevertheless, that however ironic this attribution of magic to the essential action, might be, it is still utterly indispensable: since a magic trick without a magical action simply falls flat. There are reasons for this based on the psychology of misdirection... if I fake putting a coin in my hand and then open the hand to show it empty, spectators will correctly assume that I did not put it there in the first place, since the linearity of the display is unbroken. Cause to effect. The misdirection breaks that linearity: the moment immediately following the fake pass is *prolonged* while the magic gesture or word is performed, and a *new* linearity is interposed; *para-cause* to effect; from the moment of the *magical cause* to the moment of revealing the coin to be gone. However cynical we may be about magic's “realness,” we *must* include a magical action, a moment of opaque causal mediation, to achieve the psychological effect of magical surprise.

Such analyses entail an examination of the intricate networks of mental spaces that cognitive scientists have uncovered in even the most mundane of perceptual events. Normally, these are networks that have developed informally. In the case of esoteric systems, we will often find highly formal, architected and deliberate cases of these categorial networks. Sørensen's specification that the actions to which the magic is attributed be "special" and "non-trivial," is necessary to mark a perceptible category of magical activity that is distinct from non-magical activity. In some cases, though, I will argue that it is NOT necessary for a magical action to openly be viewed as special in order for it to be considered by the magician as magical.

Magick is the Science and Art of causing Change to occur in conformity with Will.

(Illustration: It is my Will to inform the World of certain facts within my knowledge. I therefore take "magickal weapons," pen, ink, and paper; I write "incantations"---these sentences---in the "magickal language" i.e., that which is understood by the people I wish to instruct; I call forth "spirits," such as printers, publishers, booksellers and so forth and constrain them to convey my message to those people. The composition and distribution of this book is thus an act of Magick by which I cause Changes to take place in conformity with my Will.)

In one sense Magick may be defined as the name given to Science by the vulgar.

ANY required change may be effected by the application of the proper kind and degree of Force in the proper manner, through the proper medium to the proper object.

...In the present state of our knowledge and power some changes are not possible in practice; we cannot cause eclipses, for instance, or transform lead into tin, or create men from mushrooms. But it is theoretically possible to cause in any object any change of which that object is capable by nature; and the conditions are covered by the above postulate.)

Figure 1: Crowley's Definition of Magic & First Postulate (1991, p XII-XIII)

Magic may be conceived of as a universal methodology of action, with “will” as the key factor. Accordingly, what makes magic magical is neither a supernatural nor a natural cause, but rather the degree to which an agent’s intent is satisfied by a set of actions, ritual or otherwise. The most notable and influential modern case of this “all deliberate action is magical action” philosophy is found in the work of Aleister Crowley. Crowley’s basic conception of magic is very simple: all willed acts are magical acts. “Every intentional act is a magickal act.” (1991, p XIII) This is a philosophical position which seems to derive to a great extent from Friedrich Nietzsche (whom he regards as a “white magician”) and Arthur Schopenhauer (whom he considers a “black magician”). For example, of the former, he writes: “Nietzsche expresses the philosophy of this school with considerable accuracy and vigor. The man who denounces life merely defines himself as the man who is unequal to it. The brave man rejoices in giving and taking hard knocks, and the brave man is joyous” (1997, p 78). Even further, he considers Nietzsche a prophet (1997, p 303). Of Schopenhauer, he writes:

The culmination of the Black philosophy is only found in Schopenhauer, and we may regard him as having been obsessed, on the one hand, by the despair born of that false scepticism which he learned from the bankruptcy of Hume and Kant; on the other, by the direct obsession of the Buddhist documents to which he was one of the earliest Europeans to gain access. (1997, p 75)

Bearing in mind that Crowley often seems to contradict himself (he speaks of Hume highly in other places), it is *pessimism* that is at the root of his distaste for Schopenhauer, a position which places him firmly in Nietzsche’s camp. He also contrasts Schopenhauer with Spinoza: “Let us leave the sinister figure of Schopenhauer for the mysteriously radiant shape of Spinoza! The latter philosopher, in respect at least of his Pantheism represents fairly enough the fundamental thesis of

the White Tradition.” (1997, p 76) Despite, though, his attack on Schopenhauer as a black magician, it is hard to escape the fact that the ontology of the will, and the magical philosophy that stems from it, was indeed articulated quite clearly by the philosopher:

This much is certain, that an anticipation of my metaphysics underlies all attempts at magic that have ever been made, whether successful or unsuccessful: in them the consciousness was expressed that the law of causality is merely the bond of appearances, but the essence-in-itself of things remains independent of it, and that if, from this essence and hence from within, an *immediate* effect on nature were possible, that effect could be brought about only through the *will* itself. But if we wished to see magic as practical metaphysics in accordance with Bacon’s classification, then it is certain that the theoretical metaphysics correctly related to it could be no other than my resolution of the world into will and representation. (Schopenhauer 1992, p 128)

Black magician or not, Schopenhauer appears to be right in this point: a magic which attempts to reconcile itself with science will be doing so on the basis of Schopenhauer’s metaphysics. Certainly, this is the case with Crowley. His objection is therefore not ontological at all, but teleological, and thus in direct descent from Nietzsche. Magic as will is thus identifiable as a philosophical tradition that is seeking universal method by means of understanding all phenomena as *forces*. Pessimism and optimism seem to define whether such a magic is conceived of (by Crowley) as good or bad, “black” or “white.”

A similar, though subtler account portrays magic as a proto-science of social control that targets human desire. Ioan Coulianu was a Romanian scholar of Renaissance magic, and a protégé of Mircea Eliade. In *Eros and Magic in the Renaissance*, he treats the subject of “erotic magic,” as it was developed by Giordano Bruno. In doing so, he showed the development of magic as a phantasmic discipline, whose principle mechanism is a fluid dynamics of spiritual circulation.

The concept that a vaporous *pneuma*, or spirit, circulated both in the universal macrocosm and the personal microcosm (where it was synthesized by a hypothetical organ called the *hēgemonikon*), is traced back to early Greek medicine (Couliau 1987, pp 4-11). The notion that this *pneuma*, when it is operating within a person, may be imprinted by imagination, phantasm, and then projected outwards from the eyes to a target, is traced to Marsilio Ficino's magic (Couliau 1987, p 28-9) By Bruno, however, we see forming a magic of orchestrated mass-social image manipulation. Couliau's account of the "demise" of magic in the Enlightenment points to the Reformation as a conservative force of literalism that constrained the imagination-laden constructions of the former period (Couliau 1987, pp 209-11) Nevertheless, it is important that, for Couliau, the erotic magic of Bruno is a blueprint for major elements of the contemporary societal order. Renaissance magic's legacy survives under other names.³³ The manipulation of phantasms which embody our fears and desires, is conspicuously present within the society of the spectacle, and so, for Couliau, a mass-media society like ours is a magician's playground:

...magic is a phantasmic process that makes use of the continuity of the individual pneuma and of the universal pneuma...Bruno is the first to exploit the concept of magic to its ultimate conclusions, envisioning this "science" as an infallible psychological instrument for manipulating the masses as well as the individual human being. Awareness of the appropriate "chains" enables the

³³ Couliau writes: "Three hypostases: magician, physician, prophet. They are indissolubly bound together and have no precise line of demarcation. The 'psychoanalyst' is also a member of the group, his sphere of action being confined to the illicit and the superhuman. Along with specialization and delimitation of skills, we would tend to say that the other two practitioners of Bruno's magic, the actual magician and the prophet, have now vanished. More probably, however, they have simply been camouflaged in sober and legal guises, the analyst being one of them and, after all, not the most important. Nowadays the magician busies himself with public relations, propaganda, market research, sociological surveys, publicity, information, espionage, and even cryptography- a science which in the sixteenth century was a branch of magic. This key figure of our society is simply an extension of Bruno's manipulator, continuing to follow his principles and taking care to give them a technical and impersonal turn of phrase." (1987, p 104)

magician to realize his dream of universal Master: to control nature and human society. (1987, p 89)

The key ideas in this account of magic are a) erotically charged imagination, and b) circulation. These function whether the paradigm supporting them openly acknowledges magic or not. This is what allows Coulianu to say:

Historians have been wrong in concluding that magic disappeared with the advent of “qualitative science.” The latter has simply substituted itself for a part of magic while extending its dreams and goals by means of technology. Electricity, rapid transport, radio and television, the airplane, and the computer have merely carried into effect the promises first formulated by magic, resulting from the supernatural processes of the magician: to produce light, to move instantaneously from one point in space to another, to communicate with faraway regions of space, to fly through the air, and have an infallible memory at one’s disposal. Technology, it can be said, is a democratic magic that allows everyone the extraordinary capacities of which the magician used to boast. (1987, p 104)

For Coulianu, it could be said, the flows of eros and imagination that constituted Renaissance magic are now operative within the institutions that maintain our hyper-mediated socius. Imprinting phantasms on the pneuma is not far different from propagating emotionally charged images across the media space in the form of advertisements or propaganda. The social order and the individual psyche are commensurated by these operations, in a perversion of the maxim “as above so below.”

In an essay entitled ‘Hazards of Prophecy: The Failure of Imagination’, the highly popular and influential science fiction author Arthur C. Clarke formulated a set of laws which addressed our concepts of possibility and impossibility, and of their

bearing on the relationship between technology and “magic.”

1. When a distinguished but elderly scientist states that something is possible, he is almost certainly right. When he states that something is impossible, he is very probably wrong.
2. The only way of discovering the limits of the possible is to venture a little way past them into the impossible.
3. Any sufficiently advanced technology is indistinguishable from magic.

Figure 2: Clarke's Three Laws (Clarke 1962, rev 1973, pp. 14, 21, 36)

The first two laws accomplish the task of highlighting our limited imaginations: when we restrict ourselves to the “possible,” we are setting the boundaries within which our own imaginations are limited. For this reason, a master of the discourse which operates within those boundaries is *likely correct* about what they assume to be possible, but on much less certain ground when they speak of the impossible, or that which lies outside of the already circumscribed model. We need to push our imaginations outside of comfortable models in order to discover where our limits really are. The third of the laws is the most famous. It positions magic as “technology that we don’t yet understand.” It supposes that the magic in question is deliberate (that is, craft; the work of intelligent design) and is wielded by technologists whose skill and knowledge exceeds that of the witness. The law does not say that such-and-such technology IS magic, but, rather, that it is indistinguishable therefrom. This leaves open the possibility, if we take it completely literally, that there may be a magic that is not a highly advanced technology, but simply *looks like* one. If one were to pursue this avenue, one could reverse the formula, and say “Any sufficiently advanced *magic* is indistinguishable from technology.” I’m not sure that this is helpful. I am inclined to suggest instead that “any sufficiently *obscure technique* amounts to magic.” Where all

these statements intersect is on the point of production and consumption: *techné* appears on the side of the producer, and naive magic on the side of the consumer. Magician and Fool once again, and once again, there is a third tacit “magic:” a Juggler’s magic of circulation, the economy itself, which constitutes the human worlds that are woven out of production and consumption, in expanding circuits around the moment of spectacle.

These three laws also inform us that we cannot assume laws of the universe in the negative. The conservatism of the elderly scientist results from a closure of scientific method around an *ideology*: the surreptitious slippage of investigation into presupposition. We can predict outcomes using what we *do* know, but we cannot predict that a certain outcome will never happen. This is the problem of induction, reframed. We should always be open to the unexpected, while at the same time trusting the mechanisms we have so far discovered. Finally, what appears impossible, or magical, must also have some set of causes and conditions that bring it about, so that it is not fruitless to look for these. It is possible to have spurious explanations, but not spurious experiences. Clarke’s “technology,” is a magical (or opaque) causal mechanism that has been aired out, or exposed. The technologist’s vantage point is a magician’s eye perspective on the means of causing change. Read this way, we could say that the designer of the iPad is a magician, and the consumer, their enchanted client. Or, put another way, the perspective Clarke offers would mark the difference between the *experience* of a miracle, and the *construction* of a miracle. But what is to become of us, when we ourselves no longer understand our own technology? Do we become enchanted by it? Will the experience of universal “magic” accompany a society that allows its own technology to get to far ahead of itself?

When our own technologies become sufficiently advanced, however... we (as individuals, and more broadly as social demographics) may begin to relate to them as if they were magic. Thus, instead of the “cargo-cult” scenario: of a “less advanced” species/race encountering a “more advanced” species, and subsequently interpreting them as wizards, (or gods) with magical powers, we have another scenario which is far more likely to actually occur: a state of becoming alienated from our own technology as it becomes increasingly sophisticated. In other words, magical thinking that immerses not as part of an extrinsic encounter with an other, but as part of an evolving dependency on the hidden causal mechanisms of our own mediations, and thus as a devolutionary response to an *intrinsic* encounter with our own technological productions. The more we devolve from the horizon of our technology’s evolution (A.I. for example), the more we become enchanted by the occulted aspects of those technologies.

Chapter 5: The Art of Hidden Causation

From my perspective, it makes sense to look at the human social world as magical, and at humans as operators of magical agency, potent to different degrees, and self-conscious to different degrees. The insertion of any *art* into intersubjective relationships can wear the name of magic, and even those who deny its existence are making almost constant use of it. The Art of Hidden Causation is the art of intersubjective manipulation, conscious or otherwise.

Social memory is housed in impersonal, world-generating structures.

Cognitive sociologist and calendar specialist, Eviatar Zerubavel writes: “Given its highly impersonal nature, social memory need not be even sorted in individual minds. Indeed, there are some unmistakably impersonal ‘sites’ of memory.” (1997, p 87)

These structures bear the mark of having been once created (perhaps during a cultural “hot” period, and perhaps initially by a single agent), but now, they remain in place due to passive participation and out of force of cultural habit. They are works of craft which have become culturally transparent, or invisible, and thus exert conditioning force over both perception and production: they shape the world subtly, and we do not typically see the mechanisms by which they do so. They function identically to the secret methods and mechanisms of the stage magician.

Magic is operative in the regulation of intersubjective relations. Often, the structures which support this regulation are no longer directly responsive to human agency; they are enchantments that have taken a life of their own, and outlived the enchanter: superstitions, fundamentalisms, and hidden frames of meaning. *Golems*.

This work is not a call to dispel or annihilate such structures: such a task is impossible and ill conceived. As such structures restrict us, they also form us. The best strategy for those who would escape such reified enchantments that have become despotic is to slowly wrestle an agency out of the mass of perceptual stimuli that can bend, shape, and remake the simulated world, and locate the focal point of this new agency in the *present*. It is more of a question of *outliving*, than it is of *overthrowing*...

The greatest magic trick is to make magic itself disappear. In the words of Vegas card man, Aaron Fisher, the height of mastery in magic is to make one's skill invisible: "Only the devoted will achieve the highest level of craft, then manage to conceal it completely" (Fisher, 2002, p 35). There may be no greater advantage to the art, than when it is superficially dispelled, yet still operative.

All this is consonant with the image of the trickster, perhaps the most fundamental magical archetype. This character is an endless parade of masques, a shape-shifter, a Loki. The modality of which we are speaking jumps ship from one social role to another; it is ALWAYS concerned with framing the narrative, circumscribing the possible and the impossible, and establishing how, in a given world-picture, things are and are not to be done. Magic is continually appearing, only to disappear and re-appear again in another guise. Exit prestidigitateur, enter occultist.

Chapter 6: Occult Systems

An “occult” magical system is typically a taxonomy of possible events, ordered and arranged with a hierarchical element, and also with a method by which components of the schema can be randomly selected, as in divination. It is in a sense a random-access ontology. Because the taxonomy comprises a whole, it serves to provide interpretations for virtually any event that can arise. It is not a taxonomy of specific things or objects; it is not exact, but rather loose. Each level of the system represents a role that is contributed to the total system: a kind of moment, a kind of encounter. Because *any* encounter can be cast into some role, interpretation within the human experience of duration becomes an interpretive filter for temporality. What is filtered out by the magical system becomes an element that enters into dynamic relationships

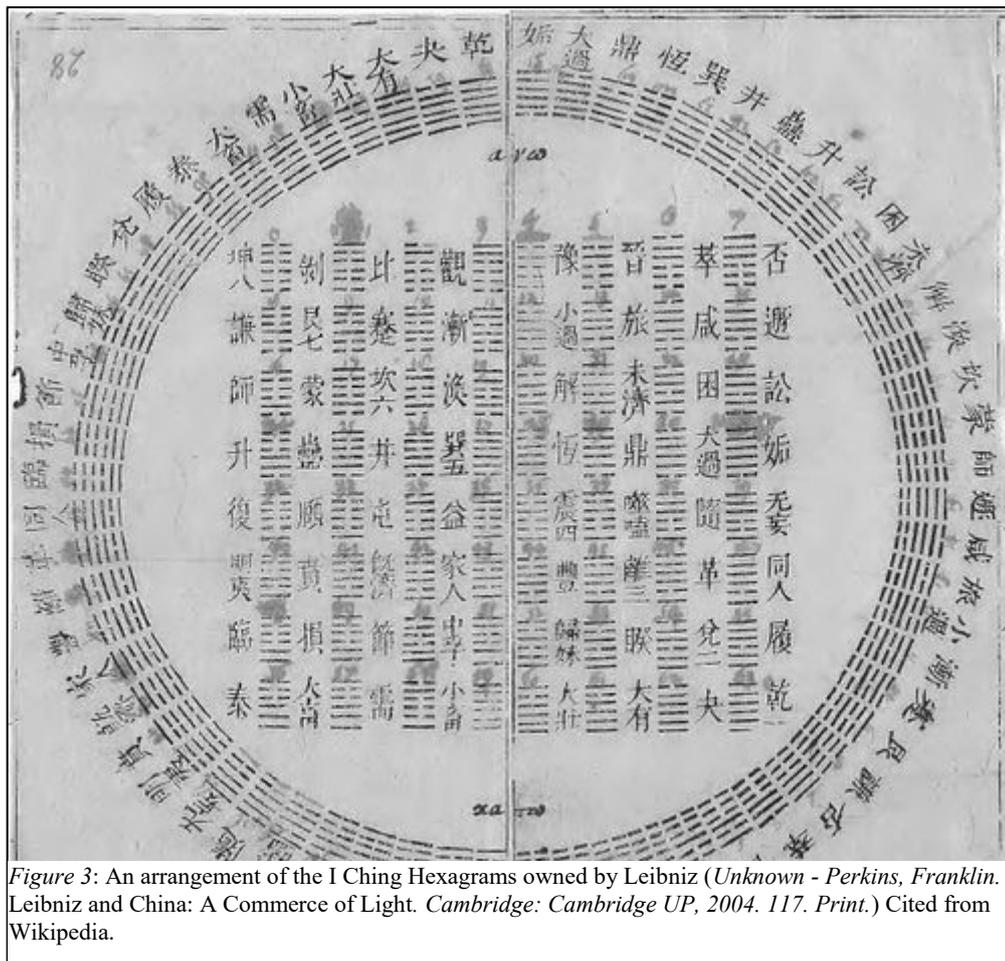


Figure 3: An arrangement of the I Ching Hexagrams owned by Leibniz (Unknown - Perkins, Franklin. Leibniz and China: A Commerce of Light. Cambridge: Cambridge UP, 2004. 117. Print.) Cited from Wikipedia.

with other selected elements. They are picked out by a synchronic *filter*, but are transformed by a diachronic progression, or *mutation*, of the selected elements that eventually results in transformational syntheses of these same elements into more and more elegant assemblages. As an analogy, take how the rules of chess are synchronic and transcendental elements of the game, which when progressed through a sequence of time-states (i.e. moves), result in an enormous number of variations. Patterns emerge, secrets are disclosed to the devoted. An esoteric, or divinatory system is a similar thing: as a synchronic system it selects elements that as a diachronic process, it unfolds, combines, refines and transforms. Alchemy. Magic of this sort is thus *diasynchronic*: a fusion of change and stasis.

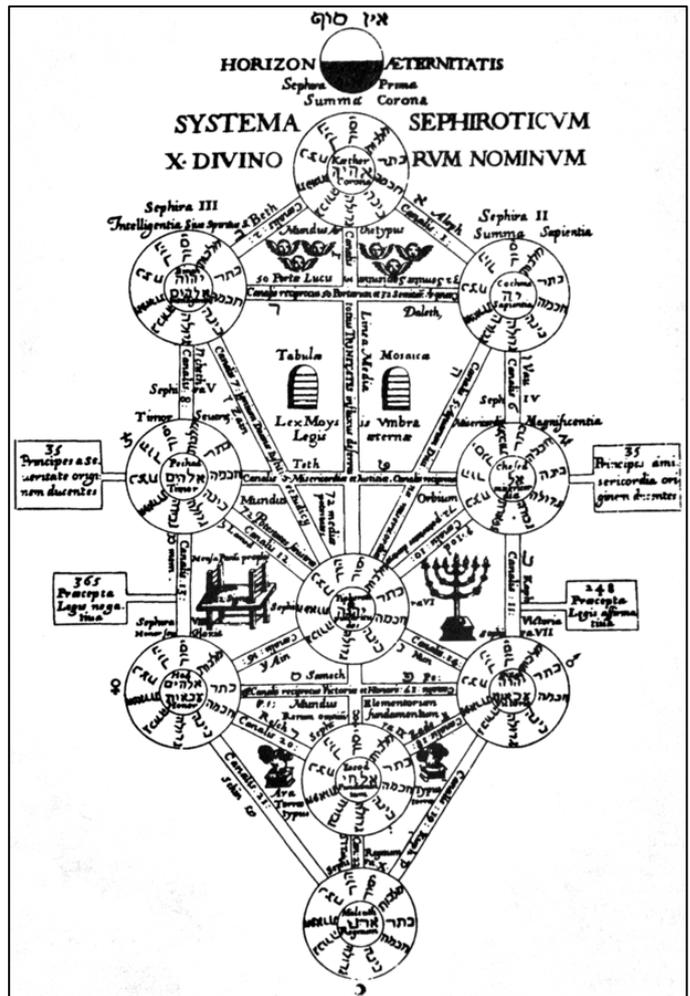
These apparatuses impart a spin on any *moment* such that it is transformed into new moments according to the pattern of the system. Rhetorical and aesthetic elements are part of a total matrix that makes a kind of stamp or print on the flow of time. A magical system is thus a time-conditioner that engages in a reciprocal dynamic between the production and consumption of events. Such systems are like game rules for reading meaning into moments: once they are adopted, the kind of moments that can be had are *prefigured* in the systems used to interpret them. Tarot, Enochian, Qabalah, Futhark runes, I Ching, astrology, geomancy, Goetic demonology, etc... these are all elaborate psycho-social *games*.

Cumulatively, the act of applying a magical system to the interpretation of the world becomes increasingly shaped, over the course of events, by that system's structure, its inherent biases, specializations, and aesthetic, as well as its compulsive elements, such as protection, reaction, and taboo. Magic does not affect *being* so much

as constrain *becoming*. Well-used magical systems have an ontological inertia of their own. It serves to bind the singular moment together within a larger arc of moments in such a way that the self, and its overall experience of time is composed in the same

Figure 4: The Tree of Life, as presented by Athanasius Kircher. (Image from Wikipedia).

basic image. *We are* our image of time. We see this in figures 3 and 4: two examples of totalizing universal schema; occult metaphysical schema. Eternity is the limit case of time, and so an eternalist structure is a kind of semiotic that acts *as if* it is “for all time.” Time spent as an occultist is subject to the modeling that is superimposed onto eternity as a moment-embracing-all-moments. The sum total of possible interpretations of a given moment in an open system is infinitely



infinite. The magical or mystical system reduces basic interpretations to a limited matrix. We derive more complex interpretations from combining the basic elements of that matrix. Esoteric magic is secret, contagious *theatre*.

Interpretation is a creative act. Esoteric or elemental combinatoria form a basis for interpreting moments. A thinker-in-words is limited to concepts. Another layer of

thought subtends the verbal, an elemental, experiential mode of thinking is in *direct* contact with events. The phenomenological experience of time will pass through the muscular, the visual and the aural levels of language in order to produce thought. The magical system represents a form of *arte*, or artifice, whereby a metaphysical schema of interpretation is installed in the sensory (primarily visual) and cognitive apparatus. Esoteric praxis can engage every sense, but the schema, or model, that binds the system together is almost always expressed as a visual array, even when that array can be activated, or stimulated, by sound, smell, or touch.

The imagination bridges immediacy and eternity. This is what the esotericist seeks to tame. From training the imagination into a manageable structure comes the possibility of construing a self-world relation that is at least somewhat stable. The imagination interprets sensation and informs conceptual formation. In many magical systems this taming process is designed to arrange the phantasmagoria into a singular synthesis, or bottleneck, whereby direct sensation passes through to abstract contemplation. The *Qabalah* is a strong example of this, as we saw in the Tree of Life diagram, above. The magical system sub-narrates each moment and assigns significance to each event in such a way as to form part of an overall web of significations, to which the system is both map *and* key. The illusion of timelessness arises when the schema so thoroughly saturates the consciousness that on the level of abstract cognition it achieves total, unproblematic integration. At this point the intermediate level is forgotten.

A magical system comprises a condensed mnemonic of responses to certain scenarios; by canonizing the possible scenarios that a person may encounter; a high number of contingencies can be stored in the associative memory relating to that

scenario. Tarot trump cards, with their rich symbolic language (associated as they are with the Tree of Life and the Qabalah), are an example of this.



Figure 5: The Juggler; An original card from the tarot deck of Jean Dodal, a classic "Marseilles" deck. The deck dates from 1701-1715. (Image from Wikipedia)

In an encounter, an unconscious process of identification occurs, so that the “class” of scenario is intuited, and possible ways of handling it arise spontaneously in the mind. This whole process happens almost instantaneously and is not particularly “magical” looking. The result is a structured tactical repertoire that not only deals with events as they occur naturally but *cultivates* certain kinds of scenarios. The result is a psychological magic, where the wily magician is enabled, all things permitting, to steer the formation of individual and social narratives. This has its benefits and its

drawbacks. It may be a healthy or pathological spin on the social body onto which it is cast, like a net. This is what it means to cast a spell, to weave an enchantment: to employ a sub-conceptual vocabulary of transformations that influences interpretation, progressively, with the goal of affecting events within a circulatory matrix of unconscious, hieroglyphic encounter archetypes.

Chapter 7: Magic, Fiction, and Qualitative Time

Both idealist and materialist explanations for phenomena suppose an idea of the “true” as a standard. From both vantage points, magical claims would seem to be consequently either ungrounded (the former) or impossible (in terms of the latter). Law assumes a fixed order of objective relations. Magic, I argue, involves an element of fiction as constitutive of the real.³⁴ The status of magic hinges on the status of fiction, and of art. Is fiction a lie, or is it a simple and literal truth? Clearly it is neither. Fiction is of a logic that runs contrary to the concept of law. Fiction is, in a sense, the essence of magic, and vice versa. Fiction suggests that we help to *weave* the fabric of what is real for us, and that *that* is actually more important, more fundamental, at least more *human* than “truth,” than the notion of a fixed and changeless order. Art and magic, in this sense, are the same thing.

The force, or reality (effect) of an illusion is a) at least semi-controllable, b) at least semi-predictable, and c) productive of novelty. Such a force is effective in its synthetic function more so than in its analytic function. A creative act asserts, or rather inserts its differential into the movement of forces in a state of affairs. Creative acts are participatory co-creations. Magic is a particular manifestation of aesthetic force. Its efficacy shares more with the efficacy of an artwork than it does with the efficacy of a machine, or of a logical relation.

³⁴From the *Online Etymological Dictionary*: “early 15c., *ficcious*, ‘that which is invented or imagined in the mind,’ from Old French *ficcion* ‘dissimulation, ruse; invention, fabrication’ (13c.) and directly from Latin *fictionem* (nominative *fictio*) ‘a fashioning or feigning,’ noun of action from past participle stem of *ingere* ‘to shape, form, devise, feign,’ originally ‘to knead, form out of clay,’ from PIE **dheigh-* ‘to build, form, knead’ (source also of Old English *dag* ‘dough;’).” (Harper 2001-2016)

Henri Bergson was concerned with our use of static concepts to account for dynamic forces. In his view, we have assembled our knowledge backwards: we have mistakenly proposed the measurement to be the ground and the ground to be the measurement:

Space is not a ground on which real motion is posited; rather it is real motion that deposits space beneath itself. But our imagination, which is preoccupied above all by the convenience of expression and the exigencies of material life, prefers to invert the natural order of the terms. Accustomed to seek its fulcrum in a world of ready-made motionless images, of which the apparent fixity is hardly anything else but the outward reflection of the stability of our lower needs, it cannot help believing that rest is anterior to motion, cannot avoid taking rest as its point of reference and its abiding place. Therefore, it comes to see movement as only a variation of distance, space being thus supposed to precede motion. (Bergson 1991, p 217)

Time and space, motion and fixity, quality and quantity. Quantification, accordingly, is essentially a limit case of the measurement of *quality*; quantification is applied retroactively in our intellectual endeavors as the ground of phenomenal experience, where the mobile, originary ground, *the commonly sensed*, is treated as secondary. This operation applies to the concepts of time and space. Bergson's argument shows that we are making an error in judgement when we consider time as a secondary attribute of space; instead, we should look at it the other way around. First order time, however, is not the time of clocks and calendars, but the time of experiential (or *nomadic*) becoming. Bergson called this time, or rather this sheath of many times,³⁵

³⁵ He writes: "This imaginary, homogenous time is... an idol of language, a fiction whose origin is easy to discover. In reality there is no one rhythm of duration; it is possible to imagine many different rhythms which, slower or faster, measure the degree of tension or relation of different kinds of consciousness and thereby fix their respective places in the scale of being. To conceive of durations of different tensions is perhaps both difficult and strange to our mind, because we have acquired the useful habit of substituting for the true duration, lived by consciousness, an homogenous and independent Time; however, in the first place, it is easy, as we have shown, to detect the illusion which renders such a thought foreign to us, and, secondly, this idea has in its favor, at bottom, the tacit agreement of our consciousness." (Bergson 1991, p 207)

durée. From the point of view of *durée*, there is both a consistency, as well as a spontaneity in our fundamental ontology, that of the lived. From the point of view of this qualitative and intuitive reality of time, there is an inherent continuity, and an irreducibility to the “same.” It exposes to us a world of time that is deeper and larger than the means by which we measure it. Bergson’s idea of metaphysics is an immersion in immanence, and, ultimately, the “art of the lived.”

From the standpoint of *durée*, magic as a para-real force makes sense. For Bergson, the actual state of affairs is affected by virtual forces which dispose consciousness to certain courses of development (amongst an array of choices). The co-extensivity of the past with the present *is* this virtuality. In other words, *memory* is virtuality: “Duration is indeed real succession, but it is so only because, more profoundly it is *virtual coexistence*: the coexistence of all the levels, all the tensions, all the degrees of contraction and relaxation.” (Deleuze 1988, p 60) Fiction could be considered a kind of virtual illusion with no opposite: the freedom to create and express. Fiction and the past are linked: it is only by virtue of fiction that we know the past, and what we know of it, we invariably fictionalize to suit our present. If this is akin to the self-directed illusionism³⁶ inherent in magical ritual, then we can begin to understand magic as neither supernatural nor a deficiency of natural intelligence. It would have all the force and capacity which a virtual assemblage - memory, fiction, phantasm - would have in conditioning the flow of becoming. Magic is a virtual pressure of *art*, brought to bear on *time*.

³⁶ The deliberate auto-hypnotic saturation of the “unconscious” with elements of a synchronic symbol-system.

Magical practices, such as reading meaning into tea leaves, or clouds, or drawing images meant to attract specific energies, exemplify habits that situate us as close as possible to the free development of experience from heterogeneous flux, *durée*. This is because such practices build thought onto *experience*, not simply onto thought. They are about the *quality* of the focused moment: its inherent, irreducible and dynamic uniqueness. To design a moment of experience is to facilitate magic. Inspiration is proportionate to our perception of this fundamental heterogeneity, and homogenous thought must continually avail of it, in private *gnosis*, in order to continue to grow and to be inventive. Thinking in terms of space is *empty* without a rigorous intuition of time.

Let's put this another way. When we encounter a series of events in the world, our bodies sense them first and foremost. Following from this encounter, we tend to link aspects of those events by means of likeness. Increasingly we form metaphors which link and network those events in terms that are informed by our growing stockpile of metaphors. First, they are simple, but they grow more complex. Our thinking then, begins to range across those associations we have already formed. It begins to deepen its operations, building on that initial foundation. A logic of causation through association is an imaginative causation, a para-causation, and it supports magical thinking. As this deepens, we relate more to the mental spaces we create than to the quality of the events. We treat events as members of a categorical class, and reason about those classes. In doing so, the domain of quality and sensation increasingly becomes a collection of nominalized "essences." We can dispense altogether with the primary content, a durative flux, and move toward comparing and contrasting categories which are imagined to be self-identical. The more abstract we

go, the more we move toward pure reason. The more rationalistic we become, the emptier these categories become. Science, then, as an empirical method attempts to turn back toward sensation as a ground for reason. Still, so long as the categorical apparatus is unexamined, a science that is uncritical of its own tacit mental spaces, it still relies on the associative mind which is largely formed out of para-causal relations. It thus interpolates categorical thinking into the flux of time: a non-categorical space. When the empirical scientific method begins to draw in aspects of the social sciences which deal with our categories, then we open up the capacity to view time in its givenness, and the process comes back round. I think this is the most effective way of taking responsibility for our projections of mind-onto-body, or put another way, our spaces-onto-times. The aim is to perceive time as an in-itself, with spaces emerging as a result of human thinking.

Chapter 8: Abstraction and the Mesocosm

I will float the notion that a continuum of progressively more tempered abstractions, more refined imaginings³⁷ mediates between direct phenomenological embeddedness in the sensuous and a hermetically closed system of signs. This is what Antoine Faivre suggested we call a *mesocosm* (1994, p 12). We could speak of order-0, non-abstraction, and order-1, pure abstraction, as the polar extremes, with this *mesocosm* occupying the entire intermediate range. In this way, imagination engulfs our world.

Order-0 awareness is the awareness of the flesh, alert and non-analytical. This is not an awareness readily conveyable through language. Philosopher Michel Serres excels in conveying the phenomenological empiricism of the undifferentiated act of sensation, by means of a poetic register. He writes:

Empiricism is a tailor, working locally, basting, thinking in extensions, from near vicinities to vicinal proximities, from singularity to singularity, from seed to layer, from well to bridge. It draws detailed maps as it traces paths, maps the body, the world and dressmaker's patterns: cuts out, pins, sews. Subtle and refined, it loves detail, its creations fragile. It is a topologist, having a sense for borders and threads, surfaces and reversals, never assuming that things and states of affairs are the same, more than a step in any direction, a weaver of varieties, in detail. (Serres 2008, p 227)

This primary empirical sense, a kind of universal touching, becomes broken into categories of relative-likenesses as the process of abstraction progresses. As sensate awareness fragments, we find the emergence of a logic of associative linkages,

³⁷ "...The imagination is that in which the passions, together with their circumstances, reflect themselves through the principles of association. In this manner, they constitute general rules and valorize things which are very distant, *beyond the tendency of the imagination*... Practical reason is the establishment of a whole of culture and morality... The *schematizing imagination* makes it possible, to the extent that the schematism manifests and translates three properties of the imagination: imagination is reflective, essentially excessive, and quasi-constitutive. But, at the other end, theoretical reason is the determination of the detail of nature, that is, of parts submitted to calculation... In this sense, reason is imagination that has become nature; it is the totality of simple effects of association, general ideas, substances, and relations." (Deleuze 1991, pp 64-5)

charged with meaning, marking the appearance of magical thinking. Quasi-logics proliferate in the mesocosm. Sympathetic magic interweaves with language and image. Meaning and *topos*, sense and flesh, are intertwined. Serres compares this to tattooing:

The skin, a single tissue with localized concentrations, displays sensitivity. It shivers, expresses, breathes, listens, loves and lets itself be loved, receives, refuses, retreats, its hair stands on end with horror, it is covered with fissures, rashes, and the wounds of the soul. The most instructive diseases, the sicknesses of identity, affect the skin and form tattoos that strategically hide the bright colors of birth and experience. They are calls for help and advertise their misery and weakness; we must learn to read the writing of the enraged gods on the skin of their victims, as on the pages of an open book. The alphabet of pathology is engraved on parchment. (2008, p 51)

Consider that if magic is a kind of world-creation on the basis of symbolic networks, and symbolic networks can be said to follow the evolution from immanence towards abstraction, then any world-creation practice *must* be located on one or several of the operational levels carved out by these networks as they grow out of the ground of sensuousness towards the domain of our categories. The flesh is domesticated by the combinatoria of similitudes. Zero is the sign of a quality of movement that transcends signs, just as it is the sign of a non-numerical number; the limit of quantifiability. It is *Apeiron*, the nullity of limit.

Order-1 intelligence, in this account, is the awareness of code. It represents the purest features of our mathematics, our metaphysics, but also our *restrictions*. It is akin to *peras*, limit. High abstraction reaches the terminal horizon of our humanity as semiotic animals. That which is pushed past its limits collapses, but that which collapses can often recover, and acquire higher limits. Pure limitlessness and pure limit are un-realizable to the living. They are *both* deaths. What exists for us, exists on

the bridge between *macrocosm* and *microcosm*: the *mesocosm*.³⁸ The mesocosm *is* the spectrum between materiality and ideality.

³⁸ There are thus two journeys through this intermediate space, both forms of magic: moving from 0 to 1 suggests a metaphysical, intuitive magic, and moving from 1 back to 0 suggests a physical, yet no-less intuitive magic. Bergson's intuition-as-method, and Deleuze's "transcendental empiricism" are examples of this latter journey through the *mesocosm*, the *mundus imaginalis*.

Chapter 9: Fortune-Telling, Randomness and Aesthesis.

Consider divination as method. Divinatory and oracular modes of thinking come in many varieties. For instance, we could identify certain methods as “direct”, or “open” divination such as tea-leaf reading, augury, entrail reading, and the like, which would seem to draw meanings directly from natural phenomena in flux. Other methods, such as astrology and palmistry, we could call “predictive,” but not divinatory. There are also trance-related methods of inducing and interpreting visions obtained through dreams, crystals, flames, clouds, or ink pool gazings, etc. Finally, there are what I will call the “exhaustive systematic methods” which I would class into two main categories: *sortilege* and *generated*. They are exhaustive because they contain a fixed number of elements and they are systematic because those elements are arranged in a metaphysical “rest state,”³⁹ prior to introducing the element of chance.

The common ground of both the *sortilege* and the *generated* types of divination is that a set of fundamental elements, synthesized into a total schema, is accessed randomly in some manner. The number of elements varies from system to system, as well as within systems, depending on the level of interpretation/resolution being used. What differentiates the *sortilege* method from the *generated* method is that the procedures for the former,⁴⁰ involve a *blind selection* of several elements, while the procedures for the latter⁴¹ involve undergoing a procedure that results in the *generation* of a figure. In both, we detect a dialectic between order and chaos. The

³⁹ A map of the encounterable points of contact between the system and reality.

⁴⁰ Examples include Tarot cards, runes, ogham staves, and others.

⁴¹ Examples include the *I Ching*, the *Tai Hsuan Ching*, the Yoruba *Ifa*, “Western” *geomancy*, and others.

theme is of a pre-existing order, scrambled, shattered, or just confused (the randomization), which is engaged by the oracle and reconstituted into sense (the interpretation). The diviner, and by extension their client, is taught to conjugate the disordered, or unknown, into symbolic syntheses, which operate according to tacit matrices.

The purpose of oracular systems goes beyond the particular interests of querants asking oracles for advice and becomes a way of knowing itself. This is in accordance with everything we have suggested above. The system in its rest state acts as a world model, or a comprehensive cosmological classification. Philip Peek, editor of *African Divination Systems*, writes that “Divination sessions are not instances of arbitrary, idiosyncratic behavior by diviners. A divination system is often the primary institutional means of articulating the epistemology of a people.” (Peek 1991, p 2)

The two examples of oracular system that I am most familiar with are the I Ching and the *Tarot*. The former is a geomantic oracle that consists of figures called hexagrams. These are made of six lines that can either be broken or unbroken and operate as a binary. There are sixty-four of these figures in total, each of which can be analyzed into a lower and an upper trigram, of which there are eight arranged around the points of the compass. These in turn resolve into either a majority of *yang* (unbroken) or *yin* (broken) lines, and so at the penultimate level of analysis there are two classes of phenomena. These are seen to be two expressions of a continuous whole which can never be made explicit. When the hexagrams are generated (usually by coins or yarrow stalks, but sometimes also by dice), for each line, or *yao*, the throws determine whether that line is “old” and will change into its opposite, or “young” and remain itself. In this way, any hexagram could in theory become any

other hexagram through one or more changes. The overall model, then, is a mathematical matrix which we might call “sound and complete,” in the sense that its generation rules can produce all the possible figures, and *only* the possible figures. So, in addition to being a mode of divination, it is actually a mode of analysis, where any given state of affairs, if its “signature” is known, could in theory be transformed into any other desired state of affairs. This of course depends on the texts that are appended to the hexagrams and the lines themselves; texts which function both as oracles, as well as ethical maxims: admonitions to the “superior man” as to how they would handle a given situation.⁴² The system becomes a moral code, where integrity is quite literally mathematical. I would argue that through repeated use, such systems create feedback loops between the oracle and the social body itself. The principles of the changes then write themselves into the social order, and the social order reifies the structure of the changes.

Compare this type of *generated combinatoria* to the *Tarot*, a *sortilege* system. The *Tarot* is much younger. Its earliest incarnation, the Visconti *Tarots*, emerged circa 15th century in Italy (Kaplan 2016), and its mature text is still evolving. The *Tarot* is a format that can wear many skins, some more, and some less profound. While it is not an exhaustive, procedurally-generated combinatoria, it is nevertheless a complete cosmological system. While it has evolved considerably in the 500 years since the first decks were painted, perhaps one of the most dramatic turns in its history involves the manner in which it became married to the Qabalah, and to astrological and

⁴² For example, in the commentary to Hexagram twenty-two, we read: “Below the Mountain, there is Fire: this constitutes the image of ... Elegance. In the same way, the noble man clearly understands all the different aspects of governance and so dares not to reduce it to a matter of criminal judgement.” (Lynn 1994, p 224)

numerological symbolism. The symbolization treatment it received by the members of the Hermetic Order of the Golden Dawn was particularly intense, leaving it with a canonical overlay of associations that are now commonly used for interpretation and meditation.⁴³ This arrangement depicts the *Tarot* as a representation of the elements of astrology in the form of an oracle. The seventy-eight cards are divided into twenty-two “major arcana,” forty “minor arcana,” and sixteen “court cards.” The roles of these different cards can be analyzed in many different ways, but the most basic would be as follows: the major arcana are pictographic lessons which are assigned to the three “pure” elements, “fire, water, and air,” the twelve zodiacal signs, and the seven classical planets. Contemplating the images on these cards fleshes out the canon of symbol and association, assembling into the astrological model. Of the forty minor arcana, four, the aces, are assigned to the four quadrants as a whole, and the remaining thirty-six refer to the *decans* or ten-degree parts of the zodiac. Lastly, the sixteen court cards refer purely to the combinatory relations of the four elements: fire of fire, fire of water, fire of air, fire of earth, water of fire, water of water, water of air, water of earth, and so on... These can also be considered an independent geomantic sub-system of the *Tarot*. *Tarot*'s strength is the manner in which it acts as a cue book for various pieces of lore, mathematical and mythological. It is also used to map the Qabalistic Tree of Life.

A consultation with the *Tarot* will draw a specific set of elements out of the total model, to form one of a large variety of possible configurations. This is termed a “spread.” The diviner will interpret the spread by performing a synthesis of the

⁴³ And which were published by Aleister Crowley in “Liber 777”, a series of Qabalistic correspondences, as well as “The Book of Thoth”.

elements, in consultation with the querant, to assemble a viable solution to the querant's difficulties.

Tarot and *I Ching* systems have an inner, or metaphysical corpus, *contemplated* by the diviner, and an outer, divinatory function, *interpreted* by the diviner. In both systems there is also a cultivating of the internal structure of the system into decision making processes; the oracle becomes a kind of underlying template of action for the social body. Both systems demonstrate that well-structured narrative can act as a sort of confusion filter: the consultation is undertaken because a solution to a given problem is not immediately obvious, and the random-access to a whole-model enables a dialogue that clarifies the situation. James Fernandez writes:

The diviner makes sense out of the afflicted world brought to his attention by rescuing sequence out of the muddle of simultaneity and synchronicity. For, in the end, if the client is to be brought to act, if not efficaciously, at least with some confidence, a sequence of activity must be proposed to him. "The cryptic potency" of the diviner's session, therefore, lies in its production of domesticated sequences of action out of the wild, existential simultaneity of experience. (Peek 1991, p 212)

Considering all this, we can say that an oracle is a whole model, engaged with chance, and used to analyse problem situations in ways that "spin" solutions which themselves reify the model. Again, a feedback loop. The spin of creative fiction is a value sequencer for developing coherent social interactions between persons. A common narrative, in other words.

Especially in the case of the *Tarot*, what we are looking at is an *aesthetic* system that functions to compact knowledge into an oral form (again, mounting it onto a patterned matrix). The symbols of the *Tarot* can be used as mnemonic pegs for storing information about the nature and relationships of different phenomena. Dr. Harsha Dehejia, an aesthete, or *Rasika* in the Indian tradition of art criticism develops

a cognate account of sacred art. According to Dehejia, the trained and prepared *Rasika* engages with an object of art not as a spectator but as a kind of participant in the creative process. Art emerges from *Brahman*, or god, by way of the inspiration of the artist; a process in which object and artist become at some point, one. The aesthete becomes one with that *same* work in the process of returning the inspiration to god, attaining higher knowledge, and completing the circuit, as it were. Dehejia writes:

...the direction of our endeavour [is] largely to uncover the dynamics of the initial cognition and subsequent experience of art, our purpose is to seek the *artha* [meaning] in art, and further to show that the entire artistic process from the artist to the aesthete, from creation to cognition, and from cognition to realization, is an unbroken *advaitic* [nondual] chain. (Dehejia 1996, p 2)

The canon is essential here. The art in question *must* fit the standards of the classical tradition. This canon stipulates which postures, numbers, symbols and the like are carriers of which aesthetic emotion. If the artist misses these points, then the work of art is considered a failure, and worthless. An aesthete who is not prepared to experience the *samvega* or “aesthetic shock” that accompanies an informed contemplation of the work, can be considered non-fluent, and will not be able to return the inspiration hidden in the work to *Brahman*. In the Indian classical tradition, this *advaitic* chain, which the contemplator aspires to complete, is a function not of the surface features of the art object but of the underlying codes that form the tradition itself.

... For art to be *advaitic* both the aesthete and the art object must meet certain criteria. In other words, the objectivity of the art object cannot be left undefined and open. Aesthetic experience stemming from an unspecified art object cannot be sustained under the *Advaita* of art. (Dehejia 1996, p XV)

I would argue that a similar process occurs with the *Tarot*: a canon of images with norms of expression is presented, and although it might be a beautiful object to

anyone, the images on the cards offer an opportunity for the diviner to experience a mythic mode of knowing that culminates in a kind of aesthetic *gnosis*.

Sometimes very specific exercises, called “path workings,” are undertaken in which the *Tarot* trumps are used as starting points for visualizations. In these visualizations the user will imagine themselves inside a landscape depicted by the card and engage in various ways with what they see there. This is considered a method to obtain intuitive knowledge about the meaning of the cards and to deepen the general understanding of the deck.⁴⁴ The symbols that spontaneously present themselves are decoded in a manner similar to how dreams are interpreted. When coupled with the randomization process, I would argue, something rather extraordinary occurs: it becomes possible to enter a dialogue with the oracle that combines an aesthetic union with the symbols and a combinatory synthesis. The reader must use their connection to the symbols as well as their synthetic skills, in combination with the querant, to compose a story that remains true to the spread but also assists in eliminating confusion. Judgement concerning optimal sequences draws from every possible source available, rational and intuitive alike. The oracle does not tell anyone what to do as such but provides an opportunity to come to clarity on questions that are unclear and provides a means of using narrative to gain one's bearings. The message ultimately is that *choice* is a creative and aesthetic act. It is an exercise in learning how to *spin events* into a metaphysically supported narrative.

Antoine Faivre speaks of the imagination as “a kind of organ of the soul, thanks to which humanity can establish a cognitive and visionary relationship with an

⁴⁴ It is also a means of making the Tarot into a memory palace.

intermediary world, with a mesocosm - what Henry Corbin proposed calling a *mundus imaginalis*" (Faivre 1994, p 12). When well-practiced, the use of imaginative mediations is tempered by an internal skepticism which seeks to match the oracle to what is rationally understood and empirically verifiable. This is why many diviners will also perform a sort of "cold reading" of their clients.⁴⁵ The oracle is interpreted in the light of what is already known through reason and common sense and corrected by it. The oracle is always being tested in the field.

⁴⁵ " 'Cold reading' means you start off without the slightest knowledge about the person and end up telling them a long list of personal data." (Corinda 1996, p 342)

Chapter 10: Spelling & Dis-Spelling

We perpetually enchant and disenchant ourselves, and the two movements are one. The contemporary mind is enthroned atop strata after strata of frames: narratives, world-pictures, forgotten metaphors, and buried cultural machines. We have woven about ourselves the very stories that give us time and space, purpose and meaning, and we have subsequently concealed our participation in this weaving *to ourselves*. We have naturalized our assumptions and made retroactively invisible the very ladder with which we have climbed to the roof. We have made our magic disappear, and now it enchants us surreptitiously. We are a palimpsest. Magic has this in common in all its forms: it makes a certain state of affairs look effortless and natural, by means of hiding, ignoring, or masking the true causal antecedents. As the author of the *Grimoire Legemeton*, famously wrote:

Magic is the highest, most absolute, and divine knowledge of natural philosophy advanced in its works and wonderful operations by a right understanding of the inward and occult virtue of things, so that true agents being applied to proper patients, strange and admirable effects will thereby be produced; whence magicians are profound and diligent searchers into nature, they because of their skill know how to anticipate an effect which to the vulgar shall seem a miracle. (Mathers 1997, p 21)

The claim made for magic is that it is a *secret science* and a *science of secrets*, which enables an operator to effect controlled changes in the experienced world in such a way that they seem to have occurred spontaneously. This is accomplished through a knowledge of how perceptible phenomenon are connected (framed), by us, below the surface of our awareness.

So, what is a frame? Consider a mirror. As a metaphor for magic, mirrors are famous: they reflect, replicate, and often distort the image of entities under presentation. What is often forgotten, however, is the importance of the mirror's

frame: a face in reflection in a mirror will be received very differently if the frame is of carved oak, then if it is of cheap plastic or metal. What's more, the frame is the aspect of the mirror that undermines the idea that the image is a duplication of the original. The frame says more about the *context* that the mirror (or painting) is found in, than the mirror itself. The image presents itself, but the frame suggests our tacit attitudes toward it. In other words, as we re-present perceptible phenomena as concepts, we place them, and dress them up, in such a way that they service our aesthetic sensibilities. Magic is, in my opinion less about mirrors, and more about frames. These frames mark the magical threshold between reality and idea, and in cases where, due to a proliferation of frames, there is no longer any concept of what constitutes the original, we enter a fully *phantasmic* space, an immersive simulacrum:

Everything has become simulacrum, for by simulacrum we should not understand a simple imitation, but rather the act by which the very idea of a model or privileged position is challenged and overturned. The simulacrum is the instance which includes a difference within itself, such as (at least) two divergent series on which it plays, all resemblance abolished so that one can no longer point to the existence of an original and a copy. It is in this direction that we must look for the conditions not of possible experience, but of real experience (selection, repetition, etc.). It is here that we find the lived reality of a sub-representative domain. If it is true that representation has identity as its element and similarity as its unit of measure, then pure presence such as it appears in the simulacrum has the 'disparate' as its unit of measure- in other words, always a difference of difference as its immediate element. (Deleuze 1994, p 69)

Such a web of sub-representative connections forms the hidden spaces of meaning and connection that we tacitly assume. Such networks link things together via metaphor, via symbol, via likeness. The links are normally invisible, occult. When we become capable of recognizing and operating these *mesocosmic* networks to attain our aims, we become magicians. In other words, while at first glance, we associate magical

miracles with the displays and claims that professionalized magicians⁴⁶ are tasked with, on a deeper level we find that, we are all of us, operating magically. This is because language is the first, most fundamental magic. It reveals worlds, just as it conceals them. Consider this: words themselves, *once we know them*, appear to come out of nothing, fully formed and granting their meaning to our thought as if it were always, already there. Linguistic meaning arises as fiat and epiphany, after which we cannot imagine the prior state. The archetypal creation *ex nihilo* begins with a word. Order is brought to chaos by means of a vibrating breath. Once we *know* the Logos, we cannot un-know it. The sense of words to a native speaker is spontaneous, effortless, and instant. Meaning suddenly appears to *flower*. Magic is socially ubiquitous because *language* is socially ubiquitous. We acquire the habits of selective attention, which prime us for all the prompts and goads of conventionalized idiom, at the same time that we acquire the Word. We become involved in the play of conceptual sense and meaning as magicians performing dozens of small magic tricks per utterance, producing spontaneous miracles of meaning and knowing; semiotic archipelagos that we subsequently inhabit as our normalized, everyday life-worlds. Moreover, at the same time that we perform these countless, forgotten sleights of mind, we are the audience of both our own magicing, and that of others. Just as we effortlessly juggle meanings when we perform language, we simultaneously stand mentally to the side of ourselves as we watch them pop up and dance before us. Meanings dance in a kind of “vision” that has emerged within us as the mode by which we think. The para-optical domain.

⁴⁶ That is, magicians of any kind who take *clients*.

Just like sensory vision, abstract vision is subject to special optical effects. While optical illusions and deceptions manipulate perception of the sensible world, *para-optical illusions* operate in the abstract frames through which we select and filter foreground and background, and through which we pick out the “furniture” of our world. Sleights of hand trick the outer eye, while sleights of mind fool the inward eye and facilitate the creation, destruction, and transformation of meaning-worlds, in a play of naturalized assumptions, contexts and idioms, and of course, misdirection: the controlled manipulation of attention. In learning to shift the primary locus of our attention from sensation to *mind*, to the dance of words and meanings, we learn to ignore not just the ambient background noises, but also the crucial cognitive mechanics, hidden in the shadows and depths of our seemingly natural thought-scapes. And it is precisely *these mechanisms* that make magic’s bottomless flow of surprises possible. David Abram, ecologist, phenomenologist, and prestidigitateur, draws the following parallel:

Some insight into the participatory nature of perception may be gleaned by considering the craft of the sleight of hand magician. For the conjurer depends on this active participation between the body and the world for the creation of his magic. Working, for instance, with a silver dollar, he uses his sleights to enhance the animation of the object, generating ambiguous gaps and lacunae in the visible trajectory of the coin. The spectator’s eyes, already drawn by the coin’s fluid dance across the magician’s fingers, spontaneously fill in those gaps with impossible events, and it is this spontaneous involvement of the spectator’s own senses that enables the coin to vanish and reappear, or to pass through the magician’s hand. (Abram 1996, p 58)

Active participation between the body and the world. We make sense out of things as an embodied and direct completion of incomplete elements, of fragments. We compose a gestalt out of disparate cues *in the same way* that we fill in the unseen angles of a magic trick. This is why the alphabet is so profoundly magical, (as noted by thinkers from McLuhan to Ong, to Abram). We smooth broken meanings over and

compose them into sense. It is an active, participatory process, and yet, at the same time, unconscious; instinctual, *invisible*. This is a striking correlation to make: the conjugation of experience into perception as a magical selection, an act of misdirection (or simply, direction) that creatively and magically separates ambiguity from clarity, foreground from background, the visible tip from the fathomless depths. These depths are known by cognitive linguists as the *cognitive unconscious*.

If we accept that meaning construction is like a magic show, and thought is conditioned more by how we frame it than its specific contents, then we can see that in the cognitive unconscious, we will find the structures and props that constitute the theatre of knowledge. This backstage of awareness is where the mechanisms reside that provide us with the seamless experience of things-making-sense. When the frames of thought are made invisible to us, we experience a frictionless encounter with the surface of knowledge; things feel completely natural and effortless, like watching a deft piece of card magic. Consider this:

All of our knowledge and beliefs are framed in terms of a conceptual system that resides mostly in the cognitive unconscious. Our unconscious conceptual system functions like a “hidden hand” that shapes how we conceptualize all aspects of our experience. The hidden hand gives form to the metaphysics that is built into our ordinary conceptual systems. It creates the entities that inhabit the cognitive unconscious - abstract entities like friendships, bargains, failures, and lies, that we use in ordinary unconscious reasoning. It thus shapes how we automatically and unconsciously comprehend what we experience. It constitutes our unreflective common sense. (Lakoff 1999, p 12)

Lakoff is clearly drawing a link between the cultural genesis of common sense, and the magician’s prerogative: namely that they are *equally* the production of appearance by means of a “hidden hand.”

Another cognitive linguist, Gilles Fauconnier, focuses on detailing the *mental spaces* which we use to construe sense. According to Fauconnier, we can understand

language not so much as a *labeling* system, with names attached to and signifying objects, abstract or otherwise, but rather a *prompting* system that interacts with a deeper, non-linguistic unconscious of mental spaces, integration networks, and metaphor-schema, which can be called to awareness by a signal clear enough to pick out the particular element: “Grammar is a set of prompts for guiding us precisely in our use of imaginative mental operations” (Fauconnier 2002, p 154). What’s more, there is no single, correct signal, in this regard. Because the individual signals prompt embodied understandings that are multi-dimensional - *relations rather than things* - those signals can vary widely, so long as they find a way of triggering our direct, pre-linguistic comprehensions and ruminations, as those exist in the world, in phantasy or in memory. This capacity is what makes language such a flexible tool.

The extraordinary evolutionary advantage of language lies in its amazing ability to be put to use in *any* situation. For any situation, real or imaginary, there is always a way to use language to express thoughts about that situation. We will call this crucial property of language ‘equipotentiality’. (Fauconnier 2002, p 179)

This account offers the understanding that thought is not in another, adjunct dimension to body; abstraction is not truly an escape from the sensible, but rather a continuity that stretches from phenomenological embodiment on one end of the scale to high abstraction on the other. In this regard, we can recall Bergson’s “contraction cone,” with sensibility being a relaxed form of awareness, and abstraction being a contracted form (1991, p 162). Various passages exist intermediately between the sensible and the abstract; instead of an abrupt mind/body split, we have a spectrum with body on one end, mind on the other, and imagination in between. By imagination we infer the para-optic, or even *phantasmic* capacity to form as well as explore hybrid images and spaces in the mind’s eye, as we do in dream, and in memory. It is when you add the

creative role of imagination to the model of thought, that you finally get a picture which makes consistent sense and does not require the unnecessary positing of metaphysical entities or *a priori* laws. Words prompt bodily understandings through the medium of mental spaces; framings of sense which are imaginative and aesthetic, as well as pragmatic, supply an economy to thought. Without imagination, there can be no focus. Magic's role is to direct focus.

Chapter 11: Enchanted Theatres

Let's look a little closer at these intermediate structures; these frames of experience and thought. The mental spaces which subsist below our use of signs and indicators (as prompts), are formed out of hybridized inferential structures, meaning that patterns of inference from multiple domains are synthesized with one another in a creative process that is governed by the function of *metaphor*: "The language forms that lead to intuitively literal meanings can also give us intuitively metaphorical meanings that seem to belong to radically different kinds of thinking..." (Fauconnier 2002, p 154). Through magic the abstract and the sensual are mixed; a chimera.

The picture appears to be this: our range of metaphors, and the embodied logics that they ultimately derive from, form our deepest tool-kit for understanding, and yes, co-creating, the world as we think it in linguistic terms. Language calls, and the unconscious improvises a response from out of its existing repertoire of spaces. In other words, language only tells us where *roughly* to look, in our unconscious, for meaning structures that we can bring to bear in order to model a situation. There is great leeway as to which structures, how, and with what emphasis. The meaning structures form or accrete (and in some cases they are architected or engineered) in our cognitive backstage, but they are not the same as language. They interact with language, they answer TO linguistic prompts, but they are not grammatically structured in the way that sentences or phrases are, and they are not linear in the way that written or spoken language is linear. Coulianu writes:

Fundamentally, all is reduced to a question of communication: body and soul speak two languages, which are not only different, even inconsistent, but also *inaudible* to each other. The inner sense alone is able to hear and comprehend them both, also having the role of translating one into the other. But considering the words of the soul's language are phantasms, everything that reaches it from the body - including distinct utterances - will have to be

transposed into a phantasmic sequence. Besides - must it be emphasized? - the soul has absolute primacy over the body. It follows that *phantasm has absolute primacy over the word*, that it precedes both utterance and understanding of every linguistic message. Whence two separate and distinct grammars, the first no less important than the second: a grammar of the spoken language and a grammar of phantasmic language. Stemming from the soul, itself phantasmic in essence, intellect alone enjoys the privilege of understanding the phantasmic language. It can make manuals and even organize very serious-minded games of phantasms. But all that will be useful to him principally for understanding the soul and investigating its hidden potentialities. Such understanding, less a science than an art because of the skill which must be deployed to catch the secrets of the little known country where the intellect travels, involves the assumption of all the phantasmic processes of the Renaissance: Eros, the art of memory, theoretical magic, alchemy, and practical magic. (Coulianu 1987, p 6)

Ordinarily, the formation of these phantasmic mental spaces happens naturally and organically, but, as suggested by Coulianu, there are cases where there is a more deliberate handicraft involved in their formation. In these special, professional cases, usually activated by either rituals or by well-chosen stimulæ, we find *self-consciously magical* spaces. Spaces of enchantment. There are three *directions of application* pertaining to these spaces. They may be fostered through practices such that a) they apply to and are active *exclusively* within the cognitive unconscious of the practitioner, or b) they apply to and are active *exclusively* within the cognitive unconscious of a person other than the practitioner, or c) they apply to and are active *inclusively* within the cognitive unconscious of both self *and* one or more others. This is to say that some magics are self-targeted, some are other-targeted, and some are meant to be ambient.

Even granted these vectors, there is enormous variety in the kinds of expression that self-consciously magical spaces of enchantment might take, largely depending on the degree of abstraction to which the given form commits itself. “High” metaphysical esotericism appears to be developed with an eye to meta-stratifying the spaces. The most obvious examples are the Neo-Platonic hierarchies which impose

“Hypostases,” or levels of being, that telescope backwards from the complexity of the world to the transcendent simplicity of god: “...as contemplation ascends from nature to soul, and from soul to Intellect, the acts of contemplation become ever more personal and produce unity in the contemplators.” (Plotinus 2004, III 8-8, p 43) In their purest, these are mysticisms. Sympathetic magics in general are more immanent in their focus, usually involving the organic development of chains of likeness (a doctrine of signatures) wherein an operator attempts to affect changes by stimulating a sort of mimesis on one point of the chain: they will, for example, try to affect an illness by holding a stone of a sort whose color or properties bear a similarity, however far removed, from the organs affected by the illness. This is a doctrine of signatures:

Since language is the archetype of the signature, the signatory art par excellence, we are obligated to understand this similarity not as something physical, but according to an analogical and immaterial model. Language, then, which preserves the archive of immaterial similarities is also the reliquary of signatures. (Agamben 2009, p 36)

When these fundamentally sensuous magics find themselves married to an abstract idealism (such as is given by Platonism), they can result in a hybrid form in which sympathetic magic is operative in the changing world of the lower hypostases, and becomes considered “good” or “bad,” depending on whether its operations are allied with the structures existing in the upper strata or not. This negotiation is in line with the Platonic division between the world of appearances (which changes), and the world of essences (which does not). Such a division became important in the Renaissance, for example, because it was used to distinguish between sorcerous practices (which used appearances in the world for their own ends), and “divine magics” such as Ficino’s which, although it dealt with appearances in the world,

yoked them to the idea of a transcendent realm. (Coulianu 1987, pp 28-31). In any case, it is a matter of the negotiation of spaces of meaning, and their arrangement with regards to one another that constitutes the magical frame. In the domain of secular magic, where optics is usually predominant over para-optics, this holds as well.

Even where the self-consciousness of the magic is not explicit in identifying itself as magical, it can still operate according to these crafted directions of application, such as when advertisers forge associations between desire and brand identity in a way that fuses basic appetites and products on offer, or when propaganda accomplishes a similar task with flags and anthems and rhetoric of fear and glory. Whether our magic is unselfconscious or self-conscious, we all nevertheless have a strongly creative role in framing events, even if that is an *unconscious* creativity that has been compelled by external stimulæ. As we take part in this process, even when we hold ourselves to be at our most rational, we are in fact staging a kind of theatre, albeit more or less improvisational, with each utterance acting as a prompt to deploy a related series of tropes: mental spaces, semantic transformations, etc... Language is a *commedia d'el arte*, supported by *lazzis*: the clichés, characters, and framings which we string together, jazz-like when we use language to prompt meaning.

Theatricality is embedded in all levels of social framing (class, role, character, etc...), and the dynamics of strategic maneuver, enchantment, and hidden, resonant and aesthetic causation all apply. Strategic, because the grasp of relevant tropes enables power over discourse. Enchanted, because to wield this power is to control the discourse, and to master, like a conductor, what both self *and* others tacitly consider real, relevant, and admissible. Resonant, because the causes are not necessarily linear: manifold effects can all arise simultaneously out of a deep and indirect aesthetic

cause, like wine-glasses resonating to the sound of a voice. Again, in its natural form this is ubiquitous but of a relatively low level of intensity; however, in its self-conscious or specialized form it is far more intense, singular, and focused.

Chapter 12: Spotlights

I consider social framing as magical because it plays with foreground and background: it creates, destroys or preserves identities in terms of the tropes and spaces which we understand, and which we expect and anticipate upon going in to any encounter.

Thinking is social, and thinking is magical. Erving Goffman writes;

I have suggested ways in which the performance of an individual accentuates certain matters and conceals others. *If we see perception as a form of contact and communion, then control is over what is perceived is control over contact that is made, and the limitation and regulation of what is shown is a limitation and regulation of contact.* There is a relation here between informational terms and ritual ones. Failure to regulate the information acquired by the audience involves possible disruption of the projected definition of the situation; failure to regulate contact involves possible ritual contamination of the performer. (Goffman 1959, p 67)

Light and shadow, framed and unframed, seen and unseen. In the world of magic, there is a play between foreground and background, and it is what is seen, what comes to light that forms the accepted context. Thus when a card is lost, only to re-appear in the magician's wallet, the sequence of events: signing of the card, isolating of the card, vanishing of the card, removal of the wallet, unzipping of the closed compartment, and removal (by the spectator) of the signed card from the compartment, each moment in the effect is seamlessly connected to the next. The clarity of the effect, and the congruence of its connecting elements, despite their impossibility, is the foreground, is in the light. The means of this miracle is achieved in the shadow, on the offbeat, under the cover of seemingly innocent moves, in the background. In this way, however, the magic trick is a paradigm case of all acts of enunciation, and perception, and social participation: the foregrounded elements converge into a total story, and the backgrounded elements are seldom seen, often remain nameless, and escape memory and cognition. In this way, social consciousness is a magical theatre.

So how can we come to know true “antecedent causes,” when the foundation of knowing itself is participating in the illusion-craft? Should we attempt to escape to a space *without* illusion, or should we seek to push magical thought to its furthest limits? Might it be that these two distinct-seeming strategies really amount to the same thing? As long as we are inside of language, we are inside of magic, with all that this entails. Our very identities insofar as they are framed by our linguistic understanding, and sequestered in mental spaces in the cognitive unconscious, are made up of a deep rhetorical movement of auto-fabrication: *we are composed of illusions*, operating at different levels of consistency,⁴⁷ and our human world is indistinguishable from them. We cogni-form our external environments through a kind of auto-poetic feedback loop: colonizing the wilderness of immediacy, naturalizing the structures we build there, and then, once we’ve forgotten that we built the ways of seeing that we habitually employ, we repeat the process again, gradually accreting strata after strata of unconscious meditative networks that weave the world quite “literally,” together. Illusion is ubiquitous, it is part of knowing.

For any perceivable or conceivable phenomenon to be communicated about, it must on some level be construed as having a discrete, unique identity. It must be first and foremost, itself. For such a “thing” to be of a *kind*, that kind *also* must have a unique identity of its own. Such a move of abstraction is essential to how we communicate, and how we transport our immediate perceptions *through language*, into the lived world of human sociality. It is no accident that words, names, and

⁴⁷The kinds of consistency include internal consistency, within concepts and mental spaces, inter-relational consistency between larger paradigmatic blocks, and external consistency, implying that some aspect of the non-human world is tracked within, and interfaced to that human world. Examples of this latter, empirical mode include seasonal and elemental ontologies, astrological and astronomical cosmologies.

identities are thought to be the stuff by which magic is wrought. Self-identity is not as easy as it looks. It appears both instantaneous and effortless, and yet the process of its formation hides many decisions which have given us a world that is re-presented in some ways, and not in others. The formation of a world-theatre of meanings starts with formation of identities, and as we shall see, this is an entirely magical operation.

“Self-identity” is a deeper problem than “personal identity,” since the former depends on, and is a special case of, the latter. It is the problem which points, most directly, to where “thingness,” or nominalization, first crystallizes. Early languages appear to have been verbal in nature,⁴⁸ and it is only later that the noun assumes its place in our understanding. The noun is a consequence of a shift of ground; from the world to the word. It is in this *new* ground that the magical theatre of *identity* is established.

As we understand it, by *definition*, a thing is itself, $a=a$. The world of meanings is at base formed from tautologies, each unique, each picked out against all the others in an endless collection of essences, assimilated only by the fact of common containment in a whole. This is the picture our logics give us. If $a \neq a$, then what we have, at the deepest level, is a proposition that our common sense cannot compute. What do you mean the “teapot is not the teapot.”? To imply that self-identity is an illusion, a mere epiphenomenon of language, is to imply a contest of forces

⁴⁸ Or at the very least, according to Foucault, language’s “deepest strata” are (see Part I, chapter 2). A slightly more nuanced explanation than this is possible, however: that in *some* languages, the distinction between noun and verb has not yet been made, and that terms in such a state could play either role. This does not discount the idea that one of these modes might be more fundamental. In the entangled state, I’d argue, the motion-aspect of meaning is still more primary than its stasis-aspect. Compare this to Bergson’s treatment of time and space: they are entangled, and can certainly be perceived in a pre-distinct mode, and yet, in that mode, it is *time* which gives us space, *out of itself*, and not the other way around. Returning to language then, in the verb-noun continuum, the verb-nature (motion and relation) gives us the noun-nature (identity and definitional essentiality) *out of itself*.

subtending the things we see (both concrete and abstract), and to insinuate a deep, seething, fundamental unrest into the manner by which our thoughts find repose in concepts.

It is necessary to have self-identity be true of things in general before it is possible to have personal identity, although, *in situ*, this is apparently reversed: we perceive the object as a secondary encounter of the person. Phenomenologically, we are auto-centric. We must BE a self, and “it” must HAVE a self, in order for us to feel comfortable and secure in the relation. Just as it appears to be the case that the Sun and the stars circle the earth, it appears that our most intimate self-identity encounters a world of objects in relation to one another. And just as with the Ptolemaic cosmos, a close examination of the manner in which the observed phenomena actually behave reveals that the idea of the self, of the soul, of a transcendental God, find a simpler and more elegant explanation when the central terms are reversed: the earth orbits the sun. The idea of the self is not a natural given, but a logical extension of the semantic introduction of the noun, to a space of ontological flux.

If either our own self or the self of the “it” is problematized, and the matter is not sealed or closed, then a kind of vaporous ambiguity allows for the imagination to perceive blurring of the lines, contagions and losses of definition. Self-as-resolved-unity breaks down and is undermined. Magical thinking flows with the many streams of imaginal association as they leap from de-nominalized singularity to de-nominalized singularity. Streamers of partial identities peel off from the core and dissipate into a vast and unconscious web of sorcery. The logic of contagion dominates. There is a kind of epistemic vertigo that afflicts the magical mind, whose sense of identity, is undermined, not just as it applies to the personal self, but *inter* and

even trans-personally. It is easy to see how a kind of pan-psychism can result from the dissolution of these boundaries.⁴⁹

The dilemma is this: if the deep forces are burgeoning within every identity, at what point do they need to have the pressure released? It seems obvious that “low” (or sympathetic) magic is essential to growth and resilience, and that “high” (or abstract) magic is essential to stability and discernment. An excess of the former would constitute a psychotic crisis, while the unilateral dominance of the later would be the marker of a neurosis:

The neurotic is trapped within the residual or artificial territorialities of our society, and reduces all of them to Oedipus as the ultimate territoriality... As for the schizo, continually wandering about, migrating here, there, and everywhere as best he can, he plunges further and further into the realm of deterritorialization, reaching the furthest limits of the decomposition of socius on the surface of his own body without organs. (Deleuze 1983, p 35)

If we recall our distinction between the respective operative forces of the noun and the verb, then we can see that these two modalities play out along the same lines. The question is: how much pressure verbs can be allowed to have, and how big should be the gaps between the nouns?

⁴⁹Deleuze and Guattari, citing H.P. Lovecraft, write: “If multiplicities are defined and transformed by the borderline that determines in each instance their number of dimensions, we can conceive of the possibility of laying them out on a plane, the borderlines succeeding one another forming a broken line. It is only in appearance that a plane of this kind reduces the number of dimensions: for it gathers in all the dimensions to the extent that *flat multiplicities*- which nonetheless have an increasing or decreasing number of dimensions- are inscribed upon it. It is in grandiose and simplified terms that Lovecraft attempted to pronounce sorcery's final word: ‘Then the waves increased in strength and sought to improve his understanding, reconciling him to the multiform entity of which his present fragment was an infinitesimal part. They told him that every figure of space is but the result of the intersection by a plane of some corresponding figure of one more dimension.- As a square is cut from a cube, or a circle from a sphere. The cube and the sphere, of three dimensions, are thus cut from corresponding forms of four dimensions, which men know only through guesses and dreams; and these in turn are cut from forms of five dimensions, and so on up to the dizzy and reachless heights of archetypal infinity’ Far from reducing the multiplicities of dimensions to two, the *plane of consistency* cuts across them all, intersects them in order to bring into consistence any number of multiplicities, with any number of dimensions. Therefore all becomings are written like sorcerer’s drawings on this plane of consistency, which is the ultimate Door providing a way out for them.” (Deleuze 1987, p 251)

As we will discover, these problems are unlikely to be solved within any existing framework of analysis or contextualization, and are indeed likely to worsen, principally because the crisis is a direct result of our deep cognitive infrastructure, which is suffering from a dissonance of its own frames. Collision and crisis in the deep frames. Schizophrenia, as Gilles Deleuze and Felix Guattari pointed out, is the inevitable result.

To pick out something vis-a-vis Being, to highlight its *self-identity* is, effectively to foreground it against a background of ambiguity. In other words, to confer the status of *being* onto a phenomenon, tacitly or explicitly, is to disambiguate it from its context. In the words of the famous Canadian-American magician Dai Vernon: “confusion is not magic.”⁵⁰ Magic, is, on the contrary, marked by its brilliant, and seamless *clarity*. For example, if a performer is vanishing small objects like coins, the necessity for an internal congruity, to preserve the illusion of teleportation is *essential*. All superfluous elements must be eliminated through routining, and the performance must look completely spontaneous and fluid, despite being a very deliberate selection of images designed to lead to a specific conclusion.

Foregrounding is achieved through a myriad of different techniques, across all the fields where it is applied. In prestidigitation, for example, tone of voice, physical posture, and degrees of bodily tension are all factors in controlling the attention and forcing it to pick out the features which the magician wants noticed.⁵¹ Such theatrical techniques are used to create areas and moments of primary and secondary interest. A

⁵⁰ This idea, stemming from Vernon, is an aphorism that has passed into the conjuring community for the most part, orally. It is for this reason that there is no original “source” for the quotation.

⁵¹ See Juan Tamariz’s *the Five Points in Magic*, (2007) for a wonderful primer in these aspects of the art.

tense part of the body will draw attention, a relaxed part will dissipate it. For example, in the coin vanish, the hand that contains or is supposed to contain the coin is slightly tense, as is the forearm. The other hand and arm are relaxed. In fact, the whole body relaxes slightly on the “shadowed” side, and tenses slightly on the “lit” side. We can say that half of magic is perpetually lit, while the other half is perpetually shaded. This is the case before and after the false transfer. Once the coin has been apparently passed into the left hand, the right hand and arm relax, while the left hand and arm become slightly tense. In a performance in which the hand palming the coin is tense, the spectator's attention would be diverted towards the area of method. Done properly, however, tension will help divert attention away from the area of method and toward the area of effect: “Body tension draws attention. Conversely, relaxation induces relaxed attention. This may be used to create areas and moments... of primary and secondary attention.” (Lamont 1999, p 45)

Foregrounding is implicated in the aspects of magic which deal with memory and memorability. Foregrounding is an essential component of memory palace construction, for instance. This ancient art is one of the deepest subjects in magic, as we will see. In brief, a memory palace is an imaginary environment, a location or a series of locations, where the mnemonicist, the memory artist, has assigned specific points-to-remember (numbers, parts of speeches, items on lists, etc...) to images of things appearing in that environment. The images **MUST** be made unambiguous, incapable of being lost or otherwise confused. They are made clear *through* being fore-grounded. Plato’s powerful metaphor for memory as an act of making a clear wax impression on a tablet, bears this out: the tablet must be made blank (heterogeneous

elements of background must be homogenized), and the seal must be properly impressed so as to be completely clear. Plato wrote, in the *Theaetetus*:

Imagine... that our minds contain a block of wax, which in this or that individual may be larger or smaller, and composed of wax that is comparatively pure or muddy, and harder in some, softer in others, and sometimes of just the right consistency.... Let us call it the gift of the Muses' mother, Memory, and say that whenever we wish to remember something we see or hear or conceive in our own minds, we hold this wax under the perceptions or ideas and imprint them on it as we might stamp the impression of a seal ring. Whatever is so imprinted we remember and know so long as the image remains; whatever is rubbed out or has not succeeded in leaving an impression we have forgotten and do not know. (Plato 1961, p 897)

Thinking is fore-grounding: "The very systemativity that allows us to comprehend one aspect of a concept in terms of another... will necessarily hide other aspects of the concept" (Lakoff 1980, p 10). Foregrounding is motivated selection. It does not lie, but tells a selective truth, all the more believable if conceivable objections or ambiguities can themselves be integrated into and accommodated for in the presentation. This is why many magicians factor apparent accidents into tricks which contribute to the strength of the overall effect. These are called subtleties. If thought can stray slightly, but be reigned back in, or if a seeming irrelevancy is considered as an aside which indirectly supports the overall motivation for the selection, then these elements strengthen the apparent natural "trueness" that is meant to be conveyed.

Wonder suggests that we drop the "mis" from the term "misdirection:"

The idea is quite simple: misdirection must be attention directed toward something, not away from something, and positive images are the way to achieve this. Directing attention from is a hopeless and virtually impossible approach. The moment you start trying to misdirect, the battle is lost! It would be far better for us if misdirection had not become an accepted term in magic, and direction had been adopted instead. (Wonder 1996, p 12)

A performance magician composes an imagistic sentence where one phenomenon follows another consistently, such as when a snapping of the fingers causes

(consistently, within the theatre of the effect), the rising of a card from a lost position in the deck to the top. They have used the principle of foregrounding abstract identities to provide a pseudo-causal narrative. The true cause (deft management of the deck) is replaced in the narrative by the false cause (finger snapping). Direction is the operative technique, here. This is a benign example, but the principle applies in far more consequential domains. In particular, when the world has been construed as an expression of immutable laws (theological or material), then it is rhetorically possible to present an entirely false picture of the world that is composed entirely out of true statements, simply because the audience in question has internalized the rules of the “game,” not as limitations and parameters of their thinking process, but as real structures in the world. The para-optical illusions of class, gender, religion, nationality and tradition convince us to perform them, because they are presupposed as unproblematic elements. In other words, they are fore-grounded, composed into a sequence, and then resolved as a law of cause and effect. Causality is not an ontological principle, but an epistemic one, and it is by a kind of a magic trick that we come to common-sense opinions about our world. But when that trick, which frames our moments of meaning and understanding as a series of connected mental spaces, collapses, we find ourselves in an abyss of pre-conceptual forces; gripless in a kind of epistemic quicksand. We are rendered speechless, and mindless, while remaining present and aware.

Chapter 13: Intuition and Fundamentality

The procedure whereby epistemic frames are spuriously “ontologized” is a compositional process identical to enchantment. When we counter-enchant these ontological constitutions, we are, in effect asking, “If we release topic x from its role as a metaphysical category and view it instead as a stabilized framing of events, how does that change the role that topic x plays in relation to other concepts?” Perhaps the greatest example of such a decomposition is Bergson’s treatment of time, in which he shows that quantitative multiplicities are part of an epistemic overlay, and *qualitative* multiplicities are ontologically primary. Bergson’s analysis led to a reversal of the normal prioritization of space over time:

It is therefore obvious that, if it did not betake itself to a symbolic substitute, our consciousness would never regard time as a homogenous medium in which the terms of a succession remain outside one another. But we naturally reach this symbolical representation by the mere fact that, in a series of identical terms, each term assumes a double aspect for our consciousness: one aspect which is the same for all of them, since we are thinking of the sameness of the external object, and another aspect which is characteristic of each of them, because the supervening of each term brings about a new organization of the whole. Hence the possibility of setting out in space, under the form of numerical multiplicity, what we have called a qualitative multiplicity, and of regarding the one as the equivalent of the other. (Bergson 2001, p 124)

Spatial representation is thus a quantitative encounter with multiplicity that homogenizes it for the sake of measurement, while temporal representation, in its natural state of *duration* is a qualitative multiplicity that is appreciated first and foremost in terms of how it is directly experienced. Both qualitative and quantitative multiplicities are treated by Bergson under the rubric of *intensities*:

...we have found the notion of intensity to present itself under a double aspect, according as we study the states of consciousness which represent an external cause, or those which are self-sufficient. In the former case the perception of intensity consists in a certain estimate of the magnitude of the cause by means of a certain quality in the effect: it is... an acquired perception. In the second case we give the name of intensity to the larger or smaller number of simple

psychic phenomena which we conjecture to be involved in the fundamental state: it is no longer an *acquired* perception, but a *confused* perception. In fact, these two meanings of the word usually intermingle, because the simpler phenomena involved in an emotion or an effort are generally representative, and because the majority of representative states, being at the same time affective, themselves include a multiplicity of elementary psychic phenomena. The idea of intensity is thus situated at the junction of two streams, one of which brings us the idea of extensive magnitude from without, while the other brings us from within, in fact from the very depths of consciousness, the image of an inner multiplicity. (Bergson 2001, p 72)

This juncture between the qualitative and the quantitative intensities is the site of direct immediacy. Here, it is possible to bring thought to bear on both the sensible and the abstract. Such “intuition as method,” as Deleuze points out (1988, pp13-14), is key to converting the enchanted spaces of metaphysical framing back into their real forms: virtual reference points and organizational frameworks. These are *qualitative* noetic assemblages, and they are accessed by a Transcendental Empiricism. We will have to re-evaluate some seemingly obvious orders of relation in order to see past the distortions that our grammar in general, and our nominalizations in particular project onto the states of phenomena-in-themselves. The deployment of a rigorous intuition as a thinking-method is accomplished by the application of three rules: First rule: “apply the test of true and false to problems themselves. Condemn false problems and reconcile truth and creation at the level of problems.” (1988, p 15) Second rule: “Struggle against illusion, rediscover the true differences in kind or articulations of the real.” (1988, p 21) Third rule: “State problems and solve them in terms of time rather than space.” (1988, p 31) This threefold approach operates as a method of empiricism that encounters “transcendent ideas” in terms of the problems they attempt to answer, seeks to encounter them as virtual assemblages which condition temporality. This is exactly what we must do in order to recover a fundamental realism of encounter and experience vis-à-vis “magical systems.” Even more than this, it asks us which

fundamental categories (i.e. time and space, Being and non-Being, mind and body) are phenomenologically primary, and which are secondary.

When one is trying to decide which of several distinctive qualitative categories to treat as fundamental, one should proceed by asking which of them, using the fewest assumptions, will account for the others, when it is pushed to the limits of its own internal logic. In this way we find that movement grounds stasis (and so time grounds space), because, following Bergson, we realize that we can consistently model stasis as an extreme case of movement, but not movement as a form of stasis. Putting time prior to space requires one “move,” but reversing this order will require two or more (because if being is fundamentally static, where does movement come from?). 0 or non-Being is primary over 1 or Being.

In a much less abstract domain, we find that prestidigitory magic is primary over esoteric magic, albeit strangely. This claim will likely be viewed as controversial until it is pointed out that creative deception and the optics of selective attention are at the very core of the magician’s craft in a way that is deeper than “belief.” In this way, the “modern” magician, in a highly circumscribed, limited, and stylized way, has actually captured the true reality of magic on a deeper level than the occultist, and this is because it does not depend on metaphysics. That being said, the limitations of the modern craft, concessions to popular culture, and anxieties over power, restrict its free play as a magic, and relegate it to the status of an entertainment conducted by “actors playing the role of magicians.” This is why a modern salvage of the insights germane to esotericism is fated to transform the performance aspect of the discipline into something altogether other than it now appears to be. There is a metamorphosis on the horizon for magic.

Chapter 14: Machines of Metaphor and Memory

Magic informs our ideas of truth, especially insofar as it embodies metaphors that have sunk below the surface of our awareness and become part of an unconscious machinery of mediation. Michael Taussig, citing Nietzsche in *The Magic of the State*, writes:

Nietzsche made the point that metaphor constitutes the human world by being forgotten, absorbed into the cultural reality it forms as literal truth. 'Truths are illusions of which one has forgotten that they are illusions; worn-out metaphors which have become powerless to affect the senses; coins which have their obverse effaced and now are no longer of account as coins but merely as metal,' Reality is a sort of conjuring trick whereby poetic illumination flares for the moment only to pass into routine, engorged with value by virtue of this vanishing act (Taussig 1997, p 35).

Taussig's remark arises in the context of a discussion of a shrine-being-called a portal.

The portal metaphor imbeds a powerful dynamism, for Taussig, between state and spirit into the body and practice of the pilgrim (on the way to the shrine): Taussig describes this operation as follows:

It was beyond perfection, the image, indeed the metaphor, of metaphor itself, no less than its stunning literalization. A wondrous metaphor-machine designed to set the scene of spirit passing into body, possession as embodiment activating images made precious by death and stately remembrance. (1997, p 35)

A metaphor machine creates the scene in which mind and body are imbued with an identical logic, in the microcosm, as state and citizen is, in the macrocosm. Taussig's telling is pseudo-fictional, of course; *The Magic of the State* shows us this dynamic in the context of a fictitious country. Metaphor-machines, somehow admitted into the threshold spaces of our social perception, are a powerful magic undergirding the entire order of things. Rastko Močnik, addressing Clifford Geertz, writes: "... this 'transversal function' is assumed by 'common sense', assisted by the system of magic:

‘common sense’ articulates the expectations derived from existing ‘regional systems’ of practical wisdom, while magic as ‘a kind of dummy variable’, ‘an all-purpose idea’, fills in the gaps opened by the non-totalizability of the regional systems... For Levi Strauss, this function is exemplarily performed by shamanism” (Močnik 2008, p 132).

In another example of this totalizing dynamic, Serres explores augury’s role in founding a juridical tradition in the post-Roman world:

Philosophers mock them, but I admire the rituals of augury, the close attention the haruspices pay to the meaning that traverses or resides in the world, prior to our intervention, whether physical or spoken; the very first observation, wherein perception preceded the utterance or evaluation of language. The praetor cannot say *addico* until the seer has observed the flight of birds. Vultures fly, crows swoop by and chickens peck for food, all without consulting us; it is we who consult them. It is if and only if an action has been approved by the birds that the first speaker permits or forbids it. Augury opens a window in the sky that leads in to the prison of language, to Socrates’ gaol, to the theatre and the tribunal. This Temple, the sacred space fashioned out of the air, is the fissure through which language comes undone, the interstice through which it breathes, sense with which it begins, its pre-condition. It is the condition and the limit of experience. (Serres 2008, p 100)

Birds form a core metaphor, as well as a material anchor, grounding human activities, from empires to utterances, to the idea of spirit. Spirit circulates between the poles of state and citizen, binding them into the same movement. Does magic, by means of metaphor, point essentially to the power of the state, or can it be rallied to the aid of the stateless? Is it fundamentally conservative in nature, or disruptive? It depends, I think, on the context, but where magical practice involves the establishment of “beautiful illusions,” particularly for the very poor, or disempowered, it is to be considered a reification of existing power. Where it exposes the mechanisms of hidden causation in order to disrupt their unharried operation, then it is, at least provisionally, operating as a disruptive, or revolutionary movement of force. Where birds stabilize the socius, they are a conservative force, a reliable pattern: where they break with it,

and develop “lines of flight” that pick up from closed power, and *open it up*, they are a liberative force.

Reviewing these observations, we can note that augury essentially constitutes a mapping from interpretive system onto world, in other words a system-world interface, and is evidence of a magical empiricism of the kind we discussed as running from order-0 awareness to order-1 awareness;⁵² that is, through the mesocosm. By founding the major decision-making processes of the Empire on the flights of birds, there is a machine of meaning engaged, insinuated into the fabric of the socius, into its rhythms, into its aesthetics. The Roman world thus borrows qualitative time from the birds. It is equally, then a “portal,” because it opens the process of governance, and of duration, to a praetor-human reality by means of practical metaphor. In this interpretation, the metaphor “fills in the gaps” of meaning and the Roman state is enchanted into a magical *orniarchy*.

⁵² See Part I, Chapter 15.

Chapter 15: Magus or Sorcerer?

When we consider magic, we are considering a field of negotiation, alliance, and the deft interplay of forces *by* forces. There may, however, be striking differences, depending on whether the negotiations are vertical or horizontal. Consider Deleuze's and Guattari's account of the sorcerer's art:

Sorcerers have always held the anomalous position, at the edge of the field or woods. They haunt the fringes. They are at the borderline of the village, or *between villages*. The important thing is their affinity with alliance, with the pact, which gives them a status opposed to that of filiation. The relation with the anomalous is one of alliance. The sorcerer has a relation of alliance with the demon as the power of the anomalous... Alliance or the pact is the form of expression for an infection or epidemic constituting the form of content. In sorcery, blood is of the order of contagion and alliance. It can be said that becoming-animal is an affair of sorcery because (1) it implies an initial relation of alliance with a demon; (2) the demon functions as the borderline of an animal pack, into which the human being passes or in which his or her becoming takes place, by contagion; (3) this becoming itself implies a second alliance, with another human group; (4) this new borderline between the two groups guides the contagion of animal and human being within the pack. There is an entire politics of becoming-animal, as well as a politics of sorcery, which is elaborated in assemblages that are neither those of the family nor those of the state. (Deleuze 1987, pp 246-9).

How can we unpack this account? A sorcerer is a magician embroiled in encounter, enfleshed and negotiating the interplay of horizontal forces. A sorcerer allies *haecceities* to one another, and to themselves, in order play the games of immanence. Reality is fluid. Thought and art and experience are blended, intermingled. Magical thinking, and the logic of contagion play throughout. The sorcerer treads water in chaos itself, their spells keep them afloat for as long as they can be held. A sorcerer is a magician of the flesh... an artist.

Art and magic involve non-deterministic insertions. Sorcery is an in-situ mode of the art, while "high magic," is more reserved, ritualistic. High magic veers towards

the use of frames and codes to stage a magic that reduces the sorcerer's multiplicities to manage-able minimum, in favor of the game-rules of structured ritual. High magic conducts a retreat from the world, into code. Serres sees a movement from the "tattered remains" of an archaic Empiricism⁵³ towards a language addicted, code-drunk, hyper-abstract society: a product of accumulated artifice that has become naturalized and forgotten (transported, no doubt, into its position of ascension by precisely the same metaphor-machine that Taussig identified). In Serres' words:

Language is threefold dominant: administrations rule through the performative dimension of the word; the media dominate through its seductive dimension; the sciences enjoy mastery through its truth dimension. Trismegitic language produces an abstract dominant class, drunk on codes: legislative, computerized, rigorous, thrice efficient, and in this manner are producing a whole world. (2008, p 234)

Trismegitic: thrice powerful, a trident. Performative, seductive, and truth-functional.

On the other hand, the sorcerer keeps pace... a kind of sorcery takes up the role that

McLuhan sees in art:

If men were able to be convinced that art is precise advance knowledge of how to cope with the psychic and social consequences of the next technology, would they all become artists? Or would they begin a careful translation of new art forms into social navigation charts? I am curious to know what would happen if art were suddenly seen for what it is, namely, exact information of how to rearrange one's psyche in order to anticipate the next blow from our own extended faculties. (McLuhan 1994, p 66)

One can easily imagine this passage being re-written, substituting magic for art, with no loss of meaning.

⁵³ "And what if Fairy Tales – seven-league boots, beast become beauty, donkey skin, vair slipper, little mermaid with her body numb from cold and sheathed in blue-green scales, ogres smelling live flesh – and what if *fetes galantes*, masked balls, Harlequin theatre, visions and Sabbaths were simply brightly colored representations of the lost, forgotten, disintegrated ruins of the sensible, whose qualities our culture of language and religion of the word will no longer allow us to apprehend." (Serres 2008, p 233)

Consider the words to Neil Young's song *The Loner*:

He's the perfect stranger, a cross of himself and Faust.
He's the feeling arranger and the changer of the waves that toss.
He's the unforeseen danger, the keeper of the key to the lost.⁵⁴

The subject is marked as a tragic magician, but then also as “the feeling arranger and the changer of the waves that toss.” Magicians are interested in controlled, psychic change. The deep psyche with all its drives, is a turbulent fluid. The danger that they may lose that control is a constant subtext. As for the keeper of the key, the initiate is understood as participating in a hidden orality,⁵⁵ presumably one of numerous possible master methodologies for “connecting the dots” when it comes to the stories, thoughts, and opinions of the mass society. This tradition speaks of a buried architecture of framing that has been bequeathed to initiated brethren via initiation, for quite some time (Faivre 1994, pp 14-15). Explicit and literal examples of this behavior, as in the traditions of “secret societies,” are less important than the theme itself: within an oral transmission is hidden a record of routes for optimal access to a technology of metamorphosis which harnesses the wildness of experience and seeks to master it.

Perhaps they blend together, like the hard and soft spots of a machine, an exo-skeleton. Immanent and transcendent; a messy dialectic. Magus plays towards abstraction, like stacking marbles in a pyramid, while sorcerer tracks the motions of the real, the lines of force-in-play, as they exist in actuality. They throw the marbles to the floor and watch them, tending them as they *scatter*. The magus of being, the sorcerer of becoming.

⁵⁴Neil Young, ‘The Loner’ (1969, Neil Young, Wally Heider Recording)

⁵⁵ Such secrets are not trusted to paper, they are passed by word of mouth from master to disciple....

This latter's commitment to an engaged and metamorphic relationship to change and flux manifests themes of hybridity, heterogeneity, and liminality: between order and chaos, between time and space, and between categories.⁵⁶ Does the sorcerer contain the potential for the magus within themselves, offering it as a limit case in the way that we have said time offers space up out of its own substance, or the way that the verb produces the noun *out of itself*?⁵⁷ Is there another magic that has not yet split into high and low? If so, then such magicians could be seen as *fluxionists*, or change-makers.⁵⁸

Magical thinking, when we compare it to religious or scientific thinking, is uniquely liminal, even marginal. Consider the physical horizon: it marks a division between heights of the sky, and the depths of the earth. Consider that this is perhaps the longest abiding visual experience that any being endowed with eyes, living on the terrestrial surface of the globe, will have. Consider that our abstract understanding is cobbled together out of physical experiences which have been carried over, by metaphor, from the embodied actual, into the intersubjective virtual. In our own internal cognitive structure, we can expect there to be an analogous arrangement to what we see when we look at a horizon. Consider that almost all real experience is had not below or above a physical horizon but in the middle, on the surface; not in the

⁵⁶ George Hansen writes: "'Distinction' is a central idea. A distinction separates one thing from another. Tricksters are associated with destructuring, boundary crossing, and blurring distinctions." (Hansen 2001, p 30)

⁵⁷ See Part I: Chapter 2, footnote 6.

⁵⁸ Serres writes: "The differential of the flux is fluxion. So the flux is a sum, and classical rationality is safe, I am going from the local, fluxion, to the global, flux, and conversely. Be advised: flux is a multiplicity of fluctuations. So flux is unintegrable, it is not a sum, the path from the global to the local and back can be cut. I am praying for a completely new calculus, a different rationality remains to be conceived." (1995, p 65)

space of ontological or epistemological stability, but in the inter-mezzo between them; in the *flux*. We find immediacy on the thin membrane of extended topology, and we find mediacy at some degree removed, either above, towards the heavenly zenith, or below, towards the gravitational nadir. Consider, then, that abstraction is a move away from immediacy and toward mediacy. Abstraction can thus move in two directions from the fluxion zone that is the surface of experience: when it moves toward the sky, where we have mapped the idea of “mind,” it tends toward the position of idealism, and where it tends toward the subterranean realms, where we have mapped the idea of “body,” it reifies materialism. What seems to be emerging, however is a magic that is neither high nor low, but rather a chameleon, occupying and modulating the intermezzo, the threshold between the dialectical twins.

Chapter 16: Limit and Limitlessness

As with the ancient Greek dyad of *apeiron* and *peras*, chaos and limit, acts of magic are the primary line of response to the bewildering: the first, most local interpretations of the fathomless in a form fit for human comprehension. Magic is designed to domesticate the unfathomable. It is where the wilderness of immediate sensate perception first undergoes the transformations, personifications, and artful captures that make it a place in which we can work, think, expect consistency, and transmit memory. Order over chaos, stability over uncertainty. Without an enchantment/subduing of primordial chaos, such as the one depicted in the Mesopotamian myth of *Marduk's* battle with *Tiamat*, it is feared that there might be no larger social continuity, no history.

And then he returned to Tiamat, whom he had subdued... To divide the abortion (and) to create ingenious things (therewith). He split her open like a mussel into two (parts); Half of her he set in place and formed the sky (therewith) as a roof... The stars their likenesses, the signs of the zodiac he set up. He determined the year, defined the divisions. After he had defined the days of the year by means of constellations, he founded the station of *Nibiru* to make known their duties. (Heidel 1951, p 40-4)

In the above myth, depicted in the *Enuma Elish*, once Tiamat (chaos) had been defeated by Marduk (order), the latter sun-god constructs a *calendar* out of her corpse. Magic involves domestication of the *apeiron* by *peras*, of chaos by order, of ontology by epistemology, of *a-chronos*, by *chronos*. Calendars and other time-framing devices are the deepest and most significant matrices of human enchantment, as they coordinate the production of the *socius*, however all ritual activity participates in this production. Neale writes:

Ritual behavior is systematized behavior. It is not haphazard. Magic occurs within an organized worldview that makes sense to those who live in it. There is an internal logic to the understanding that objects that are similar in appearance are somehow connected to one another. Ritual behavior is an

affirmation of this logic; it represents a distinct understanding of the world. Ritual can express not only what we think the world *is*, but also what we *want* it to be. We all want to live in an orderly world. Living in chaos is painful. When life becomes unbearably chaotic, we reassert order and direction by means of ritual control over change: systematized behavior that is intended to prevent undesirable changes in the world (for example, famine and disease) and promote beneficial changes (for example, healthier crops and children). (Neale 2002, p 56)

Ordering our apprehensions of time through the calendar is meant to bring order to the sequence of our lives en-mass, and to conjure into existence a stable mass-narrative.

Magic is a kind of attentional economy: a distillation or systematization of signal/information over noise. Where noise is chaos, information is order. In mnemotechnic terms, where the trained memory is an ordered zone, an enclosure, the body and its con-fusion⁵⁹ is akin to the *silva* of the Medievals.⁶⁰ The process of civilizing the forest is the process of civilizing ourselves, stabilizing our *memoria* and our categories. By applying limit to our world, we humanize it.

⁵⁹ “Let us invite logicians, linguists and grammarians to drink with us, let us mix the drinks and raise our glasses to confusion. Hermes pours from his caduceus: a clear and distinct schematic of confluent streams, a graphic representation of the opposite of a balance. Let us drink to Hermes’ caduceus, to confluence, to confusion. Can we think of it? Can we reason about mingled bodies?” (Serres 2008, p 218)

⁶⁰ Mary Caruthers writes: “...without the sorting structure, there is no invention, no inventory, no experience and therefore no knowledge- there is only a useless heap, what is sometimes called *silva*, the pathless ‘forest’ of chaotic material. Memory without conscious design is like an uncatalogued library, a contradiction in terms.” (Caruthers 1990, p 33).

Chapter 17: The Flatness of Lettered Perception

Direct embodiment becomes transformed through classification, analysis, naming, and the organizing functions of abstract thought and language in general into a highly specialized faculty for cogni-forming our extended, “natural” world into a likeness of ourselves. The magical effects we are looking at take hold within and between the structures erected to mediate direct embodied presences. They involve naturalizing the mechanisms of perceptual production until they are generally forgotten, only then *exploiting* those mechanisms consciously or unconsciously. We can envision a core reality of embodied presence surrounded by a field of stratified abstract envelopes, each ranging more generally over the layer below it, and ultimately subsumed within a sphere of total generalization.

Philosophies which propose that certain metaphysical structures are literally true and in (or over) the world, can be seen as magical illusions. Often, religious and scientific world-views operate as meta-magics that deny their own role in producing the frame of reference that they employ in order to obtain their mediation monopoly. From an embodied perspective, so-called “transcendent structures,” be they laws of God or laws of Nature, are interpreted as parameters internal to language and category use.

David Abram makes no great distinction between the magic of the prestidigitator and that of the esotericist, shaman, or magus. In his work, the shifting of external appearances as they are secretly conditioned by hidden mechanisms is *magic proper*, whether that be the dance of a coin in the throes of leger-de-main or the encryption of ideas by the sub-tending constraints imposed by the phonetic alphabet.

Some insight into the participatory nature of perception may be gleaned by considering the craft of the sleight of hand magician. For the conjurer depends

on this active participation between the body and the world for the creation of his magic. Working, for instance, with a silver dollar, he uses his sleights to enhance the animation of the object, generating ambiguous gaps and lacunae in the visible trajectory of the coin. The spectator's eyes, already drawn by the coin's fluid dance across the magician's fingers, spontaneously fill in those gaps with impossible events, and it is this spontaneous involvement of the spectators own senses that enables the coin to vanish and reappear, or to pass through the magician's hand. (Abram 1996, p 58)

The theme in his work is a return to sensation and to embodiment, out of a labyrinth of abstraction masquerading as reality. Abram's thought is allied to that of Merleau-Ponty, and that of Walter Ong. The latter's investigation of the contrasts between orality and literacy help us understand that writing by means of the alphabet changes thought. The alphabet manages to de-couple us from the senses and re-engage us with an abstract space. The alphabet enables the encryption of the sensuous. Writing, in short, deploys a magical force, and letters are especially potent (and problematic) manifestations of that force. Abram brings us full circle back to Deleuze, as he writes:

Like many other philosophers, I have drawn much pleasure from Deleuze's endlessly fecund writings, which are fairly brimming with fresh trajectories for thought to follow. We share several aims, including a wish to undermine an array of unnoticed, other-worldly assumptions that structure a great deal of contemporary thought, and a consequent commitment to a kind of radical immanence- even to *materialism* (or what I might call "matter-realism") in a dramatically reconceived sense of the term. My work also shares with his a keen resistance to whatever unnecessarily impedes the erotic creativity of matter. (Abram 2010, p 10)⁶¹

One of the impediments that Abram sees to our acknowledgement of matter's "erotic creativity", is that our objectification of the world and our nominalization of its forces, begins with *how* we use language, with *how* we frame meaning. Post-lettered, literate consciousness imports the assumption that the world is assemble-able from isolable

⁶¹ "Matter-Realism," might I amend it further? "Mater-realism"; ur-realism, the proto-state before matter and mind can be conceived of as distinct.

fragments, and that those fragments are arranged on a surface (the space of sensuous perception), before the mind then interprets them in the depths of its thought-space. The world is shallow, the mind is deep. This is the tacit message that writing gives us. We delude ourselves when we think this way, in other words, and so for Abram, we need to recover a pre-encrypted, sensuous understanding. We need to fill in the lacunae between the letters with the understanding that our watchful sensate awareness gives us. Immanence. Abram goes on to specify where his work *departs* from Deleuze's: "As a phenomenologist, I am far too taken with lived experience- with the felt encounter between our sensate body and the animate earth- to suit his philosophical taste. As a metaphysician, Deleuze is far too given to the production of abstract concepts to suit mine." (Abram 2010, p 10) Both Abram and Deleuze articulate the body that thinks.

Abram's two books chart a philosophical course through the production of abstract sense by way of a progressive alienation from the sensuous. Abram describes an immersive and living flesh of inhabited world, which is flattened into an interior space of reflection by the operation of the alphabet. The flat and the deep. The body as an extended actor knows depth intimately. The mind, a new-comer, a limit case of the former, in its newfound, imaginary independence is fixated on terms whose stability comes from the very stasis of marks and letters. It cannot help *but* imagine itself to be written onto the world. To the mind, the world, in all its depth, is two dimensional; a slate, a parchment, a cave wall. It adds its own pseudo-depths of intellectual abstraction to phenomena, just as it forgoes its original and direct perception of embodied depth. Abram identifies the *alphabet*, perfected in Greece, as the trigger for the development of our self-perception as disembodied, unaffected spiritual beings,

aloof from a world that seems to pass by on a screen. The surface of encounter has shifted from terrain to page:

While the visible landscape provides an oral, tribal culture with a necessary mnemonic, or memory trigger, for remembering its ancestral stories, alphabetic writing enabled the Hebrew tribes to preserve their cultural stories intact even when the people were cut off, for many generations, from the actual lands where those stories had taken place. By carrying on its lettered surface the vital stories earlier carried by the terrain itself, *the written text became a kind of portable homeland for the Hebrew people. And indeed it is only thus, by virtue of this portable ground*, that the Jewish people have been able to preserve their singular culture, and thus themselves, while in an almost perpetual state of exile from the actual lands where their ancestral stories unfolded. (Abram 1996, p 195)

Philosopher, feminist, and linguist, Luce Irigaray, approaches this same idea by a different route: she treats the Platonic cave allegory as a play-by-play analysis of the means by which *symmetry* comes to be installed as the evaluative criteria for robust thought. This move makes of thought a kind of performative abstract geometry. It serves to direct away from the senses, away from the empirical, toward a “game-of-thinking”, which will re-create the world in its own image. She describes the shadow-theatre of the cave allegory as follows:

On one side, then, men pass, move about freely, we are led to believe, they are led to believe, restricted only by the ban on advancing further into the cave. On the other side, prisoners are chained up facing the back of the cave- a hollow space that is just as *closed off* as the wall curtain will remain *intact*-, backs to the fire, to the balustrade, to the men moving about behind it, and to the instruments of their prestige. Their backs are also turned, of course, to the origin, the *hystera*, of which this cave is a mere reversal, a project of figuration. Without cracks. A prison that these men can have no measure of, take no measures against, since they are restrained by other, or like, chains or images of chains from turning back to the opening of this grotto, from walking around to examine its topography, its deceptive project of symmetry. The a-priori condition of the illusion governing and structuring this drama in mime. Fictive representation of the repetition that leads, and can only lead, to the contemplation of the Idea. Eternally fixed. (Irigaray 1985, p 249)

Irigaray in effect accuses Plato of doing what sleight of hand magicians would call “routining” a series of seeming accidents in order to lead to the unquestioned

acceptance of a false conclusion. Never has the logic of metaphysical magic been so clearly identified with magic in its performance sense. The deliberate aim, or effect of this performance, and the cave analogy IS a performance, is the full semanticization of the world, and at the same time, the full obscuring of bodies-in-the world.

But we're getting ahead of ourselves, and ahead of the story that Socrates has already put together so that things unfold in the right order. He guides you surefootedly along a well-blazed trail, according to a tried and true method. No surprises, no cracks are to be feared. He plays it all back *in reverse*, as it were, and with a certain irony, retracing his steps, confident of the destination, skirting all obstacles. The only risk you run is of finding yourselves at the end more cunningly enslaved than at the outset. Understudies in a mime that you yourselves confirm... (Irigaray 1985, p 248)

Furthermore, just as letters must be inscribed upon a tablet, parchment or surface, the images of sensible things are now seen, not as occurring in their depth, but as shadows projected onto a curtain or veil, hanging over the rear wall of the cave. It is the same movement, in either case. In other words, Plato replaces the world-in-itself, in its depth, with an overlay, a screen upon which perceptions are discerned:

[a] wall curtain swallows up the conjurer's sleight of hand; this wall curtain stands in the way, barring the path, by/for artifice. It is artfully, artificially fashioned by human hand. This wall curtain or restraining wall or balustrade prevents the men who have raised it from having access to the back of the cave. *Here is the backcloth of representation.* (Irigaray 1985, p 249. My italics)

The end result is a miraculous and magical theatre, in which well-ordered, geometricized thought comes to appear to have a self-existence prior to sensation. Ideas can be picked out against this neutral background, and given clarity and distinction, by their contrast. By making the background of noise, of ambiguity, of *depth* vanish, the world of forces-in-flux can be replaced by a collection of essences, assembled according to an architecture (Irigaray 1985, pp 256-258). The flattening of the sensuous world is *necessary* in order to build a foundation for the house of ideas. We interact with it as if we are writing our thoughts upon it, as if it were a slate. Both

Abram, as critical magician, and Irigaray, as magical critic give us detailed accounts:
the production of interior space at the expense of the recognition of exterior depth.
The displacement of immediacy into a magical theatre of mediation.

Chapter 18: Rhetoric and Enchantment

Magic is not neutral. It is rhetorical at its heart.⁶² Plato wrote in the *Phaedrus*:

Oratory is the art of enchanting the soul, and therefore he who would be an orator has to learn the differences of human souls- they are so many and of such a nature, and from them come the differences between man and man. (Plato 2000, p 271)

The word “enchantment,” is of course, entangled with the idea of magic. Like “*spell-ing*” or “*grimoire*” (grammar), “enchantment” points back to *enunciation* as the source of magical power. “Enchantment’s” root in English appears to be the Latin verb *cantare*, to sing, implying that to enchant is akin not just to music, but to vocal music in particular.

Enchanted things and bodies seem to be immersed in limpid water beneath which they glitter like diamonds or pearls... their nimbus dazzles us and protects them. To make them radiate thus, we content ourselves most often with immersing them in the transparency of language or in the brilliance of style and we sometimes succeed: we see them shine behind clear words or stiffen or settle beneath their rigor when they do not shrivel up beneath the ugliness or dryness of terms... to perfect the miracle, one can only by turn immerse words and languages in the spell of a song [*chant*], whence comes the word *enchantment*. (Serres 1997, p 160)

The bard, the rhapsode, the rhetorist, are all enchanters, and indeed, anyone who would seek to persuade anyone of anything (including themselves) is participating in this use of language to condition or frame the real. Rhetoric is no mere ornament on a presumably neutral base of language. ALL utterances are rhetorical. Some, but not all, uses of rhetoric are counterfactual, that is, they convince the audience of something other than what is the case, they lie. To recognize that all rhetoric is enchantment, but not all rhetoric is empty, or false, is to restore us to a proper appreciation of the

⁶²The neutral register is in truth *never* neutral, but reifies an order of perception that establishes subject and object as two independent and parallel orders of being, while excluding the experience of subject-object entanglement and transcendence, which is part of magic and mysticism.

creative power of language, which we lose when we oppose rhetorical to factual discourse or conflate magic with cheating. A neutral register is used to convey facts that are to be considered unbiased. Pure material factuality can be productively described with a supposed neutral register, at least on the level of quantitative analysis. Objects and distances can be measured, weights can be ascertained, quantities counted, probabilities calculated. Logical entailments can be worked out exactly for closed systems. Pure abstraction, too, can be viewed in such a register, since at its heights, the contributions of imagination have seemingly vanished, and the work of rational thought appears to be governed by the apodictic “laws” of mathematics and logic. The neutrality of the neutral register is an illusion. Magic is art, and art has the potential to be a force of liberation. To quote the prolific artist-magician Alan Moore:

I believe that magic is art, and that art, whether that'd be writing, music, sculpture, or another form, is literally magic. Art is like magic, the science of manipulating symbols, words or images, to achieve changes in consciousness. The very language of magic seems to be talking as much about writing or art as it is about supernatural events. A grimoire, for example, the books of spells, is simply a fancy way of saying grammar. Indeed to cast a spell is simply to spell, to manipulate words, to change people's consciousness, and I believe this is why an artist or writer is the closest thing in the contemporary world that you are likely to see to a shaman. (Moore 2005) (*Transcribed directly by the author from a video performance*)

It is fair to say that the rhetorical and aesthetic elements of human thinking are present in self-described *artworks*, and also throughout the creative process, in whatever domain such a process might explore. It is not whether magic is present or absent in a work of art as opposed to say a logical argument, but rather, the different ways in which the elements of magic are present in *both*. And they are. Even the impossible and deceptive neutral register is an aesthetic exercise, made possible by an initially creative selection of elements, a choice of representational theatres.

Chapter 19: Aesthetic Efficacy

Deleuze and Guattari provide an explicit model of aesthetic efficacy that is in every way compatible with the model of the magician as initiator of change. “Art preserves, and it is the only thing in the world that is preserved.” (Deleuze and Guattari 1994, p 163) But how can we say that preservation is the initiator of change?

What is preserved- the thing or the work of art- is *a bloc of sensations, that is to say a compound of percepts and affects*. Percepts are no longer perceptions; they are independent of a state of those who experience them. Affects are no longer feelings or affections; they go beyond the strength of those who undergo them. Sensations, percepts, and affects are *beings whose validity lies in themselves and exceeds any lived*. They could be said to exist in the absence of man because man, as he is caught in stone, on the canvas, or by words, is himself a compound of percepts and affects. The work of art is a being of sensation and nothing else: it exists in itself. (Deleuze 1994, p 164)

Preservation of a quality of perception modifies the landscape of common sensuality. It performs the function, as Jacques Rancière will inform us, of enabling a poly-valent zone of coupling, combination, and encounter, on the level of the embodied and of the sensual. The monument, the mark, is a preservation for the future: it ensures the return of encounters in accordance with its nature.

By means of the material, the aim of art is to wrest the percept from perceptions of objects and the states of a perceiving subject, to wrest the affect from affections as the transition from one state to another: to extract a bloc of sensations, a pure block of sensations (Deleuze 1994, p 167)

How can this be tied into magic as such? Rancière writes:

Aesthetic experience has a political effect to the extent that the loss of destination it presupposes disrupts the way in which bodies fit their functions and destinations. What it produces is not rhetorical persuasion about what must be done. Nor is it the framing of a collective body. It is a multiplication of connections and disconnections that reframe the relation between bodies, the world they live in and the way in which they are ‘equipped’ to adapt to it. It is a multiplicity of folds and gaps in the fabric of common experience that change the cartography of the perceptible, the thinkable, the feasible. As such it allows for new modes of political construction of common objects and new possibilities of collective emancipation. However, this political effect occurs

under the condition of an original disjunction, an original effect, *which is the suspension of any direct relationship between cause and effect*. ‘Aesthetic efficacy’ means a paradoxical kind of efficacy that is produced by the very rupture of any determinate link between cause and effect. (Rancière 2009, p 72)

Image and sign can be made to intervene in the framing of events, not directly, but by means of those “*connections and disconnections that reframe the relation between bodies*.” Consider the idea that a new mode of action becomes possible, through the medium of art, once the grounding of the principle of linear cause and effect has been subverted. Aesthetic causation can mimic linearity, or it can subvert it altogether. It will propagate primarily via vectors of contagion, but once it has saturated its medium, it undergoes a series of progressive transformations and metamorphoses. Those metamorphoses may be understood and mapped, and so the master of a system of such becomings, in an environment where that system has “set” into (or infected) the deep frames, will be able to avail of an (apparent) celerity and deftness with respect to calling into immediacy, certain required presences.

An enchantment is an aesthetic enveloping of an otherwise neutral object. It marries the circuitries of aesthetic metamorphosis to the target body, or person. Spaces, persons, or objects that are enchanted have an aesthetic envelope. This envelope exists in the circuits of knowledge that pick out the enchanted object; it does not have a physical existence, but a temporal one. The object, space, or person is clearly altered, affected, and influenced by this virtuality that is paired to them. The virtuality consists of the circulation of images, assumptions, and associations. For example, the old graveyard up by the crossroads is haunted, because it is *known* to be haunted. There are stories about it, a history, a legacy that is not obvious on its

surface, but which will be become known if you ask around, as will forms of practice, traditions even:

‘Old man Jenkins is jinxed!’,

‘The well water is blessed.’,

‘The sprig of rowan was used as a wand.’,

‘New Orleans is cursed.’

‘Passing through the Men-An-Tol will induce labor.’



Figure 6: The Men An Tol, St Ives, Cornwall, UK. Photography by Waterborough, released to public domain.

These examples have this in common: in each case the enchanted body has become infected with *story*. Narrative is viral. The bare facts have acquired another level a meaning transcendent to them, virtual to them, which exists as the circulation of stories about the thing through the population that has encountered it. The more powerful the current running through the thing’s aesthetic envelope, the more intensely it is felt to be important, significant and singular, and the more, in general, it is considered capable of “rubbing off” some of its significance, imparting via contagion, some of its virtual properties to other bodies that come into a relation with

it. Perhaps the problem with Old Man Jenkins is that he went to New Orleans...
knowingly.

Chapter 20: Productive Metaphor

There is something of the poetic in *all* acts of magic; even in the most “objective” language, the conclusions are deeply underwritten by the metaphors that support the abstractions. Even the most rational language depends on metaphor. The metaphors which make comprehension possible bring with them the aesthetic choices involved in selecting just the right image. It is the function of metaphor, on a cognitive level, to found abstractions by transporting common sense realities from the sensible to the intellectual. In a passage that cuts to the heart of how magical constructions are involved in cultural realities, George Lakoff writes:

The idea that metaphor is just a matter of language and can at best only describe reality stems from the view that what is real is wholly external to, and independent of, how human beings conceptualize the world - as if the study of human reality were just the study of the physical world. Such a view of reality - so-called objective reality - leaves out human aspects of reality, in particular the real perceptions, conceptualizations, motivations, and actions that constitute most of what we experience. But the human aspects of reality are most of what matters to us, and these vary from culture to culture, since different cultures have different conceptual systems. Cultures also exist within physical environments, some of them radically different- jungles, deserts, islands, tundra, mountains, cities, etc. In each case there is a physical environment that we interact with, more or less successfully. The conceptual systems of various cultures depend on the physical environments they developed in.... Each culture must provide a more or less successful way of dealing with its environment, both adapting to it and changing it. Moreover, each culture must define a social reality within which people have roles that make sense to them and in terms of which they can function socially. Not surprisingly, the social reality defined by a culture affects its conception of physical reality. What is real for an individual as a member of a culture is a product both of his social reality and of the way in which that shapes his experience of the physical world. Since much of our social reality is understood in metaphorical terms, and since our conception of the physical world is partly metaphorical, *metaphor plays a very significant role in determining what is real for us.* (Lakoff 1980, p 146)

Metaphor is a transportation of meaning, as is art, as is magic. Where you find these functions, you find the working material of the magicians. In the words of McLuhan:

The word ‘metaphor’ is from the Greek *Meta* plus *pherein*, to carry across. In this book we are concerned with all forms of transport of goods and information, both as metaphor and exchange. Each form of transport not only carries, but translates and transforms, the sender, the receiver, and the message. The use of any kind of medium or extension of man alters the patterns of interdependence among people as it alters the ratios among our senses. (McLuhan 1994, p 90)

There is no magic without metaphor, and every metaphor functions as a chosen act of transmutation.

We live embodied, sense-absorbed lives, and we process experiences by drawing them into language, sorting them vis-à-vis each other by means of an intermediary and managerial mode of translation: metaphor. Not *pointing*, or *signifying*⁶³ metaphors (metaphors that are understood to refer allegorically from one state of affairs to another), but *productive* metaphors. The idea that metaphor is unproductive, or pseudo-representational is a major misinterpretation of metaphor’s function linguistically, and one that is used to reify the idea that abstract states are a-priori. The use of metaphor allows us to establish the logic that our ideas will follow, even before they have been proposed as ideas. This fact is obscured when we then wrongly suppose that the resemblance between states of body and mental states is merely coincidental, and that metaphors are a way of “shedding light” on what is already there. The reason that states of mind can resemble states of body (say, by having directionality, density, spatial arrangement and so forth) is that the function of metaphor has been to transport those physical logics *into* an abstract space. Metaphor is not representational. It does not “discover” meanings, it forges and creates them (even though we seldom recognize this, and often treat these insights as “discovered”).

⁶³ Which are only a highly specialized subset of metaphoric function, despite the pernicious widespread belief that they exhaustively represent what metaphors actually accomplish within language.

The spurious interpretation of the function of metaphor-as-representation conditions us to ignore the insertion of structural biases, anthropomorphisms and other distortions into our common-sense understanding. These get imported into our thinking by metaphorical transport. The difference between viewing metaphor as *signifying* and in viewing it as *productive*, marks the familiar difference between enchanter and enchanted; magician and fool. Abstraction is a-posteriori, and abstract concepts are built by means of metaphorical transport from the actual to the virtual. If this is unrecognized, then framing of perception becomes surreptitious, invisible. Productive metaphors that actively generate an abstract domain of thought from one or more concrete ones are operative, sometimes quite consciously, in magic.

It is common to dismiss metaphor as “mere” ornament or indicator. Consider, for instance, the story of the *Passion*. It might be treated as a metaphor for enduring restriction and suffering with compassion and forbearance. Or “do I dare to eat a peach?” (Eliot 1920) might be construed as an allegory for indulging sexual appetites. It is this kind of pointing metaphor that is dismissed by Deleuze and Guattari in the opening of their extraordinary autopsy of the psychology of power and self, *Anti-Oedipus*:

It is at work everywhere, functioning smoothly at times, at other times in fits and starts. It breathes, it heats, it eats. It shits and fucks. What a mistake to have ever said *the id*. Everywhere *it* is machines - real ones, not figurative ones: machines driving other machines, machines being driven by other machines, with all the necessary couplings and connections. An organ-machine is plugged into an energy-source-machine: the one produces a flow that the other interrupts. The breast is a machine that produces milk, and the mouth a machine coupled to it... Hence, we are all handymen: each with his little machines. For every organ-machine, an energy machine: all the time, flows and interruptions. Something is produced: the effects of a machine, not mere metaphors. (Deleuze and Guattari 1983, p1)

The *Passion*, accordingly, would not be a sign meant to be picked up by a mind, but a machine for bringing about the state of affairs. The cross, when carried, is a restrictive cognitive junction establishing the self as a point and position on an axial coordinate system (and opening it to all the powers that such an extended device avails). The peach is a construction of femininity as “virgin femininity ripe for consumption,” or some such. Either way, these are not signs, but machinic transformers that operate directly on the flow of time, making it *become* through them, like light through a filter, or water through a sluiceway. To encounter a metaphor is to become that metaphor. A metaphor is not a message, but a transportation from one state to another. The metaphor IS the passion, and it instantiates the gospel as a real and ongoing interpersonal event, a universal psycho-social coordinate system governing the domain that it creates, sustains, and enables (that of Christendom).

Deleuze’s and Guattari’s rejection of “figurative” metaphor is well founded. This rejection, when read next to the work of Lakoff and Fauconnier, is capable of generating a misunderstanding. Although one would seem to reject metaphor, and the other champion it, the seeming disagreement is superficial. It is fair to retain the word “metaphor,” provided we know we are talking about a productive transportation. In other words, Lakoffian conceptual metaphor IS productive metaphor, IS a machine of desire, *IS* magic.

Chapter 21: What Isn't Magic?

The plurality and depth of our analysis, namely that we identify “magics” operating anywhere within the generally mediated sphere, raises an important question as to the *limits* of magic. In other words, “what isn't magic?”. There are two different answers that I will explore, which both revolve around the concept of distinction, contrast.

The first answer to the question “what isn't magic?”, is as follows: forces in themselves are not magic, magic is restricted to the *mediation* of forces (so as to allow the hidden causal mechanism to be exploited). As a corollary, then, it is only (and all) *human* mediations of forces that are magical. “Man is the magical animal.” This is a bold statement to make. Let's unpack it. This answer entails the claim that human beings, by means of extensions to their consciousness, are uniquely capable of producing fictional worlds of their own, and that THIS, is in effect, the sum of what magic is. Granted, however, that we know much less about non-human mediation practices, I would like to qualify this, so as to soften it: “As far as we know, only humans mediate the immanence of the world, in the manner that we are calling magical”, and it is indeed the outstanding trait of humans that we construct these extensions. But whether humans are the ONLY beings with this capacity, is, to my mind, not a certainty. If other beings are shown to use mediative strategies to compose and navigate inner and outer worlds from which they design technological extensions that reinforce and instantiate those worlds materially, then we will know that the magical experience is not exclusively human. To my mind, any mediating animal is a magical animal.

Still, this leaves us with forces-in-themselves. Forces in themselves are not magical, in the sense of possessing an *acausal* element. The main thrust of this work

has been to claim that *acausal* phenomena are illusory. Nothing comes from nothing. I have suggested the claim that that if we dig deep enough into our mediations, no matter how spontaneously self-asserting they may appear to be, we can undo them altogether, and we can therefor *intuit* an unmediated space. TRUE, that space is almost always *re-mediated*⁶⁴ by us, re-magicalized in some mode, but for my claim to work, I must hold on this point. Magic requires forces, an agent of the representation of those forces, and an audience to perceive this representation. For a force to cause an event is not magical as such, but for a person to represent an event, following from some force, will contain at least a minimum of “magicalized” content, even if that content is simply the act of selecting specific words and not others, through which to make the report. An aesthetic enveloping. This claim, that forces are not themselves magical, directly contradicts animist and pan-psychic claims, and is on the face of it, materialist.⁶⁵ Notwithstanding, I require this claim if I am going to limit magic in the way that I have, and it is necessary for me to limit magic if I am going to claim that we can use the twin faculties of enchantment and disenchantment vis-à-vis world-making/breaking. If I am going to claim, in this work, that magic is an art of hidden causation equivalent to “deep mediation”, I require a fundamental boundary between the magical and the unmagical, the mediated and the unmediated.

A softer approach, is however, possible. Instead of saying forces-in-themselves are unmagical, and mediations are magical, what if we say: “it is *meaningless* to ask

⁶⁴ See *Remediation: Understanding New Media*. (Bolter and Grusin 1999).

⁶⁵ It is an odd materialism, however, as it allows matter to be dynamic, and even alive. The unmediated is the unmagical. The unmediated, however is in no way necessarily lifeless, or even without consciousness.

whether *forces in themselves* are magical or unmagical, BUT it is meaningful to ask whether or not *human mediations* are”. This formulation thus restricts the space wherein the question has basic *relevance* and gives us the more agnostic statement: “It is only *meaningful* to ask magical questions of human mediations”. The boundary remains, but the strength of the claim is softened. Additionally, this allows us to introduce degrees to which a human mediation might be deemed magical. We are given the option, now, whilst admitting that though the very act of making a representation contains basically magical cognitive moves, there may well be profound differences in terms of how wildly the re-mediated narrative diverges from the dynamics apparent in the forces themselves. This will allow us to see intrinsic differences internal to our mediative practices which align them more towards one or other end of the spectrum as regards magicality versus “realism.”

TO recap, then, our first answer to the question “what isn’t magic?”, is: unmediated forces are not in themselves magic. This is an *extrinsic* answer, and its purpose is to set up an *extrinsic* demarcation between the magical and the unmagical which, if interpreted in its strongest sense, provides us with a boundary between what magic absolutely is, and what magic absolutely is not. Whether we interpret this in the hard sense, of claiming that there is no magic outside the boundary, and all magic is to be found within it, or in the soft sense, by claiming that the question of magical power only makes sense in terms of human mediations, this approach is still meant to separate the domain of the magical from the domain of the a-magical.

The second answer to the question “What isn’t magic?” follows from the softer interpretation of the above, and is *intrinsic*, referring to *degrees* of magicality within our mediated sphere. By suggesting that it is only meaningful to talk about magic in

terms of what human beings mediate and remediate, we have shifted the discussion onto a question of how deeply a given instance of mediation hide the dynamics of the forces themselves. To make a play on Jeremy Bentham's utilitarianism, I could suggest that we develop a "hide-onic" calculus to measure the degree to which a representation actively diverges from the forces it purportedly maps onto, but that would be far too silly.

Accepting that some degree of "magic" is present in ANY representation, we can still claim that there are modes of discourse which minimalize it, and modes of discourse which maximalize it. How can we tell the difference? The key to this seems to be the question of whether or not a given account is being used towards the (ultimately impossible) goal of exhaustively and accurately describing a force, or whether (and to what degree) a given account seeks to siphon some of the "explanatory power" off onto a spurious, or unrelated para-cause. This maneuver might be a partial, a near total, or a total re-attribution of causality. This maneuver might be performed to fill a gap in knowledge or technique with a "best possible explanation", or it might be performed specifically to empower an agent, or a schematic with praeternatural, or transcendental prestige. In an extremely minimalist example reminiscent of Frazer's portrayal of magicians as primitive and flawed rationalists, we could envision a person (or people) encountering a forest for the first time. When they seek to portray that forest in language, to what degree is the portrayal descriptive, and to what degree is it explanatory? It seems to me that if, in this scenario, the observer attempts only to *describe* the forest, magicality would remain at a bare minimum, HOWEVER, if the account shifted toward an attempt to *explain* the forest's existence, there would almost certainly need to be a variety of magical

explanations and attributions: the work of gods, or spirits, or of legendary heroes... this is precisely because explanation *itself*, is an activity that seeks to fill in gaps of non-knowledge with “best guesses”,⁶⁶ and the fact that we do not KNOW the “cause”, would forcibly elicit such magical explanations (at least until such a time as enough observations have been made to give an account of that forest, purely in terms of description of how its myriad, interconnected forces *work*).

In short, I think that it is possible, in human language to be, or think, along minimally magical lines, but it is not possible (or desirable) to completely extinguish magical thinking. There are discourses that require a high degree of magicality, and those which require a low degree of magicality. Highly magical mediations include art, fiction, poetics, drama, and rhetoric, while low-magic mediations include empirical science, detective work, and descriptive language. The *intrinsic* contrasts between discourses which rely heavily on hidden causal siphoning/re-attribution and those which seek to minimize it, are ultimately upheld by the *extrinsic* contrast between the a-magicality of forces themselves and the magicality of mediation. The interplay between these extrinsic and intrinsic boundaries give us the gradations of the magical and the “unmagical”, within a space which is ultimately opened up as a kind of *fiat* of language, metaphor, and abstraction: the human psycho-cosmos.

⁶⁶ This can of course be mitigated, especially if we accept the contingency of explanation, and proceed to keep investigating the forces themselves, but if this safeguard is not taken, any given explanation itself will likely become normalized and then “fit” into all subsequent worldviews as fact. For this reason, close-description and agnosis of explanation is, in my opinion the optimal way to keep a given mediated discourse “minimally magical”.

Part II: THE ARCHITECTURE OF ABSENCE

This Hollow of the world, round like a sphere, cannot itself, because of its quality or shape, be wholly visible. Choose any place high on the sphere from which to look down, and you cannot see bottom from there. Because of this, many believe that it has the same quality as place. They believed it is visible after a fashion, but only through the shapes of the forms whose images seem to be imprinted when one shows a picture of it. In itself, however the real thing remains always invisible. Hence, the bottom – {if it is a part or place} in the sphere – is called *Haidēs* in Greek because ‘to see’ is *idein*, and there is no seeing the bottom of a sphere. And the forms are called ‘ideas’ because they are visible forms. The <regions> called *Haidēs* in Greek because they are deprived of visibility are called ‘infernal’ in Latin because they are at the bottom of the sphere... Such, then, are the original things, the primeval things, the sources or beginnings of all, as it were, for all are in them or through them or from them.

Aesclepius (Copenhaver 1992, pp 76-7)

And I would build a dome in air,
A sunny dome, with caves of ice.
And all who heard would see them there,
And all would cry: beware, beware;
His flashing eyes, his floating hair;
Weave a circle round him thrice,
And close your eyes with holy dread,
For he on honeydew hath fed,
And drunk the milk of Paradise.

S.T. Coleridge
(Coleridge 1919)

Glossary

?-Being: The being of pre-nominal immanent forces.

!-Being: The being of post-nominal semantic essences.

Deviction: In the logic of chambers, or *camerae*, the process of dominating the chamber with a quality suited to it. Certain qualities are more suited to dominate certain *camerae* than others.

Assemblage of Figurate Systems: A submerged landscape of associative “thought-systems”, which function as interpretive matrices, and which is operational in supporting both main-stream and marginalized “enchantments” of event-perception.

Chapter 1: The Fullness of Emptiness and the Emptiness of Fullness

We have established that the world as we frame it to ourselves quite naturally becomes entangled in illusions. Where this seems to start is where we begin to mediate fundamental difference, or flux, in ways that make it apparently reducible to static ideas. In the following sections, I will explore how we might gain insight into how this process unfolds if we considered these points of stasis, the Platonic “essentials”, as kinds of mental spaces, or semantic tunnelings through, or hollowings out of first-order immediacy. This would then shed some light on the various esoteric systems, such as the *Tarot* and even the *I Ching*, which function to frame the entirety of the encounterable cosmos in a series of basic templates, moments, or spaces: so many inter-linked chambers of experiences. Because such frameworks feel as if they are somehow ab-stracted *from* immediacy, I have associated them with *absences*. Because they are often highly articulated, deliberately thought out, multi-room systems of mental or memorial spaces, I have dubbed them *architectures*. It is for these reasons, that I refer to this form of deep framing as an ‘Architecture of Absence’.

‘The Architecture of Absence’, accordingly, wishes to depict thought as akin to an *intagliated surface*. To accomplish this, I turn firstly toward the classical philosophical question of the relation between Being and Nothingness. By making an argument for the reversal of their relationship, I set up a means by which I can go on to portray magical systems as carvings-out, tunnelings into the flesh of the world. I will use this dynamic to claim that agency, even subliminal agency, of human cognitive actors, is at work in the framing of thought at its very depths. This becomes the means by which I will be able to claim that magical systems (and indeed any

systematic cognitive scaffold), are theatrical, poetic productions that are dynamically connected to *time*. The surface is teeming with action, the cuts and crevasses that abstraction forms are canalizations of that action. An assemblage of figurate systems, in various relationships, is a magic of time, and *knowledge* is the threshold across which the sensory is drawn, siphoned, in order to form *noesis*' mediating theatre.

The knowable world is a special case, a subset of the experience-able. This is the same as saying: namable and named are subsets of the un-name-able, unnamed, yet experienced, encountered. Consensus, of course, starts with the provision of name, of structure, onto this uncountable immediacy. The name-able and knowable form out of the unnamed and unknown in a process of dilation. The semantic spaces open like camera-shutters within the flesh of the pre-semantic. In this way, the "Universe," as we know it, is born; pre-Being, the positive existence of difference-in-itself retracts itself *from itself*, then projects itself back into the space it vacates. The universe courses through its own negation.

The above account is loosely derived from the concept of the *Tzimtzum*, introduced by Kabbalist, Isaac Luria.

The second Lurianic symbol of negation and evil is *Tzimtzum*, the divine contraction and concealment that gives rise to a created world. In *Tzimtzum* God's beneficence is restricted in order that finite creatures can subsist without being reabsorbed by the infinite divine light." (Drob 2000, p 63)

Accordingly, the process of creation involves the formation of an abyss of separation in which essences are refined in isolation before they reform into their natural state. Similitude, identity, is a negation of difference. The fabrication of the universal theatre is an attempt to negate all difference, and reform it as identity, in other words, to convert the inexhaustible unknown into the exhaustible known.

The dyad of *Apeiron* and *Peras*: the relation of being to non-being, of question to answer, silence to speech, emptiness to fullness, and chaos to order. The most fundamental departure from the world of forces, and the entry into abstraction. “The Tao that can be told is not the eternal Tao. The name that can be named is not the eternal Name” (Lao-Tzu 1988, Ch 1). We can rephrase this: “The difference which is negated is not the eternal difference. The identities that can be identified are not eternal identities.” In other words, to connect with experience directly, unmediated, one comes to it by an affirmation of its paradox, its fundamental incommensurability, its *difference*. Deleuze writes:

We must consider whether or not the celebrated thesis of the *Sophist*, despite certain ambiguities, should be understood as follows: ‘non’ in the expression ‘non-being’ expresses *something other than the negative*. On this point, the mistake of the traditional accounts is to impose upon us a dubious alternative: in seeking to dispel the negative, we declare ourselves satisfied if we show that being is full positive reality which admits to no non-being; conversely, in seeking to ground negation, we are satisfied if we manage to posit, in being itself, or in relation to being, some sort of non-being (it seems to us that this non-being is necessarily the being of the negative or the ground of negation). The alternative is thus the following: either there is no non-being and negation is illusory, or there is non-being, which puts the negative in being and grounds negation. Perhaps, however, we have reasons to say *both* that there is non-being *and* that the negative is illusory. (Deleuze 1994, p 64)

The indispensability of picking out the positive in *relief* appears to have resulted in a conflation of the ability to say “no” (in a process of selection, for example), with the more absolute statement: “it is not.” Being is number, and number is a “spotlight,” in the sense that we have already introduced that term: *a foregrounded element*. The error resulting from assuming an equivalence between “not this,” and “this is not,” forces non-quantifiable phenomena into a mute silence, with the entailment that we begin to see non-discrete, fluxional systems as defective. The experience of time is felt to be an illusion. “It is not,” must be absolute; non-Being must, as Parmenides clearly

thought, be fully excised, in order to make that-which-remains appear shinningly clear and distinct. Spherical. Consider that Descartes' experiment in radical doubt was meant to establish more or less the same thing: the undoubtable sovereignty of nouns, essences, *ones*. Definition was attained at the price of pretending that non-Being did not exist at all: if it was not clear and distinct, then rather than representing a counterpoint to the concept of identity in "pure difference," the counterpoint is made out to be "pure absence," a very different concept.

There is, or was, quite likely, some trace of the Greek phobia of zero implicated in this movement towards conceptual positivism, indicated by Deleuze. "The Greek universe, created by Pythagoras, Aristotle, and Ptolemy, survived long after the collapse of Greek Civilization. In that universe there is no such thing as nothing. There is no zero." (Seife 2000, p 25) Zero does strange things to number:

Even if zero were a number in the Greek sense, the act of taking a ratio with zero in it would seem to defy nature. No longer would a proportion be a relationship between two objects. The ratio of zero to anything - zero divided by a number - is always zero; the other number is completely consumed by the zero. And the ratio of anything to zero - a number divided by zero - can destroy logic. Zero would punch a hole in the neat Pythagorean order of the universe, and for that reason it could not be tolerated. (Seife 2000, p 35)

The Greeks, knowing of the number zero from the Babylonians, chose to ignore it. Why? Because it disrupts the sanctity of arithmetic: it introduces ambiguity. Its operations of multiplication are irreversible, and it seems to be in infinite supply, should you care to add or subtract it from a given sum, forever. Division by zero collapses the theatre of identities altogether. Non-Being is a similar conundrum. It is as if, in following the Greeks, we have pretended that non-Being is to Being what the number -1 is to the number 1. But this is not the case, for non-Being is 0, and as such, it is at the very heart, or core; an eye of the cyclone, and the fountainhead of Being.

There are three infinite series, not two. Zero is just as infinite as the positive or the negative series and it is less austere than we would think. Deleuze continues:

Neither the problem nor the question is a subjective determination marking a moment of insufficiency in knowledge. Problematic structure is part of objects themselves, allowing them to be grasped as signs, just as the questioning or problematizing instance is part of knowledge allowing its positivity and its specificity to be grasped in the act of *learning*. More profoundly still, Being (what Plato calls the Idea) ‘corresponds’ to the essence of the problem or the question as such. It is as though there were an ‘opening’, a ‘gap’, an ontological ‘fold’ which relates being and the question to one another. In this relation, being is difference itself. Being is also non-Being, *but non-being is not the being of the negative*, rather, it is the being of the problematic, the being of problem and question. Difference is not the negative; on the contrary, non-being is Difference: *heteron*, not *enantion*. For this reason, non-Being should rather be written (non)-Being or better still, ?-Being. In this sense, it turns out that the infinitive, the *esse*, designates less a proposition than the interrogation to which the proposition is supposed to respond. This (non)-Being is the differential element in which affirmation, as multiple affirmation, finds the principle of its genesis. As for negation, this is only the shadow of the highest principle, the shadow of the difference alongside the affirmation produced. Once we confuse (non)-Being with the negative, contradiction is inevitably carried into being; but contradiction is only the appearance or the epiphenomenon, the illusion projected by the problem, the shadow of a question which remains open and of a being which corresponds as such to that question (before it has been given a response)...Beyond contradiction, difference - beyond *non-being*, *(non)-being*; beyond the negative, problems and questions (Deleuze 1994, pp 63-4).

Deleuze is addressing non-Being as the domain of problem and question. In doing so, he gives us the idea of ?-Being. A problem field which picks out the “not this” of clarity and distinction without collapsing it into a “this is not.” This problem-field is the cosmic soup out of which our chosen answers form as so many mental spaces and conceptual networks.⁶⁷ The natural corollary is to rename Being to match this move. We are thus given !-Being, as the being of answer and axiom. The interplay of ? and !

⁶⁷ The well formed question is an affirmation of the problem, not as a unity, but as an unresolved multiple-intensity. A con-fused state. The question, brought to bear on a problem, produces answers, and the answers are perceived by us as resolutions, unities, when the truth is that they are insertions, bridges to further question. The entire *mesocosmic* space is a space of bridges.

thus become an elegant and succinct way of describing the threshold of idea formation as identity-formation.

Compare Deleuze's thought, above, with a piece written by Crowley entitled 'The Soldier and the Hunchback':

Now the ideas of McCabbage are banal and dull; those of Hume are live and virile; there is a joy in them greater than the joy of the Man in the Street. So too the Buddha-thought, *Anatta*, is a more splendid conception than the philosopher's Dutch-doll-like Ego, or the rational artillery of Hume. This weapon, too, that has destroyed our lesser, our illusionary universes, ever revealing one more real, shall we not wield it with divine ecstasy? Shall we not, too, perceive the inter-dependence of the Questions and the Answers, the necessary connection of the one with the other, so that ... we destroy the absolutism of either ? or ! by their alternation and balance, until in our series ? ! ? ! ? ! ? ... ! ? ! ? ! ? ... we care nothing as to which may prove the final term, any single term being so negligible a quantity in relation to the vastness of the series? Is it not a series of geometrical progression, with a factor positive and incalculably vast? (Crowley n.d., ch. IX)

If we were to fuse these two accounts, that of Deleuze and Crowley (while considering the cognitive idea of mental spaces, established and *framed* by metaphor), we would derive an interesting heuristic for how the networks of mental spaces form. First order mental spaces emerge out of the problem-field as basic postulates: unity, equipotentiality, nominalization. Secondary mental spaces form within the primary, and so on with tertiary spaces, quaternary spaces, etc..., all developing as sets within sets, forming the "Dutch doll" ego, and engendering a fractal progression, a telescoping infinite ingress of thought into *itself*. Question and answer, difference and repetition, are engaged in this movement from natural sensation to semantic sense. It is the same movement, a surplus of categorical imagination that takes us in one movement from body to mind: not separate faculties, but rather a progression of strata. Magic, which is driven by metaphor, is the universal method that allows mind to be an emergent property of body. Magic is the glue that binds embodiment to abstraction,

and which knows no absolute barrier between the two. Crowley goes so far as to attempt an analogy which fuses question-space and solution-space:

In the light of the whole process, then, we perceive that there is no absolute value in the swing of the pendulum, though its shaft lengthen, its rate grows slower, and its sweep wider at every swing. What should interest us is the consideration of the Point from which it hangs, motionless at the height of things! We are unfavourably placed to observe this, desperately clinging as we are to the bob of the pendulum, sick with our senseless swinging to and fro in the abyss! We must climb up the shaft to reach that point --- but --- wait one moment! How obscure and subtle has our simile become! Can we attach any true meaning to the phrase? I doubt it, seeing what we have taken for the limits of the swing. True, it may be that at the end the swing is always 360° so that the !-point and the ?-point coincide; but that is not the same thing as having no swing at all, unless we make kinematics identical with statics. (Crowley n.d., Ch IX)

Here, I think is where our analogy breaks down, or at least becomes difficult to maintain.

Crowley's move, above, conflates the two zones of question and affirmation so thoroughly as to eradicate and obfuscate *any* sense of primacy. To Crowley, ? and ! form a chicken/egg dilemma. The central point in the circle, (which one can presume that Crowley believes is a hyper-field that is essentially both problem and answer), is Being and non-Being at the same time. 0 and ∞ are another such hyper-entity; substantially identical (as infinite quality, and infinite quantity respectively, with the natural numbers "magically" bridging the series), but conceptually separate (as the respective limits of uncountableness and countlessness). On the other hand, he correctly points to the fallacy that disables intuition: making kinematics identical with statics.

In *The Book of Lies* (Crowley 1996, pp 8-11), Crowley includes two full pages prior to the actual body of the text. His commentary on this graphic presentation reveals his ultimately pragmatic choice to put ? first:

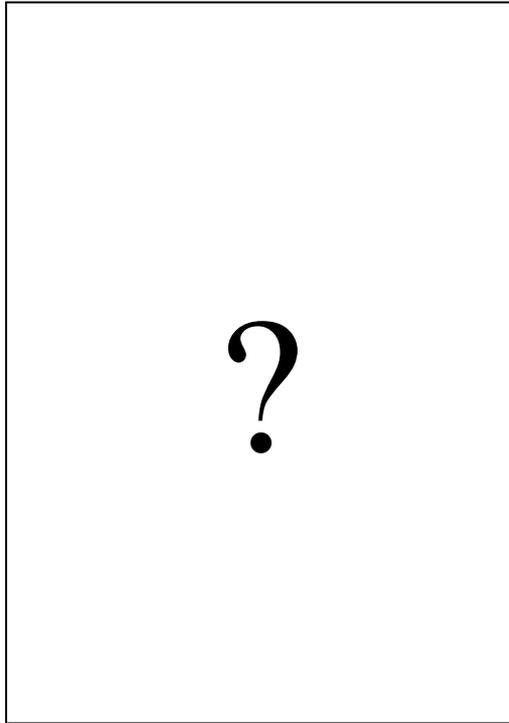


Figure 7: Crowley's Hunchback, from The Book of Lies.

And Second:

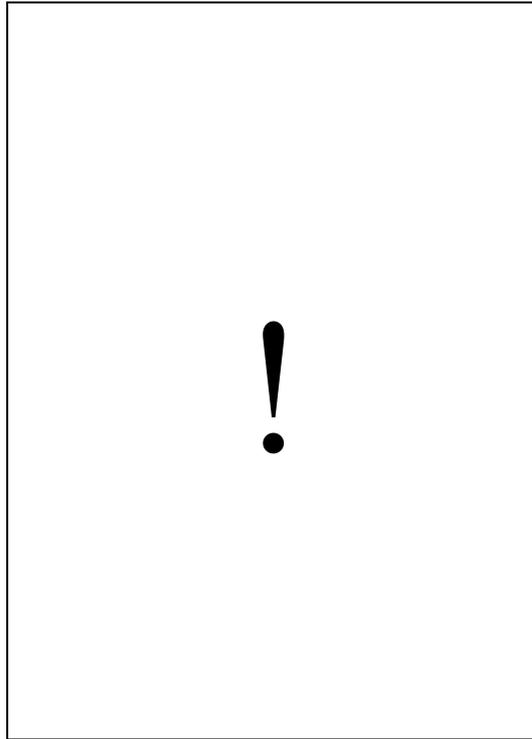


Figure 8: Crowley's Soldier, from The Book of Lies

And lastly:

O
!
The Ante Primal Triad which is
NOT-GOD
Nothing is.
Nothing Becomes.
Nothing is not.
The First Triad which is GOD
I AM.
I utter The Word.
I hear The Word.
The Abyss
The Word is broken up.
There is Knowledge.
Knowledge is Relation.
These fragments are Creation.
The broken manifests Light.

Figure 9: Crowley's Genesis, from the Book of Lies

The poem continues, and proceeds to articulate the Qabalistic tree of life model (which we have already seen in figure 5), in the more or less customary way, but I think it is these first three sections, and the ? and ! which precede them that are the most interesting, and applicable to our study. It is of special note that he goes on to give his own commentary on the meaning of this opening “Chapter-that-is-not-a-chapter.” He writes:

COMMENTARY (The Chapter that is not a Chapter)

This chapter, numbered 0, corresponds to the Negative, which is before Kether in the Qabalistic system. The notes of interrogation and exclamation on the previous pages are the other two veils. The meaning of these symbols is fully explained in “The Soldier and the Hunchback.”

This chapter begins by the letter O, followed by a mark of exclamation; its reference to the theogony of “Liber Legis” is explained in the note, but it also refers to KTEIS PHALLOS and SPERMA, and is the exclamation of wonder or ecstasy, which is the ultimate nature of things.

Figure 10: Crowley's Commentary on the pre-text, from the Book of Lies

Furthermore;

COMMENTARY (The Ante Primal Triad)

This is the negative Trinity; its three statements are, in an ultimate sense, identical. They harmonise Being, Becoming, Not-Being, the three possible modes of conceiving the universe. The statement, Nothing is Not, technically equivalent to Something Is, is fully explained in the essay called Berashith.

Figure 11 Crowley's Commentary on the preconditions of conception, from The Book of Lies

Here, Crowley shows the triply infinite nature of thought: Infinite question (0, becoming), infinite affirmative answer (1, being), and infinite negative answer (-1, non-being). Here there is a difference in vocabulary that is important to note.

Deleuze's ?-Being is more appropriately Crowley's “becoming,” as Crowley's Being

and Not-Being are both modes of !-Being: the affirmative and negative answers, respectively. Deleuze's seeming dyad between ? and ! is in fact a triad, a ternary series.

The abyss or void is created by the retraction of ?-Being from itself. It is the shadow cast by the formation of !-Being as a hollow within the thickness of dynamic universal immediacy. To this end, it is important to recognize that the idea of a "true" emptiness, is also trans-cultural. In the Greco-Semitic descendent civilizations it is *Apeiron*, or *Ain Soph*, and perhaps Sophia, or even the Holy Ghost; and in the Buddhist and Taoist worlds, this becomes the *Sunyata*, or the *Tao*. In either case, the nameless and formless, pre-knowable, and yet experience-able condition of existence is identified, although it is only until name and form are applied that the "world" as we know it is formed. Whether this is a positive movement, or an unmitigated catastrophe seems to depend on the particular cultural philosophy in question.

A positive, or full emptiness eventually degrades, because of language, into a world in which things are understood as self-existent, isolated from one another, and arranged into orders other than the natural. A *Fall*, a *Maya*, a *Samsara*. Meanings, systems of meanings, and systems of systems of meaning, are things: not *additions* to ?-Being, but *subtractions* from it. Bergson wrote:

If there were *more* in the second term than in the first, if, in order to pass from presence to representation, it were necessary to add something, the barrier would indeed be insuperable, and the passage from matter to perception would remain wrapped in impenetrable mystery. It would not be the same if it were possible to pass from the first term to the second by way of a diminution; for it would then suffice that the images present should be compelled to abandon something of themselves in order that their mere presence should convert them into representations... Now, here is the image which I call a material object; I have representation of it. How then does it not appear to be in itself that which it is for me? It is because, being bound up with all the other images, it is continued in those which follow it, just as it prolonged those which preceded

it. To transform its existence into representation, it would be enough to suppress what follows it, what precedes it, and also all that fills it, and to retain only its external crust, its superficial skin. (Bergson 1991, pp 35-6)⁶⁸

As we have seen, Deleuze linked this very same ?-Being with *difference in itself*; the “being of problem and question:” a richness of difference containing similitude within it only as an afterthought, a vague approximation. Parts of the difference field drift together at relatively similar rates: identity is fragile and contingent. In a difference ontology, “identity” is not other than “motion together.”

When reflective schemes of identification are mathematized and eternalized, a provisionally static space is made to appear as the world. “Naturally” self-identical objects and subjects become differentiated, a derivative difference rather than a constitutive one. Change is made to appear as a defect, and permanence a perfection. Such is the state of affairs wherein self-identities are separated from one another by a nullifying void, negation, which is more of a dampening field allowing specific elements to be picked out, spotlighted, than a true pre-semantic field of difference. We have named something that is essentially full as “emptiness,” and something that is essentially empty as “fullness.” Full of itself-ness. Being is a hollow: a subtraction *from* immanence.

As per the *Tzimtzum*, we will say that noun-oriented thought is not added to the world but *subtracted* from it; each term its own, subsidiary Genesis. The entirety of abstract understanding is a network of hollows and reservoirs made possible by the effect of assuming that a phenomenon can be *identified*, made subject to a form. ?-

⁶⁸ Representation is thus a system of exterior outlines, comparative to the Kabbalistic concept of *Qliphoth* or shells. Essence (or reality) gets trapped in representation, in shells, thus becoming isolated and disempowered.

Being retracts its presence to form !-Beings within itself. Each Being, each *On*, each “one,” is a kind of conceptual container that can hold various predications.⁶⁹ In other words, the Boolean logic of containment in particular, and thus logical entailment in general, is a consequence of this photonegative vision of our existence where zero, ?-Being, is a fundamentally *verbal* and fecund source-space and one, !-Being, is a singular infinitude of *cavities* within the former. Any number between 0 and ∞ describes the specific configuration of an *environment* carved out of the primordial chaos:

What Boole proposed, from a cognitive perspective, was a historical metaphor that allowed one to conceptualize classes as having an algebraic structure. He developed this metaphor in stages. The first stage was a partial metaphorical understanding of classes in terms of arithmetic. Boole observed that if you conceptualize classes as numbers, and operations on classes (union and intersection) as operations on numbers (addition and multiplication), then the associative, commutative, and distributive laws of arithmetic would hold for classes. In cognitive terms he constructed a *linking metaphor* between arithmetic and classes, mapping numbers to classes, arithmetic operations to class operations, and arithmetic laws to “laws of thought” – that is, the laws governing operations on classes. (Lakoff 2000, p 124)

Here, then, is a possibility: the “forms,” or general definitions of Plato are not above the world but are spaces, hollows, gaps in immanence’s continuous flesh, caused by a semantic incision. They are borings-through the *Ain Soph*, and also tunnels *for* it, because what is caused to happen is that pure difference is differentiated from *itself* by the application of the tautology as if a spotlight shone upon the stream. Pure difference *Tzimtzums* from itself, opening up number-able concavities within its own body, and

⁶⁹ “The concept of containment is central to much of mathematics. Closed sets of points are conceptualized as containers, as are bounded intervals, geometric figures, and so on... The concept... of containment ...[is] not special to mathematics but [is] used in thought and language generally.” (Lakoff and Nunez 2000, p 33)

concavities within those concavities. Pocketed⁷⁰. Because the cavities are like “sets,” their overall structure embodies a logic. Logic is not in the world, but in the arrangement of the spaces through which we see the world. It flows through itself. Number proceeds to hollow out non-number all the way to the very edge of its capacity to do so, where it becomes Cantor dust.⁷¹ This is how meaning populates the void. “Being” is a hole in the profound depth of that which stretches far beyond it, and which only the flesh knows.

⁷⁰ Recall Part I, Chapter 2, on “environmentism”: These “pockets” constitute the environments that thought both engenders and negotiates.

⁷¹ Pushed to its limit, this vision of the world that proceeds by the proliferation of hollows granulates to the point where the discrete seeks to approximate the continuous: it dissolves into it. The ultimate result of pushing a logic of container schema to its furthest limits is an illusion of smoothness created by a granulated intelligence which seeks to approach infinite resolution. This is Being’s approach to non-Being.

Chapter 2: Surfaces

Consider that the empirical world is a surface, or topology of encounter. It is then modified (added to or annexed by) the semiotic strata that language and visionary activity apply to it. Serres, Deleuze, and Guattari, and Irigaray all speak in different yet resonant terms of this world-code-making as being the act of engraving upon, tattooing, canalizing, intagliating, folding or otherwise performing topological manipulations upon a *surface*. Take Deleuze and Guattari, for example:

Transcendence may be entirely “empty” in itself, yet it becomes full to the extent that it descends and crosses different hierarchized levels that are projected together on a region of the plane, that is to say, on an aspect corresponding to an infinite movement. In this respect, it is the same when transcendence invades the absolute or monotheism replaces unity: the transcendent God would remain empty or at least *absconditus*, if it were not projected onto a plane of immanence of creation where it traces the stages of its theophany. (Deleuze and Guattari 1994, p 89)

What is meant by this? Essentially that a system of transcendental signs, is imposed upon phenomenal immediacy in such a way as to form a kind of corral for thought: circumscribing thought’s implicit boundaries within the absent parameters of the divine sanction. They continue:

In most cases, imperial unity or spiritual empire, the transcendence that is projected onto the plane of immanence paves it or populates it with figures. It is a wisdom or a religion- it does not matter which. It is only from this point of view that Chinese Hexagrams, Hindu Mandalas, Jewish Sephiroth, Islamic “imaginings” and Christian icons can be considered together: thinking through figures. (Deleuze and Guattari 1994, p 89)

Esoteric systems such as these are thus part of the deep mediation of the thinkable, part of a movement that affects thought’s framing by manipulating its preconditions. The cultic aspect of magic is as we said earlier, related to an art of encounter, and of the staging of encounters in such a way that the play of Truth and Falsehood unfold

within the system of presupposed boundaries instituted by the magical Will. The authors continue: sage-thought is *figurate* thought, paradigmatic thought:

Hexagrams are combinations of continuous or discontinuous features deriving from one another according to the levels of a spiral that figures the set of moments through which the transcendent descends. The mandala is a projection on a surface that establishes correspondence between divine, cosmic, political, architectural, and organic levels as so many values of one and the same transcendence. That is why the figure has a reference, one that is plurivocal and circular by nature. Certainly, it is not defined by an external resemblance, which remains prohibited, but by an internal tension that relates it to the transcendent on the plane of immanence of thought. In short, the figure is essentially *paradigmatic*, projective, hierarchical, and *referential* (the arts and sciences also set up powerful figures, but what distinguishes them from all religion is not that they lay claim to prohibited resemblance but that they emancipate a particular level so as to make it into new planes of thought on which, as will be seen, the nature of the references and projections change). (Deleuze and Guattari 1994, p 89)

All these examples of mystical and magical systems demonstrate what we have already visited in connection with Agamben's discussion of the knowledge of names. Each figure has two functions: firstly, to capture a free flow, by means of assigning it to a region of transcendent figure and secondly, to release that flow by sanctioning its immanence. The former restricts by means of a figure, the latter releases the flow from the figure. The former constitutes division by 1 (production of commensurability), the latter, division by 0 (production of incommensurability).

Transcendental figures, such as the magical systems we have already discussed are brought to bear upon a first order immediacy as a kind of lateral interposition: the establishment of a surreptitious framing; a series of absences disguised as a positive entity. Serres writes:

Classing is a succession of dams, a complicated arrangement of wickets, hierarchy is semi-conductive, the gaps between subsets prohibit crossings, classing is there to disarm, to slow momentum be it creative or destructive, who can tell, to cool down its heatedness or slacken its celerity... (Serres 1995, p 94).

The *real* flows through these capture apparatuses, these waterworks. It is in this way that “laws,” limits, are established in human social perception. They reflect the diversion and social engineering of otherwise wild flows through the *socius*. We see that Serres, Deleuze, Guattari and Agamben all recognize the same dynamic which we noted between the magus and the sorcerer: a magic of transcendentalism that imprisons flows, and a magic of immanent connection that liberates flows. Territorialisation and deterritorialization. Psychosis and neurosis. As we will see in a later chapter, Agamben (following Thomas Kuhn) treats the *paradigm* as the tacit framing of things below the surface of their experienced becoming; an intermediary between empiricism and idealism. The *paradigm* is IN the *mesocosm*. Recall also that the *magic name* functions as a capture flow OR a release depending on which magical tradition the practitioner represents. If figurate thinking is deployed in the way Deleuze and Guattari note that religion, that *wisdom*, might deploy it, it is a capture-flow, but if such thinking is played out as an *artist* or a scientist would deploy it, it acts as a release-flow.⁷² The *art* becomes a means of canalizing the real, or of diverting established canalizations.

⁷² See Part I: Chapter 2.

Chapter 3: The Veil in the Cave

There are nothing but caves, because there has never been a cave in the first place.

Deleuze states in *The Logic of Sense* that his program is directed toward an

“overturning of Platonism.” He writes:

Every thing, animal or being assumes the status of simulacrum; so that the thinker of eternal return- who indeed refuses to be drawn out of the cave, finding instead another cave beyond, always another in which to hide- can rightly say that he is himself burdened with the superior form of everything that is, like the poet burdened with 'humanity, even that of the animals'. These words themselves have their echo in the superposed caves. Moreover, that cruelty which at the outset seemed to us monstrous, demanding expiation, and could be alleviated only by representative mediation, now seems to us to constitute the pure concept or idea of difference within overturned Platonism: the most innocent difference, the state of innocence and its echo. (Deleuze 1994, p 67)

Like Deleuze, I challenge the presupposition that the back wall of the cave be construed as solid at all. I would suggest instead that we view it as a screen, behind which is a starscape. It is a kind of curtain drawn over the deep experience of depth, upon which shadows are cast. Plato constructs the metaphor such that sensuousness, in all its sublimity, becomes seen as a flat and impenetrable surface, a cul-de-sac. The story of the cave is the story of how we turned our backs on the world of the sensuous, denied it its extended depth, so that we might conjure into existence an *interior* depth, an interior self. Irigaray points out that:

[M]en have lived in this cave since their childhood. Since time began. They have never left this space, or place, or topography, or topology, of the cave. The swing around the axes of symmetry necessarily determines how they live, but they are unaware of this. Chained by the neck and thighs, they are fixed with their heads and genitals facing *front*, opposite- which in Socrates' tale, is the direction toward the back of the cave. The cave is the representation of something always already there, of the original matrix. (1985, p 245)

This silent fullness of sensuousness is not without pattern, but at the same time not *subject* to pattern. This is where the magic trick must happen: to render the fact of

immediacy mediate without remainder. To *subject* it. To reverse the order of perception, insinuating the fruits of artifice into our mediation of sensuousness to ourselves. Installing interior depth, insisting on perfect harmony, perfect symmetry. Making change subject to stasis, making difference subject to similitude. Halting time, making of it a magical theatre. Irigaray continues:

Womb which these men cannot represent since they are held down by chains that prevent them from turning their heads or their genitals toward the daylight. They cannot move toward what is more primary, toward the *proteron* which is in fact the *hystera*... To the *Hystera Protera* that is apparently resorbed, blended into the movement of the *Hysteron Proteron*. Forward. The cave cannot be explored in the round. Which means that the men all stay there in the same spot- same place, same time- in the same circle, or circus ring, *the theatrical arena* of that representation. (Irigaray 1985, p 245)

The *men* are forcibly oriented away from the primary toward the abstraction, in a movement that assumes its own ground, and toward a metaphysics that begs its own question. This account effectively points out the extra-ordinary restrictions that the metaphor requires in order to be effective. It both requires them for *and* insinuates them into, the frame of what it means to know. Rectilinear vision, positional fixity, perfect symmetry. The cave, in Irigaray's essay, is a space in which geometry becomes embodied (or where bodies become geometrized). What's more, the original datum of experience is (mis)revealed as a two-dimensional illusion.

Is it a wild leap to suggest that flattening of the space of experience into a screen or curtain takes its own impetus from the practice of writing-on-a-page, or tablet? Letters on a page are a paradigm case for "meaning-contrasted-with-blankness," or more eloquently: "clarity and distinction." The metaphor of the cave, which is meant to give us an apparatus that can host secure knowledge, is very likely, at least in part, an extension or compliment of the practices of reading and writing which first became culturally integrated on a large scale in and around Plato's time:

In ancient Greek culture Havelock discovers a general pattern of restricted literacy applicable to many other cultures: shortly after the introduction of writing a 'craft literacy' develops. At this stage writing is a trade practiced by craftsmen, whom others hire to write a letter or document as they might hire a stone-mason to build a house, or a shipwright to build a boat... At such a craft-literacy stage, there is no need for an individual to know reading and writing any more than any other trade. Only around Plato's time in ancient Greece, more than three centuries after the introduction of the Greek alphabet was this stage transcended when writing was finally diffused through the Greek population and interiorized enough to effect thought processes generally. (Ong 2002, 92-3)

Entrance into this cave, whose true gate has been forgotten, hidden behind a curtain, and whose obvious exit leads only deeper within (under the guise of leading outside), is marked by the adoption of the tacit assumption that the things we meaningfully encounter are projected onto a surface. The cave's very existence is predicated on this illusion. The body's voice is now completely silent, and in the silence, words take their turns speaking:

If everyone spoke, and spoke at once, the silence of the other would no longer form the background necessary to highlight or outline the words of some, or of one. Silence or blanks function here in two ways to allow replication. *Of likeness.* (Note that these two ways cannot be analyzed into twice once; the silence of the magicians cannot simply be added to that of the back of the cave.)... The interference of speech, of what goes on and gets across in conversation, could no longer be reduced to that *neutral* blank, that *neutral* silence which allows words and their repetition to be discriminated and separated out and framed. This is how the illusion is sustained that there are specific terms for each thing and each one, which can be reproduced as such. (Irigaray 1985, p 257).

These stabilities, these blanks, bear some kinship to the disambiguated sequences of the fortune teller: artful stases to generate order, ordinality, sequentiality.⁷³ The cave is a para-optical magician's theatre, which dramatizes the movements and development

⁷³ Recall the diviner's "cryptic potency," Part 1: Chapter 17.

of meaning structures after a textual model. To think like Plato is to trade manifest depth for virtual depth. Across the cave's true mouth, a matrix is silently stretched, forcing all ideas into an alphabetic mode. Ancient Greek, like Hebrew, Arabic, and other early phonetic scripts, is *alphanumeric*. Each letter is also a number. This means that not only is each word a composition of fragments, but it is also a numeric sum: a natural integer, falling generally within the range of 1-10,000. Every phenomenon that crosses the threshold, that is given a name, is also given a numeric "address." Every object of discrete meaning must have a name, and also a number.

Each vault, each pocket, each crevasse within the entire labyrinth of literacy is named and numbered. Every number so conceived will be a multiple of 1, a set containing n units. Every system has its own unique numbering. Every thinkable thought, insofar as it has a name, is at the same time a number, a unit, a set, a *container*. Reason starts with the alphabet, which establishes the combinatorial basis of naming. All named ideas can, in this rudimentary way, be counted. Thought is quantified⁷⁴. The "Bergsonian reversal" is effectuated.⁷⁵ Within the abstract,

⁷⁴ Perhaps what is quantifiable are the mediated, compressed, distilled contours of 'objective' thought, carved out of the noise as a set of mediated signals. Kittler clearly shows how we might cast the development of the alphabet in this light, alongside music, so as to serve up a platter of time-directional signals from out the sea of undirected and un-directable existential noise.

When an unknown Greek, probably in Miletus, proceeded to distribute the innumerable cacophony of noises emanating from human voices across twenty- four letters, when in a further step Pythagoras reduced the innumerable manifold of sounds emanating from plucking instruments to seven intervals that could be addressed by those Greek letters, and when, finally, Guido of Arezzo invented the staff notation for these scales, then all this was in principle nothing but digital signal processing. At least on paper, uncountable infinities shrunk down to countable finite sets. Metaphysics was nothing but the confusion of such data compression with a so- called essence, the insinuation that contingency could be absorbed by writing, sound by music, and entropy by order. Everything else — such as hair, dirt, and feces that in Plato's view most likely lacked an idea — was relegated by metaphysics into a "pit of nonsense" (Kittler and Winthrop-Young 2017, p 11)

⁷⁵ Recall Part I, Chapter 22.

alphanumeric matrix, thinking is akin to an implicit calculus, a rudimentary *mathesis universalis*, since to be named is to be reduce-able to the unit. Everything within the cave of abstraction is a unit, and every unit is a container. There can be no thing that is so named whose value is 0. Zero is beyond name. It indicates the absence of *stasis*. It implies the presence of irreducible movement outside of conceptuality.

In this picture, !-Being is a displacement of ?-Being, just as 1 is a displacement of 0: “something” is picked out of immediacy, leaving the rest (those intensities which do not qualify as things or nouns, but exist as forces of becoming, ontological questions), to be designated “nothing,” forgotten, rendered non-present to the eye of the initiate. *Tzimtzum*. The trap consists of making all existences which cannot be named, vanish: to cause the world as-it-is to disappear and to be replaced by an order of categories which is none other than the contrivance of our collective memory (artificially stabilized, nominalized, and objectified units). The mandate of this far-ranging, adaptive, indexical system, which is literate awareness is to co-opt, subordinate, and silence the world outside the cave. To pinion it on stases. This is a magician’s theatre, played upon “fools:”

But there, in the *apaideusia*⁷⁶ of the cave, Being is tested by being split up into offspring, copies, and fakes. These disperse and miniaturize the potency of the gaze. Of mirror. Of eyes “like” mirrors that are not, always already, broken and articulating the break, but rather are artificially disjointed and divided into properties offering an illusion of analysis, and addition, and multiplication, up to the highest power. The unit! (Irigaray 1985, p 254)

Once the initial container, the primary unit, is presupposed, all future framings of things and events follows according to the same logic. Containers within containers

⁷⁶ Signifying lack of education.

within containers. Frames, mirrors, caves. A metaphysical fun-house. The model, or custodianship of it, is the great prize, to be fought over and to be protected at all costs; precisely because the model is the means by which activity of any kind within the realm of human meaning is either to be sanctioned or condemned. To possess the true measure of things, or the method that is the sole route to it, is the right claimed by priests and emperors: to maintain order against disorder. To maintain the human against the sub-human. To define the *unit*.

Within the model, within the telescoping mirror-maze of abstraction, there is room for plenty of simulated movement: transposition of elements, reconfiguration of the architecture, even renovation of the entire *model*. The basic fact remains that the human world, insofar as it is a world of ordered schema, categories and chambers, bound together by a systematic unity, is a model. We model, partially, and tentatively at first, and finally within a system that allows for its own renovation: this is the magic trick that allows us to function stably as literate beings. God is the singularity, or infinite regress of abstraction into a point. At the same time, we retain, in God, a spark of immediacy, kept alive in the space of its own banishment. This is in order to drive the feverish construction of structures and architectures. Like a carrot on a stick, this captured spirit of immanence is a token of what we have abandoned, held up in front of us as a goad that draws us further into abstraction. God holds out the promise that when we finally catch up with it, we will be able to re-engage immediacy on terms that are now totally our own. We dare not cease, lest we lose the opportunity. We dare not halt the tunneling and redirect ourselves towards de-abstraction, precisely because we are so afraid of losing that “spark” of immediacy, which we have allowed to linger

within the negated zone. That spark is ultimately our vision of freedom. God is a door. This, I suspect, is the driving force of the magic that inspires Platonic priesthood.

For this new “subject” that enters the world again greedy for scientific power, and (other) fantasy, and (other) dream, disturbing the precision of his theoretical instruments, must be frozen - any “passivity” of senses that are still natural and therefore uncontrollably open to impressions from silent, forbidden matter. At least for as long as it takes to make a decisive move. To focus the lens definitively. The “I” thinks and it will be, and you will be, whatever its photographic apparatus has zoomed in on, providing that apparatus is not opened so hyperbolically wide or closed so tight that there is nothing to be seen. (Irigaray 1985, p 185)

The magic of nominalization is a para-optic magic, which effaces difference wholesale, and takes its power from the implicit equation $a=a$, $1=1$. It is the word that demands this. For any alphanumeric formulation is a set of fragments demanding a unity. That unity is supplied by the word’s semantic and numerical content. Every number but 0 is a 1. The subject is thus a number: any number, but ALWAYS ultimately the number 1. Irigaray continues:

The “I” believes its field of operations has been simplified, cleansed of all stains: dreams, insanities, disordered passions. Sicknesses of a limited understanding that will have to be taken into account, but later. And clearly and distinctly. Withdrawn into a strict deprivation of all exercises of the sensibility and the imagination, the subject will observe the world like the pilot of a ship taking to the open sea where nothing determines the perspective but the limitless *nothing to be seen*. Turning inward, therefore, back into himself, the subject will set out again, will start to trace his way, buttressed by this (almost) *nothing to have*. Despite it all, “I think” therefore *I have being*. A lack is turned into an excess of power, into an all-powerful *matrix* that will make him lucidly reconsider to what and to whom he owed his life. (Irigaray 1985, p 185)

So many identities, essentialized mirrors and their contextual frames. The space within the pseudo-womb of the cave is a ‘Society of the Speculum’. If Socrates is a midwife of ideas, he is such by birthing, out of zero, so many ones: he denies immanent difference, demands universal definition. Description is not enough. To be

born out of the Platonic cave is to receive a name in letters, and to receive a name in letters is to receive a name in numbers.

This is not merely an epistemic exercise. It is a profoundly political reframing of forces (fluxes) into things. It is the establishment of a chassis sufficient to support geometric rationalism.⁷⁷ Frozen imagery is the essence of the work done by these mirrors that establish identity within the cave's specular theatre. Veils for power. Units, having crossed the threshold into unifiability, nominalization. What is to happen to those willing to open the curtain at the back of the cave, and exit by the forgotten entrance, the sensuous?

⁷⁷ And it should not be forgotten that Geometry is a war machine.

Chapter 4: Bubbles

Abstraction can capture the exterior outline of an object, and then dispel its qualitative contents. A kind of translation occurs between the direct phenomenal encounter, and then its re-presentation. It transports our intuition from the unbounded or porous intuition of a phenomenon in nature (a tree, a sailboat, a badger), to a kind of abstract intuition that re-casts the embodied phenomenon into shapes of pure geometry, and ultimately the most “perfect” of shapes, the sphere. To understand how giving a name to something can change its texture with regards to our intuition, we have to understand how equilibrium works. When we go searching for the essence of an encountered phenomenon, we start by picking out all the qualities without which that phenomenon would be called something else, and without further features that would be merely incidental. In other words, to define a concept, we need to locate all the crucial descriptors that would let us identify the phenomenon and exclude redundancies that would take us to levels of greater specification without modifying the idea itself. This recognizable abstract outline is equivalent to “basic level categorization” (Lakoff 1999, pp 27-8). Any basic level concept forms a static conceptual equilibrium from its descriptor elements. It is effective essentially because it is a kind of *averaging*. Put another way, if we were to enumerate the descriptor elements and then arrange them evenly around the circumference of a circle, you would obtain a circular schematic. The average of all identifying elements in equilibrium around that circle results in a mental recognition that we can misconstrue

as an *essence*. Ideal Being⁷⁸ is a sphere: the archive of infinite representational elements averaged into and projected around a point.

We have both tactile-immanent intuitions and visual-transcendent intuitions. Embodied thinking operates in terms of touch, feel, texture and contour. Disembodied rationality is in terms of vision and geometry. It comprises a sort of implicit Pythagorean concept-palace. A secret figurate understanding. Interposing a geometrical schematic onto a phenomenal field generates laws for the field. Within such a methodology, when we look to understand a phenomenon, we typically analyze it into components comprising the tensions that a number of points under consideration, arranged geometrically, might describe. For example, when we think in threes, our abstract intuition supplies itself with a field of triangles and hexagons with which to index its inventory of encounters. When we think in fours, our abstract intuition uses crossed polarities, to create a maximally stable space. When we think in fives, it is as if we have added an apex to a square base, and thus pushed the quadratic configuration of abstract elements into the third dimension, into a pyramidal form. Naturally, the idea that gets to sit atop the pyramid is the essence, given a definite form, and set above the body itself, paralyzed, as it is by being put on the cross of two polar ideas.

When we break a thing down into its elements like this, we impose symmetry onto it: a constructed equilibrium. The whole apparatus then vanishes into the

⁷⁸ A definition is the “sphere” that contains all instances, and averages all qualities of a phenomenon, such that only its bare participational equivalency with other so-defined phenomena remains. The body without organs, all things being equal, is spherical.

background as a tacit framework. The framework is applied subconsciously to encounters, weaving, assuming, insinuating a matrix into the nature of things.

It is possible that nouns are felt, fundamentally, as spheres, which is to say *as extended points*. This is a subtle, tacit recognition, often below the threshold of consciousness. Nouns are perfect in their self-identity; synchronic in their essential nature (their definability as instances of a general type), even if their bodies are subject to change. They can contain and be contained. They can move and be moved. They can be subsumed in larger and larger spheres, and, ultimately, they can be viewed at the highest level of generalization as a single “sphere of spheres.” The problem of distinguishing between elements and essences may be considered as follows. When a thing is self-identical, it means that we intuit it as a pure sphere of itself. Its elements have been inventoried, re-cast around a perimeter, and then, at rest, it is possible for mind to “feel” the unity of the concept. We think largely in terms of these abstractly intuited balls of self-evidence. They are holes in the flesh of things, which have had all necessary sensations removed from their content. We only feel that we have truly grasped something, intellectually, when we have used its own semantically instantiated categorical unity to hollow it out.

Assuming that the principles of centering and symmetry are observed, virtually any phenomenon may be en-sphered, or nominalized, and then further analyzed as cube, octahedron, tetrahedron, or any centered/symmetrical geometric object. The main assumption is that self-identity, whether simple or complex, is complete, or perfect, precisely when it is self-centered, and symmetrical. When it is empty. Then it may be transformed mathematically into any shape desired, providing that it is first and foremost, encircled. If all nouns were to retreat into their own centers, then the

world would dissolve as if into grains of sand, so these boundaries between the nouns themselves must dissolve, and the whole of the universe must empty out into Being as a transcendent sphere. Heraclitus wrote: "...[Being] is perfected from every side, like the bulk of a well-rounded globe, from the middle equal every way..." (Palmer 2009). Being is the meaning of meaning. Global meaning. The positivity of the verb, however, is elided, now only conceivable as a relation between spheres, somewhere within the sphere of spheres.

Gilles Fauconnier talks about "bubble-chambers", socio-mental spaces where a given set of illusions, of metaphors, hold as the principles founding ordinary, basic perception of that domain. These bubbles are brought into being by the creative work of human beings looking to cast an optimal frame through which to model the world:

Finding optimal networks has always been a highly valued skill, for which writers, poets, statesmen, teachers, scientists, and lawyers are highly regarded. The central blending at play in grammatical constructions, metaphor, and counterfactuals means that language users are perpetually constructing blends with varying degrees of novelty of which they are seldom aware. (Fauconnier 2002, p 386)

It is precisely these blends (at least the ones that become widely adopted), that function to stabilize our framings of the real. It is these created structures, more than any "objective" reality, that we turn to when making judgements. These structures are "our" world. Bubbles, spheres, spaces, hollows, environments. These chambers are our home-within the world: what makes us human is our semantic magic, our capacity to build such habitats out of our language.

Conceptual integration is strongly conservative: It always works from stable inputs and under the constitutive and governing principles. But conceptual integration is also creative, delivering new emergent structure that is intelligible because it is tied to stable structures. The bubble chamber of the brain runs constantly, making and unmaking integration networks. Cultures too, running a bubble chamber over the collection of their member's brains, develop integration networks that can be disseminated because the members of

the culture all have the capacity for double-scope integration. Very few networks tried out in these bubble chambers of brain and culture actually survive. A network that does survive takes its place in individual or collective memory and knowledge. From weaponry to ideology, language to science, art to religion, fantasy to mathematics, human beings and their cultures have, step by step, made blends, unmade them, rebled them, and made new blends, always arriving at human-scale blends that they can manipulate directly. This progression from blends to newer blends, blending and deblending, compressing and decompressing, is the pattern of child learning, too. (Fauconnier 2002, p 396)

Chapter 5: In the Tunnels of Memory

Developments in graphological technique actively transform the space of abstraction. With the phonetic alphabet we can expect to see a single, narrow cave mouth, with an extensive interior tunneling. This alphabet bottlenecks our contact with the surface. Unlike ordinary tunnels, the tunnels within these caverns shift and move; a labyrinth, or Borges' garden. Alphanumeric literacy also conjures up the desire to find, at the end of the cavern system, another exit: a singular point which mirrors the cave mouth itself. This idealized point - the hypothesized exit-from-abstraction-on-the-other-side-of-it - drives a continuous deepening of the tunnel system. In Plato's analogy, the idealized point is the Sun, in Plotinus, the One, and in Descartes it is the Cogito.

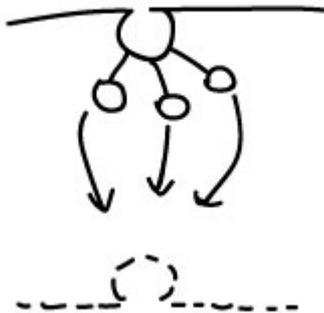


Figure 12: The search for an "exit" from abstraction drives abstract production.

It is my sense that "Telescoping" metaphysics, which depart from the world toward an ideal simplicity, *were born* out of the introduction of the Phoenician, Hebrew, and Greek alphabets. Modern "occult" systems, such as the Hermetic/Tarotic Qabalah are trying to reshape the network of tunnels, the container schemae of mental spaces. The advantage of such an extensive inner game, is that an adept can shape the local physical and social environment to be a reflection, on subtle levels, of their architected psyche. Thus, a game is insinuated into space and time. Only the mage

knows the game is being played, and only they hold its keys. The guru, or cult leader, is to become indispensable advisor of a primary, secret game that is being tacitly played by the others.⁷⁹

To call experience a “surface,” betrays us considerably. The word is useful mainly because it implies a point of contact with immanence. It is more likely not a two-dimensional surface at all, but an exterior depth which has been psychologically flattened to allow us, as persons, to step back from it, and consider it as a passive other. If experience is a surface, we must understand it to be a three-dimensional one (or even *n*-dimensional). In what is certainly one of the greatest sleights of mind ever delivered, Plato used the transformative framing function of metaphor to provide a grounding for thought that quite literally convinces us that our real experience is an illusion.

We erect a mirror in the cave mouth that superimposes the cavern’s map onto the sensorial outside. It is inconceivable to most of us that what is outside might bear no relation whatsoever to how we think. By this last projection, the organizational *force* of our magical self-image reaches into immanence, assembles physical inertias, and arranges them to corroborate our linguistic illusions. The projection becomes an *assemblage*. We re-arrange our local region so as to reflect ourselves, like a snail excreting a shell.... “The snail’s shell is a monument constructed out of its own affective capacities or the intensities transmitted thereby. Such monuments transfigure

⁷⁹ See Part 1, Chapter 4.

the experience of the animal into a living memory that is always carried with it” (Trnka 2001, p 54).⁸⁰ We tattoo ourselves upon the flesh of the world.

The entire network is a closed system, and whether organically structured (natural), or architected through meditation and ritual, these are ALWAYS spaces of memory. All thought is an art of memory. According to Abrams, full isolation from the “more than human perceptual field” is finally achieved with the Greek codification of vowels into the alphabet:

It was, only, however, with the transfer of phonetic writing to Greece, and the consequent transformation of the Semitic *aleph-beth* into the Greek “alphabet,” that the progressive abstraction of linguistic meaning from the enveloping life-world reached a type of completion. The Greek Scribes took on, with slight modifications, both the shapes of the Semitic letters and their Semitic names. Thus *aleph*- the name of the first letter, and the Hebrew word for “ox”- became *alpha*; *beth*- the name of the second letter as well as the word for “house”- became *beta*; *gimel*- the third letter and the word for “camel” became *gamma*, etc. But while the Semitic names had older, nongrammatological meanings for those who spoke a Semitic tongue, the Greek versions of those names had no nongrammatological meaning whatsoever for the Greeks. That is, while the Semitic name for the letter was also the name of the sensorial entity commonly imaged by or associated with the letter, the Greek name served only to designate the human-made letter itself. The pictorial (or iconic) significance of many of the Semitic letters, which was memorialized in their spoken names, was not readily lost. The indebtedness of human language to the more-than-human perceptual field, and indebtedness preserved in the names and shapes of the Semitic letters, could now be entirely forgotten. (Abram 1996, p 102)

In addition to this vestigial hieroglyphic element, Hebrew, as well as Greek and Arabic, were also, as I have already indicated, *alphanumeric*: every letter is a number. Numeracy and literacy are part of the same genesis. Alphanumericism is an essential

⁸⁰ And yet... the author notes that the human monument and the mollusk’s monument differ considerably: the snail’s shell is carried, so long as it is a snail. The human monument is like a disposable shell, perhaps. We are like snails insofar as we excrete our affections into a modification of the world, and like hermit crabs insofar as we tend to abide in the shells of dead snails, swapping them when convenient. A mixed metaphor, we are, and we dwell in the relics of creative acts, now past.

feature of the numerological practices known in the Hebrew as “gematria” and in the Greek as “isopsephy.” It is widely known that there is a belief in number codes, and the ability to use a number to refer to a word, or a word to refer to a number. To be named is to be numbered, to be numbered is to be implicated in the network of relationships between numbers and other numbers. An extensive and secret correspondence network, semi-deliberate, semi-accidental, stretches beneath the lexicon of an alphanumeric language. Such a network serves as a map of the “cave”, and a system of loci, linked to number-able *addresses*. Division by 0 is the only escape from the cave: 0 is itself the cave’s true mouth.

When we are forced to come out to the mouth of the cave for, whatever reason (a violent attack, the loosening of the mouth, or a decay of abstraction), we are becoming unmediated once again, partially. In an unbalanced, delirious, mad, or intoxicated manner, perhaps. Exposed to the groundless, ?-Being. None can look on the face of God and live, it is said, and I suspect that this is true of those who look out of this true cave-mouth and into the abyss. The moment of immanence. Deleuze had numerous names for it: the Body without Organs, because it is smooth of concept, although motley of aspect, and the Plane of Immanence, because it supplies the co-presence that allows “entities” to be distinguished. Spinoza, according to Deleuze, gave us this vision in the purest, most consistent form:

Precisely because the plane of immanence is prephilosophical and does not immediately take effect with concepts, it implies a sort of groping experimentation and its layout resorts to measures that are not very respectable, rational, or reasonable. These measures belong to the order of dreams, of pathological processes, esoteric experiences, drunkenness, and excess. We head for the horizon, on the plane of immanence, and we return with bloodshot eyes, yet they are eyes of the mind... To think is always to follow the witches flight. (Deleuze 1994, p 41)

Contrast this with a quote from the frontis-piece of *Spinoza: Practical Philosophy*:

‘Let me ask you what brought you to Spinoza? Is it that he was a Jew?’ ‘No, your honor. I didn’t know who or what he was when I first came across the book – they don’t exactly love him in the synagogue, if you’ve read the story of his life. I found it in a junkyard in a nearby town, paid a kopek and left cursing myself for wasting money hard to come by. Later I read through a few pages and kept on going as though there were a whirlwind at my back. As I say, I didn’t understand every word but when you’re dealing with such ideas you feel as though you were taking a witch’s ride. After that I wasn’t the same man.’ (Malamud, *The Fixer*, cited in Deleuze 1998, p 1)

The Plane of Immanence is Spinoza’s God, *Substance*.

According to Abram, orality constitutes a far less tunneled or cavernous encounter with the world than literacy. It is as if oral thought patterns really were meant to trace across the *surface* of experience, more like canals than caverns. In *Becoming Animal*, he gives us an inventory of the salient features of orality, insofar as it represents a different way of thinking and being which sticks close to the flesh of experience, rather than getting lost in the deep tunnels of abstraction:

First: Oral awareness is intensely local in its orientation... Second: The simple act of perception is experienced as an interchange between oneself and that which one perceives - as a meeting, a participation, a communion between beings. Third: Each perceived presence is felt to have its own dynamism, its own pulse, its own active agency in the world. Fourth: The ability of each thing or entity to influence the space around it may be viewed as the expressive power of that being. Fifth: Since our own sensitive and sensuous bodies are entirely a part of the world that we perceive- since we are carnally embedded within the sensuous field - then we can experience things only from our own limited angle and place among them. Sixth: To an oral culture, the world is articulated as story. Seventh: In such a breathing cosmos, time is not a rectilinear movement from a distant past to a wholly different future. *Rather, time has an enveloping roundness, like the encircling horizon.* Eighth: A world made of story is an earth permeated by dreams, a terrain filled with imagination. Ninth: Each entity participates in this enveloping awareness from its own range and orientation, according to the proclivities of its own flesh. (Abram 2010, p 268-271. My italics)

Let’s not romanticize orality, but at least recognize this: orality is a mode of transmission in intimate contact with the world. It draws its meaning from the

sensible. Literacy, on the contrary, draws its meaning from an increasing depth of distance from the world. It builds off of text, building off of text, building off of text. But text stops at the threshold of the sensible.

The modeling of ideas and idea networks as hollows lends itself to the generation of deeper and deeper spaces, all of which proceed from the elemental logic that informs the initial departure from experience into abstraction. The letters of the alphabet are the basic elements of meaning construction. Those first few “moves” and subsequent hybridization with other abstract domains causes abstraction to progress *through* imagination and towards reason. Reason is imagination self-corrected, and imagination is sensation, presented para-optically, in the space of *memory*. In the depths of abstraction likeness is no longer necessary for the shapes and contours of abstract thought to be manipulated in and of themselves. Thought can be hosted on geometric rather than geographic figures. Where sensuous content has been distilled into mathematical form, there can be a pure structural metamorphosis of meaning, which only affects our visible world indirectly, by subtly altering the frames through which we parse it. In this deep space we can conceive of a *mathesis universalis*, a code of pure mathematical manipulation of thought:

...each engendered domain, in which dialectical Ideas of this or that order are incarnated possesses its own calculus. Ideas always have an element of quantifiability, qualifiability, and potentiality; there are always processes of determinability, of reciprocal determination and complete determination; always distributions of distinctive and ordinary points; always adjunct fields which form the synthetic progression of a sufficient reason. There is no metaphor here, except the metaphor consubstantial with the notion of ideas, that of dialectical transport, or '*diaphora*'. Herein lies the adventure of Ideas. It is not mathematics which is applied to other domains but the dialectic which establishes for its problems, by virtue of their order and their conditions, the direct differential calculus corresponding or appropriate to the domain under consideration. In this sense there is a *mathesis universalis* corresponding to the universality of the dialectic. If Ideas are the differentials of thought, there is a differential calculus corresponding to each idea, an alphabet of what it means to think. Differential calculus is not the

unimaginative calculus of the utilitarian, the crude arithmetic calculus which subordinates thought to other things or to other ends, but the algebra of pure thought, the superior irony of problems themselves - the only calculus 'beyond good and evil' (Deleuze 1994, p 181).

An alphabet of what it means to think, an algebra of pure thought. What it means to think is an open question, and a magical question. Deleuze's attitude toward metaphor surfaces again: he regards it, as McLuhan and Lakoff do, as a mode of transport. The metaphorical "move" is one by which Ideas, understood Platonically, are distributed such as to touch on and overlap with multiple fields of discourse and planes of analysis. Compare Lerich on Bruno with the above notion of metaphor:

Bruno's purpose, in my opinion, in his works on memory is to formulate an account of the process of thought which is different from an abstract logic. He attempts to illustrate the ways in which the primal chaos of impressions is reduced to order by principles innate to the mind; at the same time, he takes into account the historical and social processes through which languages, both of words and images, have developed organically through the course of civilization. The image of the tree to signify the mode of growth of languages, derived from Raymond Lull, acquires in Bruno a historical dimension. The social consensus is seen to be an important part of what is considered truth, for the ways in which, at any time, words and images are used depend not only on the power of the imagination of the individual but also on the shared conventions of the society in which he lives. The awareness of the historical growth of languages and imagery tends to limit the possibility of applying his works on memory to the dramatic needs of the new science to develop a new logic of inquiry (Lerich 2007, p 88).

Arts of memory and intelligence augmentation are bound up with, intimately involved in, the experience of time. The body of techniques, strategies, arts, and practices deemed "mnemonic:" arts of memory, with all their variations, form the heart of the magical. The capacity to forge memory (formally or informally, consciously or unconsciously, socially or individually) is critical to understanding our magicity. The manner in which we manipulate memory concerns its quantitative "volume," but more importantly, its qualitative nature. Time's aesthetics, its para-optics. Memory is

magic's past, present and future.

The systems by which we structure memory are manifold and varied. In many cases, we find systems which simultaneously perform several mnemonic functions. In fact, mnemotechnic structures are ubiquitous; we inhabit them *all the time*. Several of the same structures which we use to improve memory, we also use to anticipate the future and to discern the meaning of the present. *Knowledge*, as we recall in Crowley's account,⁸¹ is related to the fragmentation of continuous perception.⁸² Knowledge is had in units that are somehow picked out in isolation from the backdrop. Knowledge is knowledge because somebody remembers it. It is present to a mind which “grasps,” and “understands” it. Knowledge is always personal, and this is the case BECAUSE it is remembered by a knower; it is part of the constitution of a *person*. The person who remembers, remembers (we presume) more than just a unit of knowledge; rather, the knowledge that a person has is usually vast, interconnected, a system.

The term “mnemotechnic” refers to techniques and collections of techniques which aim to help people remember knowledge. It is tacitly aligned with “mental spaces,” because it typically uses *loci* (or *camerae*) as a means of storing memory contents. A classical memory artist might imagine a house, with say, three rooms. Different ideas would be converted into images of objects and placed into the rooms of this house. Each room a category, each object an idea. Similarly, the mental spaces, or, as we have suggested, hollows, in non-being function as *loci*. We use them constantly to make meaning. Mnemotechnics as a passive art of remembering is truly only the tip of an ice-berg, which below the surface bears on all human meaning

⁸¹ In Part II, Chapter 1.

⁸² See Figure 9.

construction. The art of memory and the art of metaphor are fundamentally linked.

Memory is not primarily a means for us to store the past, although it may sometimes serve that purpose. Its primary role is to provide us with *in-situ* knowledge with a focus on the present. Every crystallization of knowledge or memory, whether that be an accident or an intentional mnemonic feat, has a unique shape, a distinctive contour. Every cavern, in other words, is topologically unique. The exploitation of shapes and spaces for storing, processing, analyzing and synthesizing units of knowledge and memory is precisely what mnemotechnics seeks to achieve.

Mnemotechnics is concerned with arranging memory, but also thought. The calculus of thought is a mnemotechnic art! Mnemonics is meant to compose the self, out of knowledge, in the present, so that it can draw upon the past in order to anticipate the future. To cause change in conformity with will. Highly systematized memory structures, especially those which are standard over a social body, provide templates for the self. Magic in its involvement with memory is meant to dispose time. We are all constantly noticing, storing, and interpreting memory. The specialist in *memoria* is an individual who has established protocols, parameters, or apparatus to buttress this psychic function. This is done NOT merely to be able recall the *past*, but rather in order to manage and master knowledge, and to bring it to bear on a *present*. The ideal is that the memorialist's art grows continually stronger and more efficient. The full spectrum of these arts is meant to increase general intelligence, and ultimately court genius.

Cosmology, and cosmological models, were essential to pre-Copernican science. They are aids to memory, stabilizers of thought. They establish a fixed form and economy in which the intellect can ground itself, and to which it can refer its

contents as in a memory palace. Thomas Kuhn writes:

Perhaps the most striking characteristic of the two-sphere universe is the assistance that it gives to the astronomer's memory. This characteristic of a conceptual scheme is often called conceptual economy. Though they were both carefully selected and systematically presented, the observations of the sun and the stars discussed in earlier sections, were as a group, extremely complex... Each observation is a separate item in a long list of bare facts about the heavens, and it is difficult to retain the whole list in memory simultaneously. (Kuhn 1957, p 38)

In order to structure thought, then, a model, or framework is required. This is both a cosmology and a memory aid. It makes it possible to organize all the observed details under one schema, that picks up the attentional slack:

The two sphere universe presents no such problem: a gigantic sphere bearing the stars rotates steadily westward on a fixed axis once every 23 hours 56 minutes; the ecliptic is a great circle on this sphere tilted 23.5° to the celestial equator, and the sun moves steadily eastward along the ecliptic once every 365.25 days; the sun and the stars are observed from a tiny fixed sphere located at the centre of the giant stellar sphere. That much can be committed to memory once and for all, and while it is remembered, the list of observations may be forgotten. (Kuhn 1957, p 38)

But there is more. The fact of this mnemonic now allows the model *itself* to be used to make inferences that are independent of the empirical data. Sometimes, these system-derived hypotheses even hold up: such is the mark of a robust theory:

The model replaces the list, because, as we have already seen, the observations can be derived from the model. Frequently, they need not even be derived. A man who observed the heavens with the two-sphere universe firmly fixed in his mind will find that the conceptual scheme discloses a pattern among otherwise unrelated observations, that a list of the observations becomes a coherent whole for the first time, and that the individual items on the list are therefore more easily remembered. Without these ordered summaries which its theories provide, science would be unable to accumulate such immense stores of detailed information about nature... Conceptual schemes are comprehensive; their consequences are not limited to what is already known. (Kuhn 1957, p 38-40)

And because we are now reasoning from the relationship of the two spheres themselves, we are now able on the one hand to predict movements, and on the other

to invent metaphysical explanations for them. Such explanations are a result of transcendentalizing the model, divinizing the frame. When memory aids become naturalized, metaphysics is the result. Mnemonics is a double-edged sword:

A scientist's willingness to use a conceptual scheme in explanations is an index of his commitment to the scheme, a token of his belief that his model is the only valid one. Such a commitment or belief is always rash, because economy and cosmological satisfaction cannot always guarantee truth, whatever "truth" may mean. The history of science is cluttered with the relics of conceptual schemes that were once fervently believed and that have since been replaced by incompatible theories. There is no way of proving that a conceptual scheme is final. (Kuhn 1957, p 39)

This holds true of science, religion, and philosophy in general. Reason is not immune to illusion. *Rational synthesis* composes bare facts into a model. Reason, the integration of ratios and proportions; the transformation of empirical data into a working mathematical model; could there be an act of *transport* more profound or an act of memory more succinct? Reason is dialectic, mathesis, memoria. It is both selective *and* creative, without sacrificing its capacity to be deductive.

The economy of thought and attention, memory, and knowledge, is common to magical and scientific praxis. Framings, metaphors, and transportations of meaning that allow these spaces of empirical inquiry to exist in the first place, and to be assembled as spaces of science. Metaphor, and metaphorically grounded mental spaces, undergird the use of what Kuhn famously called the "paradigm:"

Scientists, it should already be clear, never learn concepts, laws and theories in the abstract and by themselves. Instead, these intellectual tools are from the start encountered in a historically and pedagogically prior unit that displays them with and through their applications. A new theory is always announced together with applications to some concrete range of natural phenomena; without them it would not even be a candidate for acceptance. After it has been accepted, those same applications or others accompany the theory into the textbooks from which the future practitioner will learn his trade. They are not there merely as embroidery or even as documentation. On the contrary, the process of learning a theory depends upon the study of applications, including practice problem-solving both with a pencil and paper and instruments in the

laboratory. (Kuhn 1970, p 47)

If paradigms can be related to the interface between abstraction and observation, their evolution and transformation can be seen as a semi-magical process. This is the sense of a paradigm as Giorgio Agamben takes it in his *The Key of All Things*, which, as I see it, is an extension and refocusing of Kuhn's idea, with an elaboration on the post-structural elements that interface the paradigm with language and meaning in general. Commenting on both Kuhn, and Foucault, Agamben lays out a list of six key features for a paradigm:

1. A Paradigm is a form of knowledge that is neither inductive nor deductive, but analogical. It moves from singularity to singularity.
2. By neutralizing the dichotomy between the general and the particular, it replaces a dichotomous logic with a bipolar analogical model.
3. The paradigmatic case becomes such by suspending and, at the same time, exposing its belonging to the group, so that it is never possible to separate its exemplarity from its singularity.
4. The paradigmatic group is never presupposed by the paradigms; rather it is immanent to them.
5. In the Paradigm, there is no origin or *arche*; every phenomenon is the origin, every image archaic.
6. The historicity of the paradigm lies neither in diachrony nor in synchrony but in a crossing of the two. (Agamben 2009, p 15)

For Agamben the paradigm is the interface between the empirical and the rational, and it is a space of phantasm, a zone of translation, the onto-epistemic domain of memory, and what means the same thing: magic. He writes:

The epistemological status of the paradigm becomes clear only if we understand - making Aristotle's thesis more radical - that it calls into question the dichotomous opposition between the particular and the universal which we are accustomed to seeing as inseparable from procedures of knowing, and presents instead a singularity irreducible to any of the dichotomy's two terms. (Agamben 2009, p 19)

These singularities imply a bridge between abstraction and sensibility. Here is the space of phantasm, and of horizontal linkage. Here is where art finds its aesthetic power: to build the spaces, the attractors, the *figures* around which human-crafted worlds condense.

As a network of spaces, paradigms, and linkages, the vast substructure of our “common sense,” in the sense of our normalized perceptions and assumptions, stretches out like a honeycomb, or labyrinth. To plumb the magical mind is an archaeology of thought, and one that must come to terms with the fact that we did not discover our unconscious, our past: we excreted it in strata.

Archaeology, then, is always a paradigmatology, and the capacity to recognize and articulate paradigms defines the rank of the inquirer no less than it does his or her ability to examine the documents of an archive. In the final analysis, the paradigm determines the very possibility of producing in the midst of the chronological archive. (Agamben 2009, p 32)

Producing in the midst of the archive IS magic. The chambers of memory, the mental spaces, the paradigms are quasi-ontological. They indicate the zone where creativity may influence the direction of time. The network, the honeycomb, the tunnels and catacombs of memory: these are the hidden causal determinants of our common perceptions. To delve into these spaces as an archeologist is to unearth the magical legacy of our world of names, narratives, and ideas.

Chapter 6: Hermetic Memory and Volition

Let us recall the discussion on *phantasm*, led by Coulianu in part I: chapter 8. Images in the *pneuma* are not merely fleeting fancies. They can have a sustained duration. As such, like all mythic and oral works, they can serve as a repository of personal and cultural memory. In the Renaissance, mnemo-technique was highly self-conscious and technical. The art of memory's roots are in Greek and Roman oratory and its trunk is in the medieval monastic tradition (Yates 2000). In the latter, memory was conceived as a workshop, or tool-set, for the formation of ideas (Caruthers 2002, p 2). *Ars Memoria*'s branches stretched out into the Renaissance through the work of Marsilio Ficino, Giovanni Pico della Mirandola, Cornelius Agrippa, and Giordano Bruno. Bruno was the most overt example of a magical mnemotechnician, as he invented many different memory systems. These systems were infused with his esoteric Hermeticism, drawing on elements of science and astronomy, and employing a combinatorial repertoire which he garnered from the medieval giant of Roman Catholic memory, Ramon Llull. In the life of the soul, phenomena which had been perceived were recorded in the memory in the form of *phantasmic* images (Caruthers 1990, p 16). Although specific techniques varied, it was common to house one's repository of fabricated memories in an imaginary building of some sort: a house, a cathedral, or a theatre for example. As we have seen, geometric figures were also possible. Examples can be found in Bruno's work (Yates 1982, pp 306-7), as well as in Llull's (Bonner 1985, pp 291-364). Different rooms, or wings, of the building would house different memories, and the whole could be continuously expanded, as necessary, to accommodate new information. The sort of information was unlimited, although we

can assume it included metaphysical structures, mathematical knowledge, grammatical rules and word lists for the learning of languages, as well as geographic, alchemical, horticultural, and moral/spiritual information. The house of memory is a constructed soul, built of *phantasm*, functioning as a repository of oral tradition, of knowledge. It serves to synthesize verbal or written knowledge into a master context. The trained soul holds the knowledge and lives it, as it were. This is why the mystery cults of antiquity, or initiate orders of the enlightenment were organized around dramatized rites, which served to impart an experiential mnemonic imprint of key allegories important to the philosophy of the cult. These rites, such as the degrees of Freemasonry, are rituals of mnemotechnic imprinting. The memory of a person informs and structures their outlook, and (drawing on the lovely Medieval analogy of the workshop) the *kinds* of thoughts available to them.

Let us recall the concept of the *Hegemonikon*, as treated by Coulianu (See Part I: Chapter 8). This qualifies as a kind of processing node for the flow of spirit, or *pneuma* as a space of transformation, fabrication and redistribution. The incoming *pneuma* is ordered by the soul, through its *phantasmic* potencies, and formed into the person. The individual soul in this way derives its nourishment from the Spirit: “Soul feeds on the ever-restless stirring of the world” (Copenhaver 1992, p 70). Memory digests experience. What does the adept of *pneumatic* magic become? They become an expression of the cosmos in miniature. The *signatures* imprinted into their *pneuma*, furthermore, get circulated in the immediate community of discourse, and so common themes and experiences are distributed socio-culturally. The highest principles of the cosmic order are expressed in the principles and exercises of geometry, according to

the *Alexandrian Schema*⁸³. This schema is drawn upon by Neoplatonism, Hermeticism and Christianity alike. The perfected soul is, accordingly, imprinted with the form, structure and proportions of Euclidean geometry. The societal body, the *socius* also takes on mathematical form. There is a powerful Pythagorean strain in Hermetic spirituality. The Hermetic cosmos draws on the same rules of order that serve to ground geometry. The soul strives to reproduce mathematical perfection in the human microcosm. Thus, the emendation of the soul, or philosophical ascent, is a process of crystallization by which that soul undertakes an upwards journey from the multiform and disordered (of appearance) towards the pure and ordered. This is a journey within the *hēgemonikon* itself. At its zenith, the soul, fitted with the measure of perfection, merges with manifest reality, and perceives all with a divine and perfected vision. Similarly, *hegemony* is a synthesis of memory, imagination, and spirit. The heart of the “chronological archive.”

The adept is not without company on this spiritual voyage. *Pneuma* can also concatenate into forms outside of the physical body, and represent all manner of spirits, demons, sprites, elementals, gods or demi-gods. These can assist or hinder the magician, and so a journey of spiritual purification is also an exercise in relations with other forces. A successful negotiation of these relationships expands the magi’s sphere of *pneumic* circulation. As they rise, their magical influence burgeons. Through the process they come to know the forces of the world intimately, formed to their inner vision as *phantasmagoria*. The process of ascent transports the adept through the regions of the cosmic frame, which, to recall the allusion to language, are like stanzas

⁸³ “The system of successive links of being which goes to descending levels is called the ‘Alexandrian Schema’, and is inherited by Plotinus from the *gnostic* systems he attacks.” (Couliau 1987, p 55)

in a vast, spiritual poem, written in the same language in which the universe itself has been scribed. The transportation of the soul through these invisible *phantasmic* terrains, and the community of entities dwelling in these terrains are all states of the *pneuma* displayed to the *hēgemonikon* by means of *phantasm*. The adept is a *pneumic* concatenation himself, one with the conspicuous and rare property of having a body in all the four major “elemental” regions of human existence: willing, imagining, reasoning, and proprioceiving. The adept acts as a transformer for the macrocosmic Spirit which flows into him. The *hēgemonikon*, processes the Spirit, and radiates outwards on all the planes of existence. The adept finds their virtue in willing:

For God’s will has no beginning; it remains the same, everlasting in its present state. God’s nature is deliberation; will is the supreme goodness... Will comes to be from deliberation, Asclepius, and the very act of willing comes from will. God wills nothing in excess since he is completely full of all things and wills what he has. He wills all that is good, and he has all that he wills. All things are good that he considers and wills. Such is god, and the world is his image. Good from good. (Copenhaver 1992, p 71)

As with everything Hermetic, the big and the small re-capitulate each other. The microcosmic synthesizer is the heart, the macrocosmic synthesizer is the Sun. All the life-giving properties which are attributed to the Sun are also attributed to the adept.⁸⁴ Lastly, if willing transforms the adept into a *force* of the cosmos, piety and good faith keep this force revolving in orbit around the secret centre of the world: around the focal point of God as architect or ruling principle. *Hegemon*.

⁸⁴ So you can see the attraction of heliocentricity to a pantheistic magus like Bruno. It makes the magus a cosmos, and dispenses with the vertical arrangement that places the Earth in the “garbage bin of the universe” (Couliau 1987, p 204-5).

Chapter 7: Frozen Music

If we explore the idea that a magical matrix of frames might be constructed below the threshold of basic perception that, in some cases can be deliberately engineered along lines that seek a kind of Pythagorean perfection, it will not be long before we come to consider the mathematical oddities known as “magic squares”. Magic squares are considered by certain species of magician to be talismans of great power:

Throughout history, number arrays held certain powers that made it possible for mortals to seek help from spirits, perform witchcraft, and make prayers more potent. Numbers have been used to predict the end of the world, raise the dead, find love, and prepare for war. Even today, serious mathematicians sometimes resort to mystical or religious reasoning when trying to convey the power of mathematics. (Pickover 2002, p 14)

Albrecht Dürer made such a square famous in his print, “Melancholia I.”

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

Figure 13: The Dürer Square

Magic squares comprise an arrangement of elements that has an intrinsic and mysterious harmony to them, run through with secret symmetries and patterns. The magic square in figure 13, above, demonstrates this. The numbers 1-16 are arranged such that all the columns, rows, and diagonals total to the number 34. Examples of mathemagical objects are abundant. There are thousands of ways to create an order-4⁸⁵ magic square, like this one. Many magic sigils, such as the famous *Kamea* of the

⁸⁵ So-called because it is a 4x4 matrix.

planets were derived from a study of such objects. Some are textual talismans, like the “Sator” Square (of order 5):

S	A	T	O	R
A	R	E	P	O
T	E	N	E	T
O	P	E	R	A
R	O	T	A	S

Figure 14: The Sator Square

The symmetries and harmonies of these squares help to recall the Pythagorean idea of an implicit mathematic order or ratios (or musical resonances) undergirding Being. Ian Richard Fyson Calder writes, citing Cornelius Agrippa:

Such mathematical phenomena as magic squares which had no apparent counterparts in observed nature were assumed to stand in a relation to entities and truths existing in a higher realm than the sensible; the very absence of any physical analogies to them placed them pre-eminently amongst those purely abstract numbers and numerical operations, the study of which, because they “can be apprehended by the understanding and in no other way,” wholly draws us towards Being. (Calder 1949, p 2)

In our terms, they have a link to pure, unempirical *absence*: a hermetic chamber, untouched by time, and by the world. The further away from empiricism a domain goes, the more its fundamental constructive antecedents (its hidden mechanisms and sleights of hand) become obscured. Hidden causation. Magic squares are the pinnacle of this type of operation: they epitomize the almost miraculous appearance of spontaneous and effortless order, manifest in the world. Their deep genealogy is unfathomable. Pickover defines the mystical experience of contemplating magic squares as an “arithmetic *satori*.”

Arithmetic satori is the psychological result and aim of the practice of magic square meditation. At the risk of appearing overly mystical, let me quietly say

that this practice induces an awareness, and experience of joy emanating from a mind that has transcended its earthly existence. Experience is no longer mediated through concepts – which is why it is difficult to define arithmetic satori. In addition, the satori experience has a paradoxical quality, such as a feeling of oneness that is inexpressible in a language posited on a subject-object dichotomy. The existence of a separate self is viewed as a fiction through the satori experience. Awareness seems to take place directly, unmediated by conscious thought, and without consciousness of the process. (Pickover 2002, p xv)

Magic squares strike a tone, like a frozen music. For example, take “Carus diagrams.” These result from making a distinction between the “original” order of the numbers in the square (that is, they run consecutively from left to right, top to bottom on a grid on n cells, where n is an even number), the “reversed original” order (running right to left, bottom to top), the “mirror” order (right to left, top to bottom), and the “reversed mirror” order (left to right, bottom to top). This is to say that all possible reflections of an $n \times n$ square can be marked with a signature: o , ro , i , and ri . It turns out that even order magic squares may be built by swapping cells between these four categories according to beautiful, symmetrical patterns that resemble “Chladni patterns,” the emergent symmetries caused in sand when it is placed on a plate that is vibrated by a violin bow.

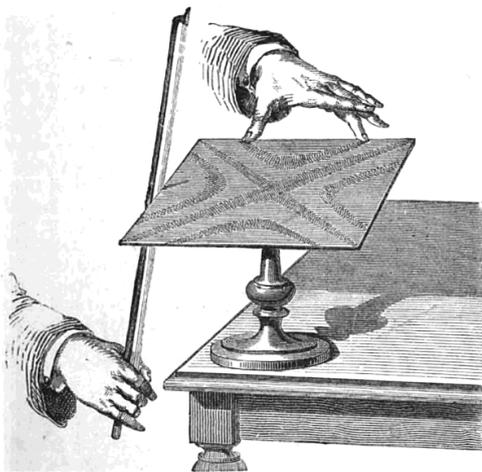


Figure 15: Generating Chladni Patterns. Image in public domain, sourced from Wikipedia. Original source: William Henry Stone (1879) Elementary Lessons on Sound, Macmillan and Co., London, p. 26, fig. 12.

Compare this to a Carus diagram of the Dürer square:

<i>Ro</i>	<i>i</i>	<i>i</i>	<i>ro</i>
<i>O</i>	<i>ri</i>	<i>ri</i>	<i>O</i>
<i>O</i>	<i>ri</i>	<i>ri</i>	<i>O</i>
<i>Ro</i>	<i>i</i>	<i>i</i>	<i>ro</i>

Figure 16: Carus Diagram of the Dürer Square.

You can see the symmetries of the four forms of reflection. Pickover writes:

Paul Carus pointed out that the resulting magic patterns of *o*, *ro*, *i*, and *ri* numbers remind mathematicians of symmetrical “Chladni patterns” produced by sand on vibrating metal plates... Carus believes that the remarkable similarities between the acoustical/mechanical patterns and the magic squares structure result from analogous laws of symmetry. (Pickover 2002, p 208)

He goes on to say:

If we want to stretch our metaphysical musings to the extreme, there is a similarity between magic square, Carus patterns and quantum particles. Both have hidden wave representations. In some sense magic squares and quantum particles are both created and simultaneously organized by the principle of pulse or vibration. The wonder of sound, magic squares, and quantum particles is that they are not solid but rather are created by underlying waves. In an attempt to understand the dual existence of wave and physical forms, physics developed quantum field theory, in which the quantum field, or in our terminology, the vibration, is understood as the ultimate reality. Author Cathie E Guzzetta poetically contemplates the controversial idea that magic squares and lifeforms are metaphors for sound: “The form of snowflakes and faces of flower may take on their shape because they are responding to some ‘sound’ in nature. Likewise, it is possible that crystals, plants, and human beings may be, in some way, music that has taken visible form.” (Pickover 2002, p 210)

I am dubious about Pickover’s use of the term “metaphor,” unless it means a *carrying over* into morphogenesis and mathesis, of a fundamentally vibrational cosmic medium, which is at this point beyond the detection of our instruments. Nevertheless, the point is lucid: when natural patterns appear across multiple domains, it is usually because of some commonality in the generative forces. Does this extend to magic

squares? Conceivably it does, when we consider that one of the traits that Lakoff and Nunez ascribe to mathematics is its effectiveness in expressing and modeling natural phenomena:

The effectiveness of mathematics in the world is a tribute to evolution and to culture. Evolution has shaped our bodies and brains so that we have inherited neural capacities for the basics of number and for primitive spatial relations. Culture has made it possible for millions of astute observers of nature, through millennia of trial and error, to develop and pass on more and more sophisticated mathematical tools – tools shaped to describe what they have observed. There is no mystery about the effectiveness of mathematics for characterizing the world as we experience it: That effectiveness results from a combination of mathematical knowledge and connectedness to the world. The connection between mathematical ideas and the world as humans experience it occurs within human minds. It is human beings who have created logarithmic spirals and fractals and who can “see” logarithmic spirals in snails and fractals in palm leaves. (Lakoff 2000, p 378)

Of course, this is not typically the position of mystics and magicians. Agrippa, for example, takes an essentially Pythagorean position on number, and as such, magic square symmetries and harmonies are evidence of an architecture of the soul, which holds the potential to ground a comprehensive matrix of spiritual knowledge. As we will see, he’s not entirely wrong. Calder writes (of Agrippa):

From the doctrine that the elements of the soul are mingled in arithmetic proportion, those of the body in geometrical and those of animals “harmonically,” he concludes that it is numbers themselves - which term includes such arrangements as magic squares - which act directly on the soul, while the derived geometrical figures have peculiar power over man’s body and spoken words are the most effective procedure when the magic concerns animals... Magic squares were thus, on the basis of a belief in the objective existence and powers of mathematical truths and by means of a symbolism of number, assimilated to a general system which attempted to interrelate all branches of knowledge, by interpreting them in common images. (Calder 1949, pp 2-3)

Magic squares are high-symmetry “absence architectures”. A mnemonicist can use magic squares to synthesize knowledge visually. As such, we might ask “How might a magic square be considered a memory palace?” If we recall what we have already

established, that the *unit* qualifies as a kind of conceptual container, a hollow, or set, and that any natural number is like a container of $n-1$ containers, where n is the value of that number, then we can view a magic square as a particularly serendipitous, or harmonic arrangement of these hollows, with an added feature: the array of a magic square represents a kind of perfect “house” with a musical tone running through it: *a sounding box*. Squares like these (and also other shapes), are part of the extended architecture of arithmetic itself, and so they are discoverable. It is for this reason that they have an objectivity and a stability that conventional memory palaces do not. They have been used, of course, as talismans, for example the Greek *Kamea*: magic squares associated to the seven classical planets. They have also been used as palaces proper: the I Ching is traditionally assigned to the *Lo Shu* a unique 3x3 magic Square, and the 729 Hexagrams of the *Tai Hsuan Ching* have been arranged into a 9x9x9 magic cube. Benjamin Franklin was an aficionado of these objects. Other instances of mystical applications are numerous. Because of their discoverability, and for the reasons cited by Calder, above, magic squares can be seen as objects which approach perfection, even divinity. As such their purpose as memory devices can be seen as of a somewhat higher order than their more imaginal counterparts. As square or cubic subtractions from ?-Being, they provide perhaps the most loftily harmonious model of !-Being available (with perhaps geometry itself being a contender). They are pure pattern: a matrix that appears to be given by the universe itself, and for that reason their utility to the magician is paramount.

Chapter 8: Thinking in Figures

Thinking in magic squares is similar in kind to thinking in figures. Historian of science, and expert on the *Antikythera* mechanism, Derek DeSolla Price, writes, in an essay entitled *The [Hexagram], [Pentagram], and [interlaced squares], and other geometrical and scientific talismans and symbolisms*.⁸⁶

The unspeakability of the title of this piece is an attempt to exemplify the thesis. There exists a type of human mind to which the three symbols in the title speak without the intervention of words and in the absence of direct pictorial representation. Such non-representational iconography, it will be shown, forms a long and honorable figurate tradition. It is a fellow to the more familiar literate tradition, common to many cultures and subjects and the numerate tradition which stands as a characteristic of the quantitative sciences. It is a vital component of the aesthetics of scientific theories, both ancient and modern, communicating a sense of interrelationships amongst a complex ‘Gestalt’ and embodying the principles and the results of theories based on such relationships” (DeSolla-Price 1973, p 250)

Such gestalt thinking intersects with Deleuze’s and Guattari’s account of the *sage*’s art: it involves thinking in *figures*.⁸⁷ These are neither purely symbolic, nor purely logical. They straddle the divide, like paradigms. Locating the figurate tradition *between* the literate and numerate traditions is appropriate, since what we are talking about is neither narrative nor equation, but the establishment of rigorous memorial *loci* upon a rational frame. The frame is a mental space; a visual organization of thought. The architected figurate frame provides a chassis *from* the numerate tradition FOR the literate tradition. It acts as *hēgemonikon*. It links the two. Just as the imagination is a bridge between mind and body, the figurate tradition is a bridge between letters and numbers. Deleuze writes about art:

Figures have nothing to do with resemblance or rhetoric but are the condition

⁸⁶ Here, I have translated DeSolla-Prices images of a hexagram, a pentagram, and two interlocked squares for the words indexing them. In the original title, these designs were drawn in.

⁸⁷ See Part II, chapter 2.

under which the arts produce affects of stone and metal, of strings and wind, of line and color, on a plane of composition of a universe. Art and philosophy crosscut the chaos and confront it, but it is not the same sectional plane; it is not populated in the same way. In the one there is the constellation of a universe or affects and percepts; and in the other, constitutions of immanence or concepts. Art thinks no less than philosophy, but it thinks through affects and percepts. (Deleuze 1994, p 66)

Being neither representative nor rhetorical, how do figures bridge aesthetics and science? By way of the deployment of diagrams. In this way, the occult mind IS the diagrammatic mind. DeSolla-Price explains:

The diagram... assum[es] a form of such inner elegance and economy whereby a few lines or simple forms imply a much greater amount of communication than could otherwise be made. Indeed, it would appear that the amount of symmetry and the ingeniousness of its interrelation is virtually an argument for the assumption that this particular theory or set of theories must be true. They must be true because they are so neat and so cleverly interwoven. We shall maintain furthermore that when a scientific theory has been developed on such a basis, the diagram tends to take on a life of its own, not just as a representation of the theory or as an *aide-memoire*, but as a magical talisman and an object of contemplation and speculative philosophy. (DeSolla-Price 1973, p 252)

Diagrams, in the figurate tradition, are self-constituting. Universe-composing. Their truth is the richness that they contain inherently within themselves. Precisely the same thing is true of magic squares. For this reason, we can consider such “objects” to be *abstract machines*. Deleuze and Guattari write:

An abstract machine in itself is not physical or corporeal, any more than it is semiotic; it is *diagrammatic*... We define the abstract machine as the aspect or moment at which nothing but functions and matters remain. A diagram has neither substance nor form, neither content nor expression... The diagrammatic or abstract machine does not function to represent, even something real, but rather constructs a real that is yet to come, a new type of reality. (Deleuze and Guattari 1987, pp 141-2)

Figures evade the conventional dialectic of acceptance and rejection, precisely because, though a rigorous game in their own right, they do not require of us any kind of verification, other than their own internal integration of complexity: they allow for

a scientific theory to ground itself on *beauty*, thus effectively supporting science “from below,” with the criteria which we use to judge *art*. DeSolla Price continues:

All other things being equal, we shall prefer the theory which displays most of this elegance, this interlocking Gestalt which seems to force a feeling of necessity and can apparently in many cases only be conveyed in the figurate mode. (DeSolla-Price 1973, p 252)

It is in this way, then, that he explains the aesthetic foundations of early science:

The ultimate foundation for this entire tradition in East and West seems to be the concepts of an Elemental Theory. What is at stake is not the predecessor of our modern chemical elements but rather a theory which relates the various *forms* of substances to all the forces and changes which may be wrought with them and upon them... (DeSolla-Price 1973, p 253)

Which is to say that the earliest elemental science was phenomenological and related to what we now call the “states” of matter. He goes on:

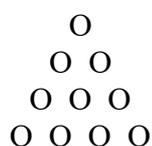
The concept of elements then had nothing to do with atoms or other units of substances which could be mixed and compounded like medicinal or culinary ingredients. The element theory, the *tetrasomia*, was that the set of basic modalities of matter were produced by the working of two pairs of qualities that acted, so to speak, at cross purposes to each other. One pair consisted of the opposed qualities of hotness and coldness, the other of wetness and dryness, each set therefore containing a positive and a negative manifestation of a principle that seemed part of the essential character of all substances and all change... From this central concept a whole theoretical structure could now be erected. The two pairs cross with each other to form the four possible combinations, the four elements of air, earth, fire and water, each of these terms being taken with the greatest of generality. (DeSolla-Price 1973, p 253)

This tetradic epistemology of material states becomes central to magical philosophies and systems which wish to manipulate or engage with the sub-lunary sphere. It was considered that all manifest elemental change happened below the moon. This is as far as these purely elemental accounts went. Beyond the moon, in the seven celestial spheres, the different astrological objects and symbols drew heavily on the pantheon of deities, still quasi-empirical, and beyond the “eighth sphere”, the firmament of stars, the images would be purely abstract, non-corporeal, timeless.

It seems quite plausible that much of astrological theory may rest on just such a basis of figurate rationality than upon empirical or special omen lore. In this sense astrology, quite apart from its utter falsity in the light of modern knowledge, developed on a very rational basis with a figurate theory and the associated symbolism at its centre. (DeSolla-Price 1973, p 258)

There is an additional sense in which “figure” is used, that pertains to this discussion.

Consider the famous *Tetractys*, which can be shown as follows:



The *Tetractys* is an example of what mathematicians call a triangular number, a subclass of the general category of figurate numbers. It is an expression of the number “10,” generated by the formula $1+2+3+4=10$. You can see how each line of the figure follows the equation. Equally, it is possible to have square numbers (1, 4, 9, 16, 25, 36, 49, etc..), pentagonal numbers (1, 5, 12, 22, 35, 51, etc...), hexagonal numbers (1, 6, 15, 28, 45, 66, 91, etc...) even n -gonal numbers. In dimensions higher than two, we have octahedral numbers (1, 6, 19, 44, 85, 146, etc...) , dodecahedral numbers (0, 1, 20, 84, 220, etc...), cubic numbers (1, 8, 27, 64, 125, 216, etc...) *stella octangula* (0, 1, 14, 51, 124, 245, 426, 679, 1016, 1449, etc...) numbers, and many, many more examples... As with magic squares, there is nothing preventing the extension of figurate number into higher dimension objects such as the tesseract. Note that “one” is the universal figurate number, in the same way that:



is the universal magic square: sufficient unto itself because of its simplicity. The total hollow, the complete absence of all but *essence*. These figurate numbers are of special

interest for our purposes because they lend themselves to discoverable visualizations that achieve a kind of abstract perfection. For example, the numbers nineteen, and two-hundred-thirty-one, can both be seen as octahedra, of orders three, and seven, respectively, and the faces of an order seven octahedron are order three triangles. A kind of magical geometry is possible with figurate numbers, because they allow us to establish the number as an easily manipulatable object, or collection of objects. For instance, the number 361, or 19×19 , is expressible by visualizing an order three octahedron composed out of order three octahedra. We could call this a second magnitude, order 3 octahedral number.

In the figurate tradition, there is a well-realized method of the inner disposition of thought, one that marries the geometric to the memorial, and in so doing bridges the literate and numerate traditions. These are the paradigms which undergird Hermetic thought.

Chapter 9: Abducted by Mutants!

Consider “abductive reasoning”. In contrast to inductive reasoning, which infers hypotheses from observable phenomena, and to deductive reasoning which distills hypotheses themselves in order to determine what they necessarily imply, abductive reasoning applies a pre-existing set of hypotheses as a model, to the observable world, and then adapts itself (in a “virtuous spiral”) to the results of continuous observation. In other words, an abductive model evolves its own form as more and more data becomes available.⁸⁸ In this way, such thinking must insist on its validity *in general*, and subsequently prove its validity by adaptation. It is nevertheless a conservative approach, in a sense, since an abductive model is not going to be “disproven”, due to this diachronic capacity for it to recontextualize, reform, and reconstitute its essential nature. It can thus presume its “basic rightness,” and prove that same veracity by means of harnessing the diachronic aspect of its response to results. It proves itself viable by insistently returning, course correcting, and modifying itself. The durative hardness of magical thinking might well come from this simultaneous vulnerability and fortitude. *Credo quia absurdum*. Sørensen writes:

The abductive character of the model implies that a specific situation will be interpreted by means of a given model *as if* the model would yield the situation in a deductive manner... This illustrates how abductive reasoning combines induction (from instance to hypothesis) and deduction (from hypothesis to instance) thereby creating a qualified guess, the hypothetical character of instantiations of cultural models entails that new information about the situation can alter the appropriateness of a given model, creating a new search for a culturally appropriate model” (Sørensen 2007, p 48)

⁸⁸ A magical or metaphysical explanation can thus keep correcting itself *until* it is accurate.

When it is considered that magic straddles the boundary between sacred and profane, then it becomes possible, with Sørensen, to make an equivalence between a set of abductive models, and the very notion of the sacred itself:

...The sacred domain is not a logically consistent set of representations, but rather a formation of coherent structures around pragmatic styles, like narratives and rituals, pre-established conceptual clusters and modes of behavioral interaction, such as ritual actions. (Sørensen 2007, p 64)

These structures are in a sense, at the heart of the spiral of abduction, and so long as they are preserved, treated as sacred, they will have the function of giving coherence to the profane world beyond them. They are an abductive axiomatic. Consider that there is a profound economy to this mode of thinking. Concept-for-concept, an abductive model is extremely compact, and yet totalizing, comprehensive. What it does not comprehend in terms of synchronic datum, it is able to accommodate through the process of its adaptations, to the point where one can see how a basic set of assumptions about the sacred can be acquired very quickly, like the growth of a seed, and that the potentiality that develops from this first “initiation” is sufficient to cover the gaps in knowledge which it will have to bridge or traverse as it goes from being an initial hypothesis towards being a fortified explanation. Once we accept initiation, we have no choice but to flow into the canalizations of the abductive system. It is always necessarily complete, holistic. Contrast this with an inductive or deductive model, which requires acquiring all the scattered pieces of the puzzle before any kind of operating *gestalt* can be formed. In other words, magic, and sacralised thinking, by being abductive, have a head start out of the gate, and keep pace with the more staccato evolutionary rhythm of inductive and deductive models, essentially by

parasiting off of them. Abduction does this by presupposing the *gestalt*.⁸⁹ This parasiting, moreover, is not entirely a one-way energy transfer. Just as the profane provides raw material for the sacred to evolve itself, the sacred in turn, lends to the assemblage of profane observations its capacity to integrate and synthesize, essentially providing a paradigm to them. The sacred makes the profane far more efficient, as knowledge-body and world-view, and in this way is essentially more symbiotic.

From this standpoint, I think we should consider Jean Gebser's *The Ever Present Origin*. I believe it is fair to say that Gebser's system functions abductively. Furthermore, although it has much to say about "magic", *Origin* supplies more (maybe too much more) than the anthropological or post-structural approaches do (for instance). It goes beyond *etic* description, and enables a fully rational, approach to the material. Gebser calls his method "aperspectival".

In a nutshell, Gebser proposes that consciousness is subject to a series of acausal, spontaneous mutations which relate to the acquisition of more and more dimensions of experience, dimensions which are attended not by an expansion, but by an *intensification* of consciousness. The various mutational structures are thus degrees of this intensity-spectrum and represent what we could call "bandwidth" zones that human beings can avail of in terms of thought. In *The Ever Present Origin*, Gebser identifies five of these levels, each triggered by historical events and movements, and yet, he will argue, they remain "uncaused". He divines the indicators for these mutations in art, in philosophy, in religion, and in the sciences. Since, for Gebser the

⁸⁹ In some ways, this is akin to supposing that the Gestalt exists, not just in the past, but also in the future. The Gestalt is like a basin, or salt-pan, facilitating the gradual evaporation of ignorance.

potentiality of these mutations pre-existed the mutations themselves, the material innovations do not so much cause the mutation, as *express* it in manifestation. In this way, he *abducts* us.

It might seem that our concept of mutation has a biologically determined anatomical basis; but it remains an open question whether we are dealing here with a step in evolution brought about by specific organic factors, or with a change “elicited” by the spiritual principle, that is, by a plus mutation. Most likely we have to do here with the latter, since it is always the superordinate potentiality that seems to enable man to develop the requisite organ appropriate to the requirements of a given situation. Consequently, there was first light and then the eye, first the word and then the speaking mouth, first the thought and then the cerebrum capable of reflective thinking... (Gebser, *The Ever Present Origin* 1985, p 38)

For Gebser, then, we can see that a structure “grows into” a pre-existing, ontological potential. “Superordinate potentiality,” and the abductive rational vector are thus intrinsically linked, if not equivalent. This is difficult for skeptical readers to accept, and Gebser acknowledges as much. Nevertheless, let us allow this initial abductive investment and see where it goes.

Gebser enumerates the five structures as follows: Originally, there is a 0-dimensional “archaic” structure, followed by a 1-dimensional “magic” structure, followed by a 2-dimensional “mythic structure”, a 3-dimensional “mental structure”, and finally a 4-dimensional “integral structure”, which is at the very earliest stages of its emergence. It is nascent. “Looking back on this endeavor of mankind, we can distinguish *three consciousness structures* proceeding from origin, from the *archaic* basic structure. These are the *magic*, the *mythical*, and the *mental*.” (1985, p 37)

Gebser begins with this foundation and proceeds to argue that the “deficient phase of the mental structure” is now necessitating⁹⁰ a new mutational structure, which in a way already exists numinously, in potential. This dynamic is such that these five structures are “realized” diachronically, but they have always, in a sense, co-existed synchronically as potential, as spirit, as Origin. It is as if consciousness is metabolizing a fundamental presence, stage by stage. Consider the concept of *numinousness*, “wholly otherness”, which Gebser dubs “the numinosum”. He writes:

...the capacity for the numinous experience loses its energizing intensity in proportion to the increment in consciousness. The greater man’s ability for conscious awareness, the lesser is his experience of actions events, and things as numinous. Early man and even children today experience a thunderstorm, for instance, as a *numinosum*: as an expression of the power of the “completely other”; but the rational knowledge of the physical conditions of the storm divests it of any numinosity. But here we encounter a remarkable fact: as the possibility diminishes for numinous experiences from nature there is a proportionate increase for such experiences from art as created by man... since the basis of music is found in the magic structure, for poetry in the mythical, and for philosophy in the mental, all of them representing in a certain sense man’s employment and mastery of these structures, man is thus able to elicit the numinous effect that resides primarily in the magic and mythical structures. The result of our first consideration, then, is that numinous experiencing diminishes with the increasing awakening of consciousness, and that the *numinosum* is transposed from nature into art, or if you will, from the respective active structure into the particular reality expressed by man. (Gebser 1985, p 202)

In this picture, the numinous is gradually appropriated as human beings realize, or secure the different (pre-existing) intensity-levels, and as this happens, its external grip upon us lessens as natural numinosity is re-expressed in a domesticated form. The dimensions of consciousness are consumptions of the numinous. For Gebser then, the further away from *Origin*, the less the world appears in its numinosity, and yet the

⁹⁰ Although it is somewhat difficult to see how this necessitation and the acausality of the proposed new mutation are compatible.

more numinous our aesthetic output becomes. Furthermore, the numinous *contains*, for Gebser all of what it will ultimately become.

This immanent four-dimensional consciousness is the original zero-dimensional consciousness as such which is represented in man and in the transposition of its mutations in man. Just as breath is present before breathing, the thought is present before thinking, sight before seeing, being before entities, so is awareness present before the variously dimensioned modes of consciousness. (Gebser 1985)

This statement would be very difficult to accept if it were not interpreted as a kind of latent potential, which is subsequently actualized by the acts of its instantiation. It is in this sense that, it seems to me, the numinous represents the pregnant mystery, or wonder inherent in things we simply do not understand, have not yet metabolized. I would consequently interpret the numinous as “that which, at a given level of development, we can productively take for granted”, or in other words assign in a general way to the mystery of life. By analogy, the larger cosmos remains numinous for us, as our grip upon it is so miniscule. Adding more dimensions to our productive repertoire of thought forces us to take less and less for granted, and yet, at the same time, forces us to take on new responsibilities of creation, as we begin to bring the various functions of the universe under the *aegis* of our understanding. This is both social and individual. As children, the awe and mystery of a rainbow just *is*, is granted. It is only when that rainbow is explained in terms of light refraction that the numinousness vanishes, replaced by the burden of our knowledge. We become responsible, essentially, for what we lay a claim to, and the numinous is the unclaimed. The fact that this can re-appear in art is all the more interesting, and sheds light on the manner in which prestidigitory and illusionistic effects operate in general. A strong magic trick, for example one of David Blaine’s street levitations, draws on

the numinous for its entertainment value, and yet loses it when the gaff is made known.

But what can we say about “abduction” in terms of this framework? Clearly, the thesis of mutations as it has been described by Gebser is abductive. *Firstly*, there is the body of observations: artistic, political, philosophical, which to Gebser characterize a “structure,” a mutation; *secondly* is the intricate logic of how these structures function on their own, and in relation to each other as dimensional additions. Abduction is always an investment: the initial hypothesis is supposed, in terms of what it will eventually become capable of delivering. This principal investment occurs in the second “structure”, the magical, not the first, “the archaic”, which is fundamentally mysterious and undifferentiated. In our terms it is simply the unmediated, but for Gebser, it is Origin, and we as humans invest in a *departure* from it (we go from being the world to having the world). The ultimate payout of our abductive investment will come four mutations later, when an “aperspectival”, or “integral” structure, will allow us to re-enjoy Origin, having been put through the paces of a systematic self-articulation (on multiple levels). Origin appreciates.

Gebser uses the terms “adduced”, and “warded”, to describe the noetic appropriation of Origin from the perspective of aperspectivity (just as he would likely use “enchanted” to indicate a magical appropriation, or “deduced” to indicate a rational appropriation). Magic, for Gebser is a first order “unification” of the immediacy of *Origin*. This is significant, because it tells us that our initial abduction away from origin is a *magical* investment. The first step backwards from immediacy

is magical. This has been a through-line throughout this thesis.⁹¹ For Gebser, all subsequent structures arise because of an overdetermination function inherent in the more primitive/originary structure. As a consequence, Gebser's entire system, save *Origin* itself, results from the overdetermination of this first magical appropriation. This is similar to what I have proposed above: that *peras*' "hollows", those zones of noetic habitability (which I have claimed form as contractions within *apeiron*, or as intagliations upon it) represent developments away from the immediacy of difference toward more and more abstract mental and spiritual environments. Gebser writes:

...The magic "epoch", as we see it, not only encompasses an extended "era" but also a variety of modes of manifestation and unfolding that are only imprecisely distinguishable from one another. In order to avoid a possible lack of clarity we shall consider all such modes to be manifestations of magic man; and he is distinguishable above all by his transition from a zero-dimensional structure of identity to one-dimensional *unity*. And we shall see that the representative symbol for one-dimensionality, the point, the basic element of the line, is as such of paramount significance as an attribute for magic man. On the one hand, the point is suggestive of the initial emergent centering in man (which later leads to an Ego) and is, on the other, an expression of the spaceless and timeless one-dimensionality of magic man's world. (Gebser 1985, p 46)

If we read between the lines here, I think we can see how Gebser has intuited the initial point of departure from immersive immanence precisely as this *gestalting* that allows him to take us through multiple, overdetermining phases, channels of metamorphosis, if you will, back to a notion of Origin, insofar as it is now visible as a tension between pure time, and its spatial representation:

Every body, to the extent that it is conceived spatially, is nothing but solidified, crystalized, substantivated, and materialized time that requires the formation and solidification of space in order to unfold. Space represents a field of tension; and because of its latent energy, it is an agent of the critical or acute energy of time. (Gebser 1985, p 24)

⁹¹ See Part I Chapter 23 on the fundamental boundary of the magical.

Is this, I wonder “accurate” in any truth functional way, or is it rather a kind of initiatory theatre that is justified in large part by *how* it reaches its conclusions? I think that asking this question of Gebser, and of the other “abductive” authors: Lull, Crowley, etc... is both pertinent and informative. From it we get a sense that in viewing magic being related to how time might be undergirded by hidden matrices, we are surveying the world of encounters as a kind of deep “abductive” theatre in which various extant structures enable the work of “dark precursors,⁹²” magical agents and agencies, to go about sculpting both the virtual and actual dimensions of our collective socio-specular, political, and philosophical existence.

⁹² Deleuze’s term for those unseen and unseeable forces which put singularities into contact so as to facilitate encounter, see the documentary, *Abecediare* part Z. (Deleuze 2012.) Also see *Difference and Repetition*: “...what is this agent, this force which ensures communication? Thunderbolts explode between different intensities, but they are preceded by an invisible, imperceptible dark precursor, which determines their path in advance but in reverse, as though intagliated.” (Deleuze 1994, p 119) The *intagliation*, in this case implies engraved, or carved out in relief, as we have observed in Part II, Chapter 1, as if the surface of difference were being canalized by these operations.

Chapter 10: Into the Labyrinth

Consider the ground we have already covered. I have argued for magic as a universal methodology at the same time that I have avoided giving a universal definition. My reasons for this have been to keep the manifest substance or experience of magicity as the focus, attempting to evoke this feeling by conducting a kind of grand tour, or *meander* through a wide variety of its expressions and experiences. From prestidigitation, to sympathetic magics. From superstition based on likeness, to compressed metaphysical schemata: all such forms of play have some claim to the title of magic. Advertising, propaganda, even basic meaning construction. All share this claim. Such an approach is additive, not eliminative, but its point is really this: the dream of magic is the dream of the universal method. The dream of obtaining the capacity to bring about *any* change in the world that is willed by the magician. For this reason, the philosophers of the Renaissance sought to unify all domains of science, philosophy, art, and theology, into a singular schema and to craft (for lack of a better term) persons capable of encountering all fields meaningfully. Polymaths.

The “Renaissance Man” was perhaps an artifact of that age’s enthusiasm, but the impulse is a more enduring one: to perfect a system of interpretation adequate to all that we experience. This polymath impulse has been with us from the beginning and is with us still. It drives our mediations. The form that such a system might take has at various times has been conceived of with differing degrees of rigidness. Proposals of an absolute structure of meaning and memory have given way to proposals of an absolute lack of structure, or of proposals that somehow blend both: a non-system that births systems. Transcendental or immanent, metaphysical or constructed; Mercury, the liminal, is somehow responsible, *implicated* in this quest for

method, method, and more method. Mercury, the magician, spins methodologies out of an empty core, always seeking the perfect adaptation, the perfect refinement. In this, then, universal method might be cast into a metaversal perspective. Each system a universe, a scheme, a grand-story, or theatre. Each with its own evolution, its own borrowings-from-other-systems, its own unique trajectory through time and meaning.

With this in mind, it is now appropriate to devote a substantial amount of space to the discussion of Ramon Llull, “Doctor Illuminatus.” In the history of systematic thought, he represents an astonishing moment. A massive technological leap. Like *Athena*, he appears to have sprung almost fully formed out of the medieval period with a mode of combinatory, systematic thinking that would, I will attempt to show, eventually evolve into the modern modes of hyper-mediation we experience in the digital age. His was a profoundly closed system, a hyper-concentrated rhetorical memory, which planted the seeds for not just the Renaissance, but for the era of Encyclopedias, the age of set theories, logics and semiotics, and now, the hyper-virtual age of Artificial Intelligence, big data, and cybernetics. His impulse may, in fact, be the key to finding further lines of flight *beyond* the contemporary stage, future mentalisms and trajectories of thought that we cannot yet fully conceive. Escape routes. Alternatives. Antidotes.

Llull was ultimately a technologist, and his “art” was a figurate technology. Lullianism and its children (legitimate and bastard alike) are at the crossroads of metaphysics, mnemotechnics, philosophy, cryptography, magic and science, and deserve a focused treatment, not just in these terms, but in the terms developed throughout this chapter: as means by which ?-Being, the unmanifest, is circulated through the conduits of language, of essence, and of identity. The bubble-chamber

dance of the spherical !-Beings. If magic is a kind of deep theatre, and human thought is a series of chambers, hollows, galleries and other spaces, then we can recognize, in the innovation of Ramon Llull, a profound leap. By making memory loci *combinatorial*, he made it possible to conceive of and to calculate meanings and ideas that had yet to be experienced. By making the frames and theatres mobile in relation to one another, he gave us an algorithmic way of computing the different possible stagings of thought. His invention made possible a programmable discourse, a programmable humanity, at the same time as it made possible a discourse of programming, and of programmers. A life within code. The Llullian moment, I will argue, was a pivotal genesis-moment for social media-enchantment. Llull, a troubadour, brought a performative dimension into metaphysics, which carried deeply subtle undertones. A philosophical “machine.” An insinuated structure of thinking, remembering, and discoursing. A frozen music, sung by an expert improviser. A closed, figurate system. Enchantment. An architecture of absence akin to a labyrinth in which the rooms change and shift, move in circles and spirals around a central theme, drawing the participants, no matter which way they turn, always and ever, *deeper into the code*, in a movement of total angular enclosure.

Chapter 11: Doctor Illuminatus

“Doctor Illuminatus,” Ramon Llull (1232-1315), was a Majorcan philosopher, itinerant Catholic missionary, troubadour, poet, and founder of Catalan literature. Llull’s life and thought were characterized by an extraordinary engagement with *combinatoria*, an elemental technique of breaking down a subject into discrete, numbered components so as to chart the possible inter-relations of those components and permit both their re-constitution into a higher unity as well as the (semi)systematic solving (or production) of specific rational theorems within the combinatory matrix.⁹³ This latter function differs from contemporary logics in a number of ways, so much so that although there are superficial similarities, the art of Llull could perhaps better be characterized as an exhaustive rhetorical and mnemonic system, rather than an investigative tool as such. It is a *figurate* architecture of absence. Umberto Eco writes:

In principle, the art only furnishes 1,680 different ways of answering a single question whose answer is already known. It cannot, in consequence, really be considered a logical instrument at all. It is, in reality a sort of dialectical thesaurus, a mnemonic aid for finding out an array of standard arguments able to demonstrate an already known truth. (Eco 1995, p 63)

Llull’s later, ternary stage of work is developed and presented in two texts, the *Ars Generalis Ultima*, and the *Ars Brevis*. Do these texts show the logical limitations,

⁹³ Consider one of the examples that Llull himself supplies: “1. By the compartment of BCD one can ask: Whether any goodness is as infinitely great as eternity. To which one must answer yes; otherwise all the greatness of eternity would not be good. 2. By the compartment of BEF once can ask: whether God is as powerful through His goodness as through His intellect. Turn to that compartment and take from it the things it signifies along with their correlatives and definitions. 3 *Question*: whether an angel, since it is superior, begets an angel, just as man, who is inferior, begets man. One must answer that it does not, for an angel does not receive any addition to itself from the outside, since that would empty it of its essence; man, however does by reason of his body.” (Bonner 1985, p 348) It’s safe to say that the circularity of these “arguments” is very clear: the system is abductive, circular, and relies on the supplement of ready-made answers to the questions posed to its “chambers” or combinations. It is thus much more a mobile rhetorical storehouse than a computational system. While this is true for Llull, I think that later elaborators eventually extracted the combinatorial elements into a more computational form. It is thus a kind of proto-proto computer.

suggested by Eco? The answer entirely depends on what we consider the *art* to actually be for. If it is indeed simply a logic, then the answer is yes. If, on the other hand it is more akin to what we have called an architecture of absence, a rhetero-logical matrix, or frame, then the answer appears to be that logical limitations per-se, are irrelevant to the art. Its power is to *convince*, it is a tool for oral discursivity, and a polymath machine.

Before we begin to speak about Llull's work and his life, some discussion of the state of contemporary Llull scholarship is necessary. It is important for us to know a little about the major scholars of the last hundred years, thanks to whom we are able to know more of the details of Llull's work and his life, and who have given us the tools by which to address the dynamics of his system.⁹⁴ Interest in Llull has long been in remission. Considering the influence that Lullian method once wielded, the silence of the 18th and 19th centuries is deafening. The 20th century revival of Lullist studies can be viewed in three principal stages. The first stage was dominated by the biographical works of E. Allison Peers whose treatment of Llull was largely historical, and in which the role of the art was largely obscured. This state of affairs was altered however, by the pioneering work of Frances Yates: *The Art of Ramon Llull: an approach to it through Llull's theory of the elements* (1954), which was followed shortly after by Robert Pring-Mills' *The Trinitarian World Picture of Ramon Llull* (1955). Yates and Pring-Mills together uncovered a master key to reading the Lullian art in his use of late medieval Astro-Elemental physics:

When one turns to any version of the Art itself, the first thing to strike one is the combinatory nature of all its calculations. Today it seems quite obvious that

⁹⁴Especially in this latter respect, an enormous amount of reconstructive work has been conducted in the latter half of the 20th century, and the fruits of this effort are just beginning to appear in full. Anthony Bonner's "user's guide" to the Lullian art is the first major text to delve thoroughly into the methodological features of both the Quaternary and Ternary stages of the Art, and has been invaluable for my project.

this feature should lead one to postulate some kind of kinship between its procedures and the combinatory techniques used by both doctors and astrologers throughout the Middle Ages, in connection with the theory of the elements, but this possibility was not envisaged by any modern Lullian scholar prior to Miss Yates. When she approached the Art from this angle, she concluded that it was in fact ‘patterned on elemental astrology’. (Bonner 2009, p 12)

These two publications sparked a new stage of Lullian studies, whose primary advocates were Pring-Mills, Yates and Jocelyn Hilgarth. While Yates and Pring-Mills took different approaches to the metaphysical Lull, Hilgarth drew up a new sketch of Lull’s political and historical activities (Bonner 2009, p12). Currently the most prominent scholar of Lullism is Anthony Bonner. In a broader vein, both Paolo Rossi and Umberto Eco have treated Lullism’s place in the history of logic, combinatoria, esotericism and constructed languages, pointing out in the process the degree to which Lull’s project spawned a lineage that can be traced through the Renaissance, the Enlightenment and (obliquely) into modernity through the works of such seekers after universality as Leibniz, Boole, and C.S. Pierce (Rossi 2006, pp xv-xx). As a consequence, both computer science and semiotics can be said to be his descendants. Contrary to the characterization of Lull as a closer of knowledge (in the “steely cage” of his system, as Eco remarks (1995, p 69) this remarkable adaptivity, and capacity to *return and regenerate* exhibited by his art is a testimony to the ultimately open status of his procedures:

The fluctuating state of the Art in part might have been because of outside criticism or suggestions, but it was also because Lull had a vision of the truth as something accessible by many different paths. The fact that he tried one and then soon after another does not necessarily mean that he thought the first was wrong or had to be rejected. One path might indeed have proved more effective than another, but the fact is that Lull spent much of his career offering new proposals with a generosity which, for those of us who want to study his works, can be quite disconcerting. Perhaps it was the result of a decision to sow many seeds to reap the largest possible harvest. (Bonner 2007, p 93)

Yates, Pring-Mills, Hilgarth and Bonner inform my investigation into the psychosocial dynamics of Llullist combinatoria from the perspective of “transcendental empiricism,” Deleuze’s term for the method of empiricism as enriched by an account of *virtual* factors: semiotic and structural components being taken into account in terms of not only how they might affect an analysis, but also considered as having causal agency (and being subject to change) in their own right. Through this approach, I conduct investigations into the significance of occult and mystical formations. Llull’s is a rigorous, combinatorial mysticism.

The life of Ramon Llull is extraordinary in a number of respects: it was unusually long, unusually prolific of texts, and unusually well patterned by the continuous development of a highly flexible yet remarkably unified systematic methodology. We find, upon examination of his *oeuvre* that he excelled at the development of systems. These came out of a fertile humus of both linguistic and theological *concepts* and also of rhetorical and mnemonic *strategies*. The former were attained almost entirely through self-directed study occurring after the age of thirty, while the latter were first developed in the years leading up to this. Prior to his conversion during his early thirties he had been a successful troubadour, a fact which was very influential on his attitude towards memory: his systems themselves grow out of a memory field which is then undergirded reflexively by those same systems, steadily growing on a frame that they themselves excrete. This is a dynamic and intense process through which he continually elaborates and re-applies the art, all the while gaining ground incrementally, and that bears all the hallmarks of a use-based (rather than a theory-based) apparatus. The Llullian artist is engaged in manufacturing a *performative* oral memory. To this effect, the troubadour in Llull must have been

very much aware of the advantage of lore, song and mnemonics. Llull, in addition to being an almost excessively literary man, was also a pre-eminently oracular man, in the sense of embodying (at the same time as inventing) ⁹⁵ the oral tradition of Catalan culture. His life was his *art*, and it has been said about him that:

Llull's philosophy is his autobiography. The whole of his thought, as will be seen, is intensely personal in inspiration and his writings are full of appeals to God and his readers and of lamentations at the lack of success of his Art. Llull's life, superficially extraordinarily Picaresque, is intimately linked to his philosophy (Hilgarth 1971, p 1).

The details of this Picaresque life are loosely as follows: He was born in (what is now) Palma in 1232 or 33 to a new colonist of Majorca (which island had been conquered by James I of Aragon) in 1229. As a result of this conquest, his father, who was a rich Barcelonan, had acquired considerable property and became part of the Majorcan upper class. Majorca itself had been occupied previously by the Moors, so he grew up in close contact with Muslims, who formed the conquered, lower class of this young Christian state.

Many of the Moslem population still remained living in Majorca, most of them now working the land for their new Christian masters, though a considerable number of Moslems who had taken sides with James during the conquest or who had obtained terms from him were able to preserve some of their property and live free under Christian Rule. (Hilgarth 1971, p 2)

Given the education of a knight, Llull went on to become a troubadour (Hilgarth

⁹⁵Bearing in mind that Llull, as being of the first natively born generation of Christian Majorcans, would have had to create a new mythos: a body of thought (understood especially in the sense of pattern recognition), memory and story that represent and produces his and his people's place in the world. This act of *binding* necessarily would require a close assimilation of the "*oriental*" elements of the actual populace, which was almost totally Muslim, but which also contained a Jewish minority that was exceptionally influential. The spectacularly successful posthumous act of *inaugurating* a body of literature in the Catalan language is a testimony to the magnitude of the troubadour Llull's performative act of synthesis and world making.

1971, p 2). He became Seneschal to the prince James II and lived his early life luxuriously. He married a woman named Blanca Picany, had two children, and was somewhat notorious in his pursuit of women (Bonner 2007, p 1). This phase of his life ended with a visionary experience: while composing a poem for one of his love interests at the age of twenty-nine or thirty, he repeatedly witnessed a vision of the crucified Christ⁹⁶, This sparked a conversion of character that radically changed Lull's life, and which was based on three goals; the acceptance of the possibility of martyrdom, the intention of writing a book which would be the "best in the world, against the errors of the unbelievers," and to petition every Church authority he could to set up monastic language schools for the purpose of training missionaries (Bonner 2007, p 1). As a consequence of this commitment, his first order of business was to spend nine years in deep study, during which he studied cosmology, theology, Latin and Arabic.⁹⁷ This period, and the conversion before it thus set the stage for his future career.

The first independent formulation of Lull's art appeared to him as a *methodological illumination*, while he was in retreat in a cave in Mount Randa, "a solitary hillock rising out of the plain some 15 miles east of Palma" (Bonner 2007, p 2), around the age of forty.⁹⁸ The character of this mystical revelation was conceptual, rather than visionary in character. Hilgarth writes: "His illumination was therefore,

⁹⁶This, as well as several other of the most iconic moments in Lull's life are presented in 12 miniature paintings by the name of the *Breviculum* of Thomas le Myesier, essentially his protégé, and the first disseminator of his works after his death (Hilgarth 1971, p 9).

⁹⁷He was tutored by a Muslim slave who eventually (upon discovering the use to which Lull intended to turn his knowledge of Arabic) attempted to take Ramon's life, and being thwarted, is said to have committed suicide (Peers 1960, p 41).

⁹⁸If the estimated date of 1272 for this event is correct.

intellectual, and seems to have consisted in a sudden insight which determined the philosophical basis of his system” (Hilgarth 1971, p 9). What came to him in his mountain retreat was the intelligible *form* or *methodology* by which he would construct the book whose purpose was to convert Muslims and Jews to Christianity. In some sense we can then view this hyper-book⁹⁹ as a condensation of works which he had previously both read and written, including his Arabic treatise, *The Book of Contemplation* and the works of *Al-Ghazali*, which he had read during his tutorage in Arabic. Add to this the accumulation of mixed cultural knowledges to which Ramon, as a person straddling a threshold of cultures, was exposed: science, language, theology, physics, and epistemology. We can see how this intense mixture of conventionally incommensurable “world pictures” would have acted somewhat like a brewer’s wort, to be colonized by the intellectual synthesis of his faith and fermented into a new and more potent spirit. In this way he really is akin to the alchemists,¹⁰⁰ in how he sought to convert the world, first and foremost by converting, in the enclosure of his mind, the modes of *knowledge* of the world. His first, and ongoing, “convert,”

⁹⁹Because in a sense it is not a book at all, but a system that he develops (unless we consider the *Ars Generalis Ultima* as this book, which is a fair assertion).

¹⁰⁰As he does with the astrologers, Lull is often pointed to as openly denouncing alchemy. As Yates notes, however, it is perhaps unfair to assume that his denunciations are the same in kind as the those of the 20th century scholars who might think that their own positions are echoed in his: her thesis seems to point to a desire to replace rather than eliminate the astrology, or alchemy of his time: in other words, as with everything else, he sought to *convert* it by means of his art. “There is no doubt that Lull did not believe in the possibility of the transmutation of metals. He states this repeatedly in his works, and notably in the long and important passage on the generation and corruption of metals in the *liber principiorum medicinae*, which shows that he had examined specimens of the alchemist’s art. That he did not write works on alchemy as he did on astrological medicine may well have been because he thought it a vain science and not ethically important like medicine. Nevertheless the ‘pseudo-Llullian’ alchemists- it may now be suggested- were not wrong in supposing that the Llullian notations and figures could be used for calculating elemental combinations. Nor probably would they have been wrong in assuming that Lull’s scientific outlook – with its concentration on the *Bonitas* and so on of the stars in substances as the true operative source- was in many ways congenial to their own.” (Yates 1982, p 29)

was therefore, himself. Lull's retreat was thus a period of synthesis in which he digested his previous work and study and produced a novel systemization of its components. As Bonner writes:

...this time it was not a vision but rather what we might now call a methodological illumination, or as he puts it, he was given the 'form and method' for writing the book (or books) he felt he had to write against the errors of the unbelievers. If he had already unfolded the foundations of his philosophy and theology in *The Book of Contemplation*, what was new in this illumination was its structuralization- the bringing together of all the various bits found throughout that work, and especially its latter portion, into a single organic whole which he called his 'art'. (Bonner 1985, p 3)

The austerity of the lifestyle and the altitude of the location both seem to be paradigmatic of the Art, since on the one hand it presents itself as a bare and skeletal reduction of the cosmos to its essential rational principles (much in the way that the hermit's life reduces the complexity of living to a bare, principled minimum), and on the other hand it presents itself as a method by which the contemplator may attain the acme of the real, and in doing so, come to realize Christianity as the essential means of knowing God. More importantly, Lull's art was devised as a tool by which a missionary could convert Jews and Muslims to Christianity, not through reference to scripture, but by virtue of the form of disputation itself. He developed

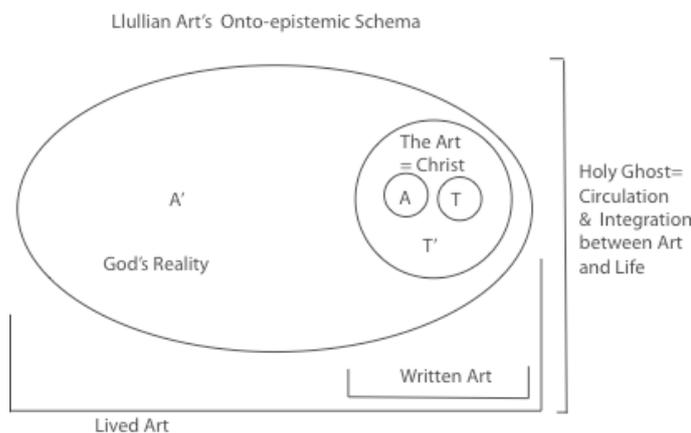
...an abstract system without exterior references, and hence [was put] into the extraordinary position of a Christian polemicist and missionary who, except for three or four stock phrases he [repeated] frequently... [He] almost never mentions the Bible, the Church Fathers or contemporary theologians. (Bonner 2007, p 14)

The purpose of such a strategy was to gather together all the relevant religious knowledge shared by the three faiths in question so that it could be *devicted* by Lull's art, a process whereby the weakest elements are dominated by the strongest elements. Yates has shown that this process, derived from elemental astrology, is the fundamental means by which the Lullist art operates (Yates 1982, p 22). The *ars* in

some way eternalizes his mountaintop (or peak) experience and generalizes it into a metaphysics. The first formulation of this system appears in the treatise *Ars Compendiosa Inveniendi Veritatem*, “The Art of Finding the Truth,” written shortly afterwards, in a monastery outside of Palma. This initiates what Bonner has referred to as the Quaternary phase of the art. Later, this system is re-presented in an updated form in the *Ars Demonstrativa* (circa 1283). An unsuccessful attempt to teach his art in Paris seems to have led Lull to re-formulate the art once more, this time in what appears on the surface to be a simpler form (Bonner 2007, p 187). The ternary phase is thus inaugurated by the writing of *Ars Inventiva Veritatis* in 1290. It is two later works, however, which seem to present us with the most integrated and “complete” form of the threefold Art. *Ars Generalis Ultima* and *Ars Brevis* are Ramon Lull’s most influential: they appear to present the Art in a form that can be both transmitted to and practiced by others, and indeed it is these works which were drawn upon in later commentaries by Cornelius Agrippa and Giordano Bruno (Bonner 1985, p 297).

Lull appears to have construed the *Art* as one which might be used creatively, not just by himself but by his students. Bonner suggests that Lull would have been open to any intelligent modification of the art so long as it furthers the primary *intention* of the art, namely to find God, or truth: “The second intention is ... the instrument or means which permits one to arrive at the first intention, the final cause or goal” (Bonner 2007, p 72). This concept of *Intention*, drawn most likely from Al Ghazali (Bonner 2007, p 72) is an important part of the fundamental reasoning behind the art, for Lull’s primary intention was to seek God, with the art providing a plan of development which constitutes, insofar as its development is sought, a secondary intention. The art is at once tightly bound by its form and surprisingly free in its

applications, and in the allowable adjustments. As long as the primary intentions are preserved, the secondary apparatus may be changed. In this regard the two main figures of the ternary art, reflect the duality of intentions. The first figure is called “A,” and represents God, and His nine potencies, or dignities, while the second figure, “T” represents the inquiring mind which is *exploring* God. The interaction between the two is what makes the art function, and also shows us that there is an absolute intention (God), and a secondary, relative intention, the human intellectual apparatus (but this is *also* divine, because it is part of the incarnation of God). By extension, we could say that the whole of the *written* art is T, while the silent and personal experience of communion with God, facilitated by that art is the “true” A. We can make these kinds of leaps, because in many ways, the Lullian art is pointing outside itself. (See figure xx.) A, in the written art is a form of T,¹⁰¹ while the true A is



experienced by the practitioner alone. Hence, the written forms of the art are subject to the intellect and are evolved by Lull (and his descendants) as such. They are incarnations of God, facilitated by the

Figure 17: Lull's Onto-Epistemic System

¹⁰¹ Or, put another way: the thinking and questioning mind *renders a picture of God to itself* as nine potencies, but both this image, AND the thinking being who contemplates them are IMMANENT to a God that cannot be diagrammed, is outside the system, and is the substantial cause OF both A and T. In other words, the art is the explicit repetition of a tacit dynamic, that is nevertheless substantially suffused by that dynamic. A sponge in the ocean. The art is “T,” through and through, and yet it points to “A.” A similar analogy can be drawn to any system, to any language. There is a tacit, referential substratum which must remain silent, and which is, in fact in *circulation* through the very system of signs which both reveals and conceals it.

circulation of the Holy Spirit.

Llull's art is perhaps the loftiest example of metaphysical combinatory in the pre-modern Western tradition. There certainly were precedents, from the Qabalistic *Temurah* found in the two-hundred-thirty-one "gates" of the *Sepher Yezirah* to the permutative meditations of Abraham Abulafia. Beyond the Western tradition itself, combinatory mnemonics and mysticism was very important in China, notably in the *I Ching* and the *Tai Hsuan Ching*, oracular texts with binary and ternary modes of organization, respectively.¹⁰² Nor are any of these systems pure, naked combinatory, but rather each mathematical skeleton is dressed in an adjunct set of memory practices. It is important to grasp this in order not to misunderstand Llull: what might appear on the outside to be a dry machinery of letter combinations must have appeared from within as a rich landscape of metaphysical, physical, and rhetorical propositions.

Yates showed that an elemental logic was at the heart of Llull's method: the system has to be decompose-able into fundamental elements, or moments, the building-blocks of thought. This is the fundamental assumption behind elemental astrology, the medicinal theory of humors, numerology, and even alchemy. The potencies possessed by these singularities stem ultimately from the classical *physics* of the pre-Socratic philosophers: the properties of *hot*, *cold*, *wet* and *dry*, in double combination with one another to produce the four elements: *fire* (hot and dry), *water* (cold and wet), *air* (hot and wet) and *earth* (cold and dry), and the four humors:

¹⁰²Although not historically connected with Llull, these systems did eventually enter the Western discourse: *the I Ching*, by way of Leibniz, who appears to have worked with both it and the Llullian art to conceive of his "*mathesis universalis*," and to develop both binary notation, and the calculus. The *Tai Hsuan Ching* has only recently begun to be explored by thinkers in the West (the first English edition is Derek Walter's 1984 translation *The Hidden Classic*), but many of its inherent patterns are surprisingly similar to Llullism.

phlegmatic, choleric, sanguine, and melancholy. In both cases, and in the astrology that is built on top of them, there is a set of “rules-of-selection,” where a combination of elements ends up being dominated by the most potent aspect. For example, in an astrological reading, a fiery planet such as Mars, in a fiery sign, such as Leo would master, or *devict* a watery planet such as the moon. Conversely, Mars might itself be overpowered if it was in Pisces alongside Venus. In medicine, this same, *devictive* logic¹⁰³ is a means of establishing a healthy set of humors, or in the case of a body which has been dominated by an *unhealthy* humor, to devise medicines that will devict the unwanted humor. This is why in earlier medicine, the relation of analogy between the illnesses and the methods of cure was considered to be so important. Each thing is a link in a chain of likenesses, and by association, one can determine the correct cure because in its symbolism, it enacts the elemental play, and brings the body/soul complex back into harmony. In astrology, an aspect can be read by calculating the dominant potency. Lull then, to operate his nine-fold, “A,” relies on the logic of *deviction*. His purpose is to establish a matrix in which to devict what he has identified as the nine vices, in preference of nine virtues. This *modus* is present in both the earlier and the later versions of his system and can be considered as

¹⁰³ Recall, the dynamic by which, once a meaning space is established as a loci, it can be evacuated of certain, weaker qualities, in favor of stronger qualities. This makes sense if we attempt to appreciate how the *pneuma* was thought to work: a fluid which could enter or evacuate certain cavities of the soul which are set up for it, and which can bring with it images that are “charged” with meaning and potency. By being very clear about what the “chambers of the soul” actually are, the worker can clear them of vices, and filled them with virtues, using deviction as a means of doing so. For this reason such phenomena as “virtues and vices,” “demons and angels” and the like, are fundamentally categorical and architectural in nature: they relate to the contents of a frame of reference, a matrix which is imposed, *precisely* so that the self-habitus can be refined as a spiritual and metaphysical praxis. Metaphysics is a memory palace, in this respect, or better still: “an attentional distribution apparatus,” masquerading/misinterpreted *as* cosmic law.

something of a universal feature. Yates has made an extremely significant point: Ramon Llull's art is fundamentally an enneadic chamber of devictions, it establishes a combinatorial field around four-fold classical knowledge and makes possible its domination and subsumption by the nine-fold system.¹⁰⁴ In a movement which is a fundamental conversion of paganism, the art *devicts* fatalist astrology and replaces it with a rationally expressed free will that comes from God. This is essentially because Llull has transferred the old knowledge to a new container: a new, and highly integrated metaphysical chassis.

Llull constructed an innovative fusion¹⁰⁵ of classic loci-system memorial arts with elemental, combinatory logic. By designating nine letters to principle "powers"¹⁰⁶ of God, he sets up these powers as metaphysical *loci*. Furthermore, as we will see, he extends this initial apparatus to an extraordinary degree through permutation: the nine potencies are combined with themselves in every possible manner producing a myriad of other figures and methods of exploring the potencies. Permutation produces two fully commensurable diagrams: a circular diagram, termed in the Ternary Art "Figure A" (introduced above), coupled with a set of 36 *camerae*, or chambers, termed in that Art, "The third figure¹⁰⁷". While on the outside this appears

¹⁰⁴Nine would have been the most natural of all numbers to perform this operation owing to its significance as a "foundation." Though strong claims linking Llull to Qabalah are impossible to make with certainty, it is nevertheless plausible that he would have been aware of such a commonplace Qabalistic doctrine as the names and functions of the ten spheres, of which the ninth is *Yesod*, foundation. This is supported by the mathematical character of the number nine, and the likelihood, considering his era and whereabouts, of his having debated publicly with Qabalists.

¹⁰⁵But not unprecedented, since the techniques mentioned above, especially the Kabbalistic letter permutations, were methods of memory manipulation; the individual letters acting as both graphic and numerical *Loci*.

¹⁰⁶Or "dignities," being somewhat comparable to the Platonic *Ideas*, or arguably the Hebraic *Sephiroth*.

¹⁰⁷Previous, more figure-numerous arts would express each set in terms of its primary (circular) formulation and its secondary (chambered) formulation.

to be simply a form of mathematical acrobatics, it must be recalled that Lull had instructed the artist to memorize the basic alphabet and to load it with associated meanings such that, like a memory palace, it can be internally “visited,” but unlike the traditional style of such constructions, Lull’s is a dynamic system: the “rooms” move in relation to one another, following a scheme which is more like that of the design for a machine, than the plans for a building. This does not abandon the classical models but rather re-codes them, for if we were to expand the half matrix of the third figure, we would have a 72-chambered system, one which is fully equipped to represent or re-model the 72 quinces of the zodiac, essential to Hebraic mysticism,¹⁰⁸ and instrumental to later Hermetic demonology.¹⁰⁹ Lull would have certainly known about the quinces (and the decans) from other well-known treatments of memory which used them as the frame.¹¹⁰ Again we see Lull’s ternary system of capture re-modeling previous systems, structurally speaking. It is “all that they are, and more,” a formula which I think succinctly describes the aim of ALL of Lull’s tactical engagements: to become his opponent and redirect them towards his own method of faith, and faith of method. Lull’s secret is in his generality, which surreptitiously conditions the question-field, and always holds out for the answer which will allow it to extend its domain that much further. The Lullian *art* is meant to serve as a general system of mobile and adaptive interlocution, rather than as a static repository of memorized topics of discussion. Much like the leap made from the system of

¹⁰⁸ For instance the 72-fold name of God “Shem Ha-Mephorash.”

¹⁰⁹ The demonic practices associated with the “Keys of Solomon,” in particular the 72 demons collectively called *goetia*.

¹¹⁰ Particularly the method attributed to Metrodorus of Scepsis, which was based on the 36 decanates of the Zodiac. (Yates 2000, p 52)

hieroglyphs to the phonetic alphabet (a leap made through a radical simplification on the one hand, and a radical extension on the other) Lull has managed to greatly extend the earlier methods of mnemonics through restricting the initial terms.

During the course of his development, Lull went from using sixteen or more basic concepts (based, it seems, on a classical elemental foundation) to just nine. However, this is not the result of an excision, but of a concentration: the earlier abundance of figures that marked the “quaternary period” is now subordinated into the operations of the far more condensed and elegant ternary system presented in *Ars Generalis Ultima* and *Ars Brevis*. He also seems to have removed several of the fundamental principles from his definition of God. He also dropped a whole figure, S, by assimilating the roles it played into T, and reduced the earlier form of T to the 9-fold system, similarly. How is this possible, if he believed his system to reflect the framework of existence itself? If it was his intention to claim that the dignities of God were known absolutely by him through his system, then this would have been an impossible operation: to shorten the art would have been to reduce God. But Lull is a pragmatist, not a realist. He is in the action itself. That Lull was willing to reduce even just his first figure “A” from sixteen to nine components shows that in a way the whole of his art is an analogue for the figure T. Figure A merely “points” to God from the perspective of the thinker, and can in fact be changed to suit the thought of his interlocutors without, in fact, damaging the body of God. T is in the domain of Man, and since the written form of the art is the instantiation of T, its secondary intention, it too can be variously engineered, developed, synthesized and re-synthesized, to best suit the reception of the REAL “figure A,” which is, as mentioned above, the primary intention, God as he exists in Himself.

Chapter 12: Ars Generalis Ultima

Llull's system has three main aspects that we will consider: an anatomy, a cosmology, and the results and implications of the method. We should judge Llull as a troubadour of faith, and as a technician of thought rather than as a proto or pseudo-logician. He was a very active man, and his *art* is a form of action rather than of reflection as such. Llull as an inceptor of discourse, and as a world-converter, is a suitable lens through which to judge him, I think.

The *Ars Brevis* opens with a description of the Alphabet which it will subsequently employ. The nine letters B, C, D, E, F, G, H, I, & K are assigned meanings in each of six different domains: those of Figures A and T,¹¹¹ the 10 questions, the subjects, the virtues and the vices. This alphabet is meant to be memorized by the artist in order to perform the manipulations that follow. Here are Llull's assignments to the letters:

	A	T	Questions	Subjects	Virtues	Vices
B	Goodness	Difference	Whether?	God	Justice	Avarice
C	Greatness	Concordence	What?	Angel	Prudence	Gluttony
D	Eternity/Duration	Contrariety	Of What?	Heaven	Fortitude	Lust
E	Power	Beginning	Why?	Man	Temperance	Pride
F	Wisdom	Middle	How Much?	Imaginative	Faith	Accidie
G	Will	End	Of What Kind?	Sensitive	Hope	Envy
H	Virtue	Majority	When?	Vegetative	Charity	Ire
I	Truth	Minority	Where?	Elementative	Patience	Lying
K	Glory	Equality	How? With What?	Instrumentative	Pity	Inconstancy

The Alphabet

Figure 18: Llull's Alphabet

¹¹¹These Figures are present in the earlier forms of the art and are the two main diagrams which have been preserved. Another, S, is omitted, although its elements are assimilated into the function of the system of questions.

The above are, in fact, the same categories and philosophical functions that Lull has been working with from the beginning: several of these are bequeathed to him by the philosophical and cosmological traditions extant during his period (and across the cultures he was familiar with), while others are re-positionings of his own formulations from previous presentations of the Art. For example, on closer examination of T, we learn that Lull has built the Aristotelian theory of causation into the category of “beginnings” (Bonner 1985, p 312), and the sub-modality “causes,” and if we turn our attention to the subjects, we are given a ladder of ascent and descent upon which the Lullian artist climbs. This is an adaptation of the Neoplatonic schema, but is not merely a copying of that doctrine by Lull, but rather a re-constitution of it, in terms of the Art. Following from this alphabet is the first (and arguably) the most important of the Figures proper, Figure A:

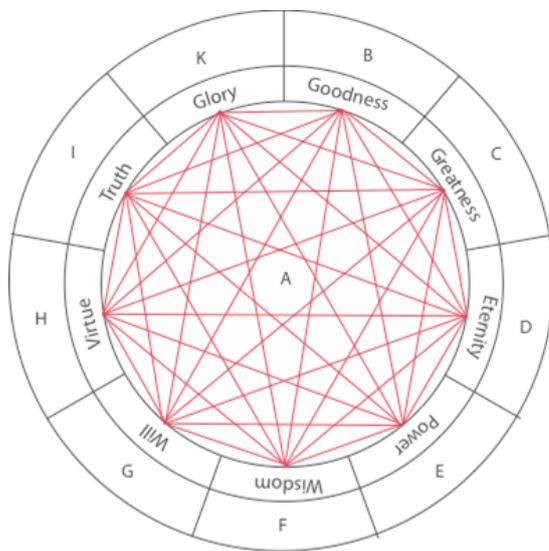


Figure 19: *Ars Brevis* Figure A

Figure A represents the nine dignities in their exhaustive inter-relation with each other. As you can see, lines are drawn from each dignity to all the others in order to demonstrate that each may play the role of subject or predicate. For example, the

predicates Greatness, Eternity, Power, Wisdom, Will, etc... can be predicated of Goodness: “Goodness is Great,” “Goodness is Eternal,” and “Goodness is Powerful,” etc... As well, Greatness can be Good, Eternal, Powerful, and so on. In figure A, where “A” itself signifies God, all the possible dignities, considered as fundamental essences, enter into dialogue with each other in this way, and these are the fundamental properties which the art is designed to investigate as well as cultivate. It is perhaps appropriate at this point to foreshadow the fact that this figure will be represented in the form of a system of thirty-six chambers, as the third of the four figures of the ternary art. We will see this in more detail below. It is important to notice that each figure is not so much an addition of new material but *a re-expression and re-synthesis of previous material*. Thus, as each reformulation produces a novel synthesis, their mutual interplay will articulate the true nature of the system as a whole, which is exceptionally creative, integrated and seems to play across the gaps between each figure. It seems likely that Llull himself recognized that the step from non-existence to existence of a figure was not mechanical at all but creative, and with a troubadour’s poetic intuition he anticipated the creative mode of God himself.

Figure A is his universe's fundamental constitution, while Figure T is its reflexive, or conscious constitution.

If the first figure is predominantly ontological, the second figure, figure T, is concerned with epistemology. As you can see, the second figure takes the second series of associations (Difference, Concordance, etc...), divides them into three triads, and unfolds them each on three levels of application. Although it is an unresolved issue as to how much Llullian combinatoria owes to Qabalah, it is certainly likely that Llull would have at least been familiar with the Hebrew alphabet. If this is the case, then, he would have known that Aleph is the first letter, and Tau the last. Tau itself signifies a cross. Figures A and T seem to represent, respectively, the most abstract, and the most embodied levels of the system: A constitutes the properties of God while T represents the incarnate faculties of man. Pushing this analogy further, the graphic sign of “T,” the cross, recalls the incarnate Christ, and so it seems likely that Llull would have considered the operation of knowing A through T on some level to be analogous to knowing the Father through the Son. As it turns out, there was a common

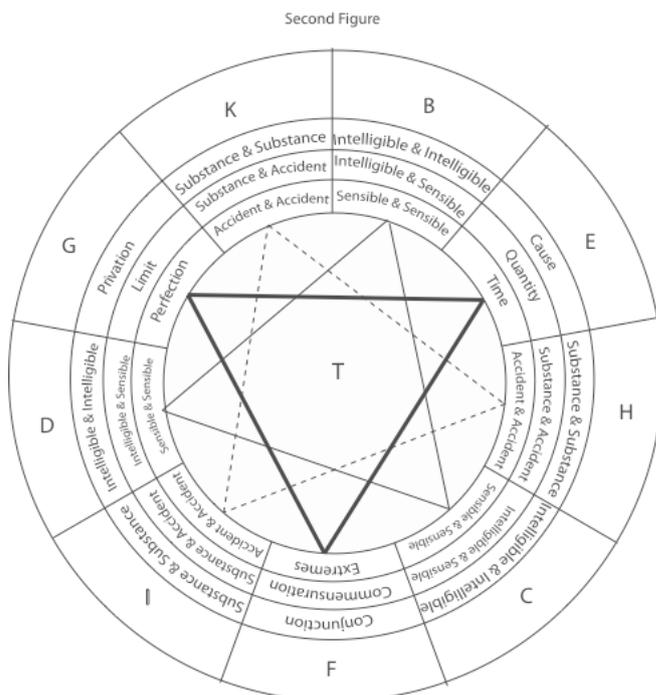


Figure20: Ars Brevis Figure T

practice in publications explicating the Lullian arts after Ramon's death, to label A the absolute figure and T the relative figure. According to Bonner, however, this ends up obscuring Llull's own (late) use of the terms (Bonner 2007, p 130). Llull's arts are modular systems which he develops in response to particular problems. In some cases, as we will see, he actually uses his principles to model an already existing system (such as that of Astrology) in order to convert it into his methodology, an approach akin to modernization, or updating. This being said, it becomes difficult to pick out a completely stable approach which holds for all systems and across all stages of Llull's development. This is, in fact, the hardest aspect of studying Llull: despite his extraordinary concern with consistency, there is tremendous variation even in how he uses terms between one phase of the art and the next. He is not inconsistent synchronically speaking, but he is also evolutionary in terms of diachrony. It would seem then, that we cannot definitively separate A from T as relative and absolute during the stage of his developments which produced *Ars Brevis*. There seems to have been a development from earlier versions of T, which was considered as an investigative tool of the intellect, and which included sixteen letters, still more internal triads, as well as a structural relationship to at least one other independent figure, S, to this final formulation (in which, according to Bonner, the distinction between the “Dignities” as *substantial* hypostases and the *accidental* features of T become somewhat interchangeable). T, therefore, attains to something of an equal status as A (Bonner 2007, p 133). Bonner points to the fact that while Llull used the term “dignity” to refer to the powers of A in earlier works, in the later works, he ceases to do so, and in fact begins to treat such “accidental” concepts as Difference, Concordance, and Majority, as actual positive powers. I do not, however, feel that this

blurring of the ontological/epistemological boundary between the two figures negates the thesis that the two still represent the functional relationships of two figures of the Trinity. It may, however, have to remain the case that we keep these two figures distinct at least in terms of A's predominant emphasis on the qualitative, and T's emphasis on quantitative properties of the subject matter. God the Father is thus construed in this analysis as being an actively contemplative Being, while Christ is considered as performing a more analytic function. For the third personage of the trinity, the Holy Ghost, we will need to look at the last two of Lull's *Ars Brevis* figures, figures three and four. These two figures can be amalgamated to a certain degree. We could perhaps suppose that in this extrapolation of the Trinity into four figures, we can see the legacy of both Lull's previous quaternary works and his elemental theory. Considering that these last two introductory figures give us what I would characterize as Lull's "Holy Ghost," let's look at what Lull actually does in the production of these two instruments.¹¹²

¹¹² If A is the Father, and T, the Son, then "mixing," using figures three and four, is the activation of the Holy Ghost.

Third Figure

BC	CD	DE	EF	FG	GH	HI	IK
BD	CE	DF	EG	FH	GI	HK	
BE	CF	DG	EH	FI	GK		
BF	CG	DH	EI	FK			
BG	CH	DI	EK				
BH	CI	DK					
BI	CK						
BK							

Figure 21: Lull's Third Figure

Figure three, above, finds A extrapolated into a half-matrix, below, giving us a meditational procedure of “exhausting the chambers.” The Lullist moves, chamber by chamber through the matrix, and formulates all the possible questions that his method will allow therein. This engages all the data from figures A, T, and the list of nine “Rules” (or ten questions). Each letter may be interpreted as a rule, a substantial “dignity,” or a measurable “accident.”¹¹³ This is where the first real “mixing” begins: rules, principles, and dignities become interchangeably attached to letters and so each two-letter combination becomes fertile of first six, then, considering reversals, *twelve* possible questions. Lull writes:

The intellect mixes one principle with another, examining each principle by means of the others, and examining each principle by means of all the species of the rules. By means of such an examination the intellect becomes acquainted with each principle, and every time it mixes said principle differently, it will find out something new about it. Who in fact could enumerate all the means the intellect discovers for drawing conclusions, with the intellect evacuating this mixture...? The mixing is the center and foundation for the finding of all sorts of propositions, questions, middle terms, conditions, solutions, and even objections. (Bonner 1985, p 323)

¹¹³Here borrowing the Aristotelian account of Substance and Accident.

As we can see, through T we are given a triad of triads (of triads). We could label these triads as follows: BCD is the *qualitative* triad, EFG is a *modal* triad, and HIK is a *quantitative* triad. This would give us a sense of how they function separately but in a compatible fashion, to give us a whole, categorical epistemology. This figure is loaded with the epistemic categories of the time and is like a control panel or navigational device in terms of investigating the nine originary principles of Figure A. Figure T is applied to Figure A, and the resulting, question-generating combination will produce a surprisingly large number of fruits. For instance, for any one of these combinations, say BD, either term can be a question, an item from A or from T, in more or less any order. So, we could get “Whether Goodness is Eternal?”; “Whether Eternity is Good?”; “Whether Goodness is Contrary?”; or “Of What is the Goodness of Eternity?” etc... As artificial as this may sound at first glance, do keep in mind that the act of running through these propositions beforehand in a kind of contemplative mode is the key to developing entire sets of stock argument which are meant to be applied in active debate.

The third and fourth figures complete the Trinitarian operation of the *Ars Brevis*, while concealing a quaternary root.¹¹⁴ While Figure 3 is really just a re-expression of Figure A - wherein all the possible combinations, excluding reflections and doublings, are arrayed in chambers, and are opened up to assignment from the first three columns of the alphabet (A, T, and the Questions) - Figure 4 is a true extension of the system.

¹¹⁴Much as how the Tetragrammaton, YHVH, is composed of 3 different letters.

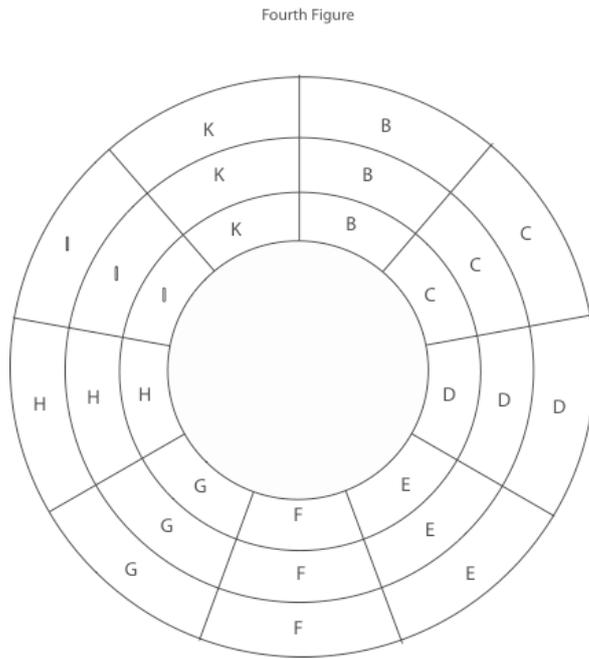


Figure 22: Lull's Fourth Figure (The Lullian Wheel)

In Figure 4, the system is made mobile. Three concentric circles bearing the letters are designed so that the inside two can rotate in relation to the fixed outside circle. This motion is used for generating ternary figures: combinations of three letters which, in a manner similar to the operation of the thirty-six chambers, can be used to generate a very large volume of questions. As the wheel is turned, with each permutation, all nine new combinations are read off of it at once. For instance, set the wheel to the first non-repeating combination: BCD. Looking around the circle, then we will find CDE, DEF, EFG, FGH, GHI, HIK, IKB, KBC. Turn the inner wheel once, and all of these are changed. This method of reading has caused Bonner to describe Lull's art as radiating out of the centre in ever increasing circles, much like in the case of a pebble dropped into a pond (2007, p 136). It is this expansive, rippling, circulation of *Spiritus* that operates, I think, as the third power of the trinity: the Holy Ghost. We can see that it is the Holy Ghost which then reflectively conditions and animates the previous figures. The three-and-a-half figures are one art with a progressively open domain, just as the

three persons are one God and his presence in the Kingdom.

These figures complete the fundamental anatomy of the system, but the thought-filled *Spirit* which is caused to circulate through Lull's art carries with it a profound and fecund force: it allows memory and thought to grow organically on the lattice of wheels. Lull has created a new kind of man, with his wheels. To this effect, the remaining chapters of the *Ars Brevis* from III-XIII, treat the terms in greater depth, and actually use the art to flesh itself out. These include definitions of terms, an account of mixing principles, multiplying questions, tables of combinatorial permutations (expressing the movement of Figure 4), the Neoplatonic hierarchy of nine subjects, the one-hundred forms (a kind of road-map of the rhetorical content of the art), a demonstrative section where questions are answered artfully, and advice for "habituating" and then teaching the Art.

Lull has adopted into his system a rich cosmological model based on the ancient image of a ladder of ascent and descent. As we saw under the category of Subjects, God is at the top of the ladder and the Instrumentative is at the bottom. This analogy, as well as its transference into the art, is merely a map, and the

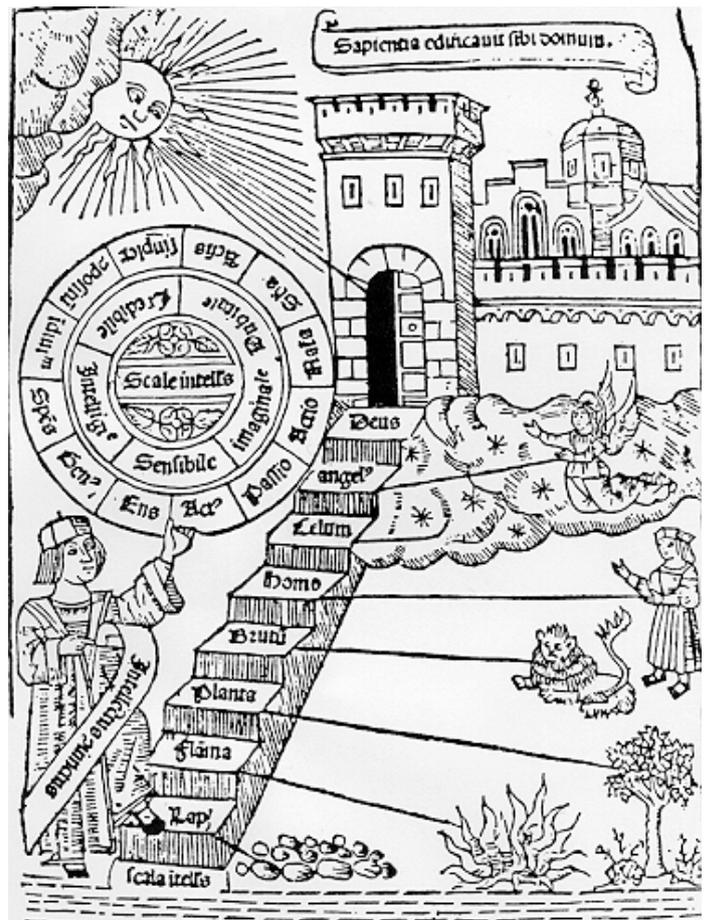


Figure 23: The Ladder of Lull's life, from *Breviculum*.

different levels are all quite unique and quite large domains. Let us begin with an overview of these levels.

Llull's God is purely active, a font of creative energy that manifests in nine dignities: “In God is difference of correlatives, without which said correlatives could not exist at all; nor without them could God exercise His infinite and eternal intrinsic action; moreover, without them his dignities would be idle, which is completely impossible” (Bonner 1985, p 327). A few issues are raised here. What are the Correlatives, for instance? The important thing is to remember that Llull is assessing God, or A, in terms of the categories of T. So, we have a dynamic God, whose dignities are activated by a series of real domains “correlated” to the dignities, each of which is different. God is *made* of difference. Llull, who says that God has many definitions, gives the following one: “God is that being who needs nothing outside Himself, because in him exist all perfections” (Bonner, 1985, p 326). So, God is a self-contained entity, much like the Art, and yet, unlike the Art, God is pure difference, pure Will. Below God is the level of Angel. He writes:

In an angel there is majority, for it is more similar to God than is man, since it contains higher principles and rules than man. As a result, the intellect realizes that, if man cannot make use of his senses without the corresponding organs, it does not follow from this that an angel is similarly incapacitated, for an angel is of superior nature. As a result, the intellect realizes that angels can talk to one another and act upon us without any organs and they can travel from one place to another place without any means of locomotion, and so on, as is clear to the intellect upon examining the rules (Bonner, 1985, p 328).

Below Angel is Heaven. Here is the sphere in which physical movement is first introduced as such into Llull's system:

Heaven is the first mobile Substance... it has a beginning, for it acts as efficient cause in things below it; moreover, this beginning is made up of its own specific form and matter, so that it may act in accordance with its species. Its movement constitutes its own end and resting place (Bonner, 1985, p 328).

Below Heaven is Man:

All the principles and rules exist twice in man, because of his double nature, that is, his spiritual and corporeal parts of what he is composed. And thus, he is more general than any other created being, as a result of which one can say without doubt that man constitutes the largest portion of the world (Bonner, 1985, p 329).

Below Man is the Imaginative:

The imaginative faculty extracts species from the things sensed with the individual senses; and this it does with its correlatives, as indicated in the second species of Rule C. (Bonner, 1985, p 329)

Llull is here sensing directly and utilizing the imagination much in the manner of the Aristotelians: as an imprinting, intermediate faculty. In the section on rule C, he writes: “What does the intellect have coessentially in itself? ... One must reply that it has its correlatives, that is to say, intellective, intelligible, and understanding, without which it could not exist, and would, moreover, be idle and lack nature, purpose and repose” (Bonner, 1985, p 312). A thing’s correlatives are thus its reality, and so the system is mapping reality in such a way that all the levels grant access to those correlatives with a systematic rigor.

Following the Imaginative are the Sensitive, Vegetative, Elementative, and Instrumentative rungs of the ladder. They have a similar dynamic. There are effectively nine major loci to organize the numerous phenomena of the world, according to the art of memory, whose correlative in the world of men is the art of rhetoric. The purpose of all this is both to ascend to God, as a mystic, but also to dwell within a coherent and meaningful depiction of the cosmos, where the differences in kind are explained through differences in level. A common, underlying method enables Llull or any adept operator to locate themselves on any level: comprehending the animal and mineral levels, assessing the status of the Heavens through

combinatory astrology, communicating with Angels, and ultimately, as humans, finding a Christly mode of participation in the primary active reality of God the Father. With this total access to the system of the world, and with the logic of *deviction* in hand, Lull's missionary has everything at his disposal that he needs in order to replace the various vices with virtues: to act as a doctor to the world. One wonders if for Lull, Christianity is ultimately a kind of all-pervasive medicine: a rational vapour that when distributed and circulated through the world can free us from fatalism, from inordinate vice, from confusion and chaos, and can quite literally re-create the world in the image of Christ, thereby granting freedom from the sickness of the sins.

Yates' work in recognizing the elemental constitution of the Lullian art was focused on just one of his "subjects:" the Heaven. There is a massive displacement between the abstract form of the system, and the highly concrete content of the lived experience, as it is articulated in different layers. Lull has literally plugged the astrological and physical systems of his time into his art, transforming them from empty frames into a living system. What can be articulated on any given layer of being is not determined by the art as such, but rather read off by the art into its peculiar idiom. It is probably this capacity to encounter the sensible world with a code in hand that lead to the later enthusiasm in the Renaissance for Lull's art as a *Clavis Universalis*, for unlocking the book of nature.¹¹⁵ The 'book of nature', at least insofar as the Scholastics had written it, had itself been enciphered by Lull, and "uploaded"

¹¹⁵ "An interest in the cabala and hieroglyphic writing, artificial and universal languages, the search for the primary constitutive principles of all possible knowledge, the art of memory and a preoccupation with logic understood as a 'key' to the hidden secrets of reality: all these themes were connected to the revival of Lullism in the Renaissance." (Rossi 2006, p 29)

to the Holy Spirit (the circulatory movement of his art). There is a tight analogy here between the ideas of virtuality and actuality: Lull's virtual system reads and encodes the actual, thus conditioning the becoming of future actualities,¹¹⁶ which it will go about reading, and reciprocally consuming into itself to expand its design. So the heavens of Lull are the same heavens of the ancient astrologers, but they are rendered almost completely elementative, so as to facilitate the *deviction* process.¹¹⁷ If we turned our eye to any of the other layers, Angel, for instance, or Instrumentive, we would discover that the virtual world which is appended to that layer is an interpretation of a sensible sphere, not a purely abstract one. Deleuze calls this contrast between the actual and the virtual contents of a *locus*, the "a-symmetrical synthesis of the sensible," meaning that the abstract and sensible aspects of a being are one system, but that in doing different work, the two sides of that being - the side that expresses its particularity, and the side that expresses its actuality - *do not resemble one another* (Deleuze 1994, chp V). One could evoke the image of a moebius strip, here, which contains a single surface, even though it has two "sides". In any event, the "actual" systematic rigor of Lull's tables and wheels completely belies the full and living textures of its virtual reality, as found in the experience of working with it. It is this latter richness which is the real spirit that animates the dry looking letter combinations. It builds up or accretes to the wheels over time, and through use. The virtuality becomes supplied as an *imaginal supplement* to the bare structure of the system. The two aspects are möebially intertwined. A mnemonic device is useless to

¹¹⁶ Through placing structural constraints upon thought, and aesthetic pressure upon action.

¹¹⁷ Bruno performs a similar operation during the Renaissance, in which he evicts the traditional figures of astrology from the heavens and repopulates them with his own pantheon of heliocentric virtues (Bruno 1964). He is of course an eminent Lullian.

an unimaginative or impartial being. Unlike a computer, which takes an input and gives an output, the Lullian art takes an input, supplements the input with a visionary/imaginal pragmatism (the troubadour's embellishment, founded on artistic intuition), and *then* generates an output. While a computer needs to be neutral in regard to how it handles data, the Art, being a rhetoric and a politics, *requires* partisanship, non-neutrality, in order to do what it does: convert thought from one form to another. The forms, and the generation and answering of questions are the most important parts of *Ars Brevis*, because they dress the naked art in the robes of context, opinion, knowledge, and pragmatism.

Lull's arts play out in the fields of religious, scientific, and intellectual dialogue, for which, indeed, they were intended. What does the Lullian art actually mean? We are returning in a sense to Ramon Lull the troubadour. The art means what it *does*, which is generate a universe of discourse that models, subsumes, and re-orders any statement or argument inputted into it in a manner that is controlled by its operator. It is in this sense that the arts of Lull are engines of synthesis.

Ramon Lull is a spider. In his missionary behaviour we see repeatedly that he operates by luring unsuspecting debaters into a dialogue with him which will force the outcomes of all propositions into the form of his Trinitarian theology. The basic premise, that the contents are agreed upon by all the faiths, while the form is surreptitiously weaving the topics into a trinity, is an example of a covert capture of the question itself. Thus, the real significance of Lull's art is that it monopolizes how questions themselves are formed. Magic or no, it is an art of hidden causation. Questions have a power, or vitality, whose fruits are inventions, speculations, accounts. For instance, if the question one asks regarding existence is "why?" one is

led to different conclusions than had you asked “how?”. Llull capitalizes on this, and his art grants an extraordinary ability to the user for determining relevant (and leading) questions. A static universal model only emerges once a particular question has already been posed (the “why?” and “who?” of theology and metaphysics and the “how?” of science will do this), but if we approach phenomena understanding them to be essentially dynamic, then the field of play is largely *open*. Phenomenologically this is perhaps the first onto-epistemic state of affairs: a field of open questions, an unknown yet present factor (an *ain soph*, an *apeiron*). Llull has arrested that field and woven a nine-fold web across it, using his wheels to siphon off that activity into tables and tables of possible formulations, all of which owe their contents to the starting point. In any situation of dispute, whoever has the power to ask the questions is the politically dominant party. Llull's art is also like an abstract martial art, and functions to close and control the discourse space. It is driven by stress and crises in the world. It is a combative rhetorical technique which operates *in-situ*, not so much by constructing the context, but by capturing and manipulating an *image* of it.

The key to an accurate understanding of Llull and his art lies in the question: *What force actually turns the Llullian wheels?* What drives Llull's machines? Llull's religious understanding, intellect and doctrinal preferences are, pardon the pun, circular. In fact, there can really be little doubt that what drives the motion of the wheels is precisely what drives the production of system after system after system, namely, Llull's passion.¹¹⁸ All the intellectual devices are flowerings of that passion as it has been restricted and channelled by his conversion experience. In a sense, T

¹¹⁸The double meaning here is intended.

overflows into A precisely because T is the crucifix, or set of restrictions upon which Lull is pinned in his own enactment of the passion of Christ. From T, the passionate love of God overflows his intellect, entering into the nine dignities, and their ever increasing circulation through Figures 3 and 4. At the heart of it all is the letter A¹¹⁹ itself, which we must interpret not as an entity, but as signifying an incrementally enlarging *passage or gap* through which all of Lull's passion ultimately flows. Since that gap, or grain of faith, is itself smaller at first than Lull's earthly passions, the process of emanating and spinning the wheels actively expands it over time.

The motion of Lull's wheels is self-driving. To interpret him as the agent of their configuration is only partially accurate. He is best understood as guiding, rather than programming, his art, shepherding its motions toward the point of contact with God as the art is progressively enlarged, the apparatus expanded, opening up like a rosette (or stained glass window) from the point of restriction on the cross of Figure T. Love spins the wheels in order to convert itself from *eros* into *agape*. Lull seeks to generate a Heavenly Kingdom of intellection, a virtual world built on a foundation of the nine dignities, in their dynamism. Utopia.

The point of combinatoria is to capture pressure and to use it to generate an absolute and synthetic "centre of being," a bottleneck through which alone the

¹¹⁹ The letter he omitted from his selection of nine dignities, precisely so as to have a unity that they could point to as so many aspects. It is both the first, and the tenth, in this respect: the axle of the Lullian Wheel. It is the hole in the heart of language, through which, if prepared, one can travel intuitively in order to witness non-Being directly. The gate to the mystery. It is heavily circumscribed by code, guarded, a *Holy of Holies*, and yet there it is, at the needle's eye, where the system is mastered so thoroughly that it can be *exited* and brought to silence in its own heart: the unmanifest, the beyond-code. God, or "A"!

pressure can escape. The excess of difference passes through a God-shaped hole¹²⁰ and circulates back into the ground, expanding Christendom, and actualizing the Holy Ghost in the process. There will never be a final wheel because there will always be a surplus that, once the system is fully inflated overflows and becomes the occasion for new systems. Lull is both a mystic and an engineer. Lullian arts employ a kind of rigorous world-creation, which foreshadows 20th century virtual technologies.

Lull's wheels turn by themselves through the pressures of the world, and are guided, manipulated, and programmed by the operator. Chthonic force is the missing key. Lull is DRIVEN to produce sense out of chaos and confusion. This is what conversion *means* to him, I believe.¹²¹ Lull's art is an ongoing conversion of himself, by means of channels, caps, and flowering machines of memory. To draw a semi-Freudian analogy, Lull's quest for God is an extreme erotic encounter, in which his considerable lusts for the world are being re-assigned to the production of an extensive super-egoic machinery: a thousand meaning-producing windmills, turned by the intensity of his desire. Lull builds a *Demiurge* from the ground up in order to discover God as the ultimate epistemic choke-point. All of his multiple formulations must ultimately pass through A (the letter, even, more than the figure), generating a fountain effect: the overflow of his machines drives the production of more machines. Machines populate the earth with their children, so to speak, which are Lull's literary and logical productions, and all subsequent productions by Lullist thinkers through the Renaissance, the Enlightenment, and (obscurely), into modernity.

¹²⁰The aforementioned "gap" of A: It must be remembered that Lull's wheels are not disks, they are *rings*.

¹²¹ Recall the various "emotionalist", assessments of magic mentioned by Sørensen in Part 0.

To reiterate, all the systems and applications of the systems are driven by an intense upward pressure: from the world, towards God. Lull's calculations are secondary, navigational functions of the self-driving nature of the wheels. The analogy to a sailboat is apt: pure activity is the wind, the art as a whole is the sail, and the individual permutations and operations are the rudder. This is why they produce an accurate signature of states of affairs in Lull's world, because they are driven by real forces. They catch the "signature" of God. The wheels aren't to be turned arbitrarily in any way, in any situation whatsoever by a conniving and calculating Lullist, but rather, like dice throws, the wheels yield a specific combination that reflects the entirety of existence at that moment. This is because God, or even the world-in-itself, is in communication with the Lullist through the particular signature of any given moment. The intellectual Lullist can then guide and manipulate the wheels after the fact, but must, I will contend, accept the messages that are first *drawn out* of the world by a "reading" of it, through the wheels. This dynamic is close to the magical practice of divination, one which proposes a kind of elemental matrix (like the *Tarot*, *I Ching*, geomancy, etc...), generates a random figure from it, and then interprets that figure. The only difference is that here, the generation is not random, but is formed from a reading or translation of a state of affairs into a Lullian code.¹²²

The supplement Lull must supply, in order to answer each proposed question, is in no way arbitrary, even though, as Eco shows, it cannot be a direct consequent of the logical aspect of the system. Lull's activity of specifically ignoring certain

¹²²Sometimes advanced practitioners of divination use random generation less and less as they become more proficient, and tend towards a direct reading or intuition of a situation. The fortune teller retires, and the sage, or oracle replaces them. The outward trappings: cards, coins, sticks, or what-have-you disappear, and are replaced by an invisible and inner interpretive apparatus.

combinations (Eco 1995, p 64) that his logic allows is not evidence of the poverty of the system or the need for Lull's reasoned intervention; rather, this activity directs the flows through various channels as determined by the primary content: his love towards God. Lull would be a fool in the un-exalted sense of the term if he allowed the mechanics of the technique to subvert its purpose: the flowering of a profound and transcendental love affair with God.

It is not in logic that the Lullian art most anticipates the present state of affairs; rather the Lullian art anticipates *combinatorially-generated virtual realities*. It consumes stressful antagonisms and synthesizes them into virtualities. Ramon Lull attained an immortality in the virtual world he constructed. His is an extended figurate architecture that is both mobile and static: mobile in that its components are always in dynamic interaction, and static, in that its ultimate impact is to superimpose its figurate “signature” onto the plane of becoming, thus conditioning the course of events. If all permutations of the *Ars Magna* and *Ars Brevis*’ ternary system were accounted, they would add up to seven-hundred-twenty-nine discrete combinations. As we mentioned before, this same number of permutations is found in the Confucian *Tai Hsuan Ching*, and that, being $9 \times 9 \times 9$,¹²³ it is render-able as an order nine cube. Both these systems are masterpieces of the figurate tradition. The image that I wish to leave you with here is that the *Ars Generalis Ultima* of Ramon Lull is perhaps the greatest “Western” example of a fully synthetic architecture of absence, and a figurate machine for generating virtual, memorial *realities*.

¹²³ Offered sometimes in the arrangement of a $9 \times 9 \times 9$ “magic cube”! (Walters 1983)

Chapter 13: The Assemblage of Figurate Systems

Esoteric magical practice is interlinked with the design, (or “discovery”) of systems. This is a living movement: magicians continue to design systems, continue to discover them. There is a link between creative/artistic system exploration, and scientific/technological system design. They fuel one another. On this note, I’d like to return to my earlier discussion of cognitive science and magic. While we might see this as a movement whereby we submit buried structures to a destructive exposure, there is reason to believe that the cognitive analysis of magical systems can open up new possibilities in the *design* of cognitive systems/mental space configurations, and that would be useful. In this way, meta-magically, we can engage the creative-technological link that these types of system have always promised. Consider the following:

1. Metaphors open mental spaces which contemplation inhabits.
2. Magical systems are complex architectures of mental spaces.
3. Computers act as exo-memorial palaces.
4. The history of mystical/revelatory system design is related to the contemporary state of affairs vis-à-vis digitally engineered social spaces.

These deserve a little unpacking. We have suggested that human contemplation occupies environments, which are grown or architected, and which, in effect, separate us from our embeddedness in things, by way of a kind of filtering. These deep “architectures of absence”, then form both the nature and the context of our thinking processes. These architectures inform the basic inferences and assumptions

that we use to construct thought, by supplying the categorical underpinnings of thought's movement. In the contemporary period, due to mechanization and mass mediation, the frames of reference have become considerably externalized. This feeds back into us, and changes how we think. I would like to view the computer as a kind of external memory palace, and the virtualities that we access through it, as a kind of programmable phantasmagoria. Coulianu was correct in suggesting that the scientific revolution enabled the technical realization of renaissance magic's dreams. I would like to view the hypermediated context as a magician's theatre *par-excellance*: supported by codes, full of backdoors, secrets, even demons and angels, antonymous codes, dwelling in the network. It is this hypermediated meta-magic that, I think, truly triggers the renewed interest in magic, because, in a way, it has surpassed us, enchanted us. Fooled us. We stand before our own creations that have become so sufficiently advanced with relation to us in our daily lives, that they function as magic.

I have sketched out a variety of systems in this section, from memory palaces to combinatorial matrices. These are all essentially "figurate systems", in the sense that Deleuze and Guattari used the term. They are "structures" in the sense of being assemblages of power, assemblages of *ur*-thinking. Their proliferation is now ubiquitous, both psycho-socially, and technologically, and for this reason we must come to understand this concretion of the spiritual aspects of our being, lest we lose further control over it. All research is a three-edged sword: it gives us the blueprints for tools, weapons, toys. It can lead to the production of technologies or of techniques. It can be disempowering or empowering.

Recall that I have argued that the cognition implied by giving a name to a force, is one that whilst seemingly positive, is in fact negative: whilst apparently an

insertion, it is more akin to a *deletion* from immanence. My claim is that a “being”, is a space, a frame, a lacuna in (non)Being. This is the essence of “system as subtraction”: there is, in the structure of the human mind, a series of mobile, modular, and evolving chambers and frames. These are spaces of general recognition, *averagings-out* of specific targeted notions, which allow us to substitute specific instances, to be trained. For Deleuze, the Platonic Idea effected a function of sorting out claimants to the status of x, where x is the general Idea of Justice, or Goodness, or Beauty, and the claimant is an individual instance, ostensibly showing some traits that we would label according to the general category (Deleuze 1990, pp 254-6). As a consequence of the way Plato frames “participation”, the instance is conceived as being “inside”,¹²⁴ or participating in the form to the degree that it is a genuine example of the quality in question. The general category itself is “ideal”, and it is the only thing equal to itself: participants in the idea are simply members of the set. The theory of forms is therefore quite arguably a “container schema”, a very basic mode of metaphor (Lakoff and Johnson 1999, p 31). We have pushed this further to denote that container schemae apply to Being itself, when using common sense language, so that, in effect, we are forced to conclude that Being is effectively a hollow, as suggested by the passage from the Hermetic *Aesclepius*, which opened this Part. As a metaphysical statement this makes less sense than it does as a psychological statement: “Being” is the conceptual container of all things that can be conceptually contained. In other words, Being is a fundamental negation that admits micro-negations of itself, *into* itself, where it binds and organizes them, like little islands. My sense is that what is

¹²⁴ Or secondary to.

going on here is that we are *negating* and *double-negating* the stuff of experience in order to frame the world to ourselves. The pattern that these selections take establishes our selective attentional filtering.

This technique of selective attentional filtering, which is fundamentally implied by our thinking (and is connected to “mind over matter” philosophies and tropes), is crucial to magical thinking, because it is in the intersubjectivity of the basic frames that we intervene in forces magically. We capture and re-direct them. We operate the containers. The Kabbalistic concept of *Tzimtzum*, then, which I raised in Part II, chapter one, is, I think, more than a metaphysical notion of Genesis, but rather a movement behind every act of cognition and recognition: each naming represents a *micro-Tzimtzum*, such that the worlds in which we abide are composed of so many chambers which we create, or destroy in order to develop the environments of human semantic sense. We are ever trying to recollect the sparks of our phenomenological understanding out of the abyss of shells formed by our insufficient linguistic categories, our array of “chambers.” Forces flow through those chambers in a molecular movement and are picked out by the spotlights we shine on them that allow them to be transported into abstraction, and it is somewhere on the continuum of abstraction, that we, (or any given I) reside(s). Para-optics relates to this, both in the sense of accurate vision, and also of illusion. This is to say, our imaginal faculties, in which so many of these structures are housed, can constitute spaces in which we see the influence of these same structures clearly and transparently, OR it can engender the proliferation of spaces and environments in which we dwell unconsciously, and become in effect *directed* (or misdirected) by them. A clear understanding of the para-optical or virtual function then, is a boon to magical offence or defense.

Lull's *camerae*, again, are these same sorts of chambers, as comprehended by a totalizing, enciphered system of letters. Equally the Kabbalah. Equally the I Ching, and equally the entire range of such closed systems, all the way up to the modern computer. "Deviction" is the process, for Lull, by which the *camerae* are "trued", that is, the forces which are allowed to be seen through them are refined and augmented by the process itself, so as to fit the shape of their containers. In this idea then, a vice would be seen as a force, enclosed within a frame against which it reacts hostilely, and a virtue, the inverse: a force which has been so trained as to guarantee the victory of the frame. Lull casts his strategic net, and then devicts all its chambers of rebellious forms. Similarly, a *Sephirah*, in the Qabbalistic strategy, is the *virtuous* counterpart to the *Qliphah* of the same, the Qabalistic strategy being to entrain perceived forces into one or several of the hierarchical schematae represented by the Tree of Life diagram. It is a means of filter-control, and also a register of that filter's strength, that it manages to clear experience of one form of becoming in order to replace it with another. The capacity to "devict" unworthy claimants from an abstract container is the whole point of establishing such a container (or system of containers) in the first place. The assemblage of figure systems is a magical theatre, and in some sense also an alchemical laboratory involved in a cogniforming action upon the sensuous world.

We have become aware of these sunken psycho-social structures, and the tendency of our postmodern age is toward the further development of this awareness. We are now in a position to interrogate the figurate assemblage and transform it. Consider Aspren's intriguing essay on *Reverse Engineering Esotericism*. It is an analytical approach, calling for the breaking of a given target system into its cognitive "building blocks". Once an esoteric system, understood as a "Complex Cultural

Concept”, a CCC, has been broken into its building blocks, those blocks can be used to model new possible cognitive arrangements that have not as yet been articulated.

Before we address this, please note that there is a striking parallel between this method, and the method of Deleuze’s Bergsonian, whose principle critical task is to examine “poorly-analyzed composites”. Deleuze writes:

Badly stated problems, the second type of false problem, introduce a different mechanism: This time it is a case of badly analyzed composites that arbitrarily group things *that differ in kind*.. If the terms do not correspond to “natural articulations”, then the problem is false, for it does not affect “the very nature of things.”... the very notion of the false problem indeed implies that we have to struggle against simple mistakes (false solutions), but against something more profound: an illusion that carries us along, or in which we are immersed, inseparable from our condition. (G. Deleuze 1988, p 18)

The concept is not new. It reflects misgivings surrounding the manner in which abstract concepts are “authoritatively defined”. In any definition, there is power, and there is a status quo. Deconstruction, either by cognitive, post-structural, or Bergsonian means, is always an attempt to ask: “What is the apparent clarity of definition actually concealing in this case?”, in order to discern whether other, equally valid procedures could produce the same result, or whether the same procedure could produce different results. Deconstruction always implies, at the very least, the possibility of alternate (perhaps more suitable) constructions. Aspren writes:

I do not assume that the concepts that we start out deconstructing (‘religion,’ ‘gender,’ ‘esotericism’) necessarily re-emerge at the end of the process as useful categories with which to carve up the world. Instead, I hold that to ‘move beyond ... deconstruction to develop terms for social [and cognitive] realities out there in the world’ often requires us to ditch the starting concepts in favor of more basic and generic terms that help us develop better conceptual and methodological tools for studying these realities. (Asprem 2015)Citing Kevin Schilbrack in *After We Deconstruct ‘Religion,’ Then What? A Case for Critical Realism* (Schilbrack 2013)

A deconstruction of magic might well abandon it altogether in favor of something less conceptually evasive (we have seen this kind of movement going back centuries), and yet... at the same time, I suspect that it will open up lines of flight that allow *whatever it is we mean by magic* to re-express itself in new, reconfigured terms. It is a testimony to the congruence of post-structural and cognitive approaches, that they might both be used in this way; to open these lines, and that they *both* seem to pose the question: “What can we build out of this”¹²⁵? Certain assumptions (namely, those which work to “hide” the causative factors) do not survive the procedure. A bivalent notion of gender does not survive the deconstruction process, and neither does a polarized view of esotericism. The constitutive elements of the fiction are decomposed, but of what kind, on what order, will a composite or CCC of magic, post-analysis, be? In this account, it is clear to me that the most exciting answer is not

¹²⁵ Asprem suggests two “integrations” which follow from the reverse-engineering process: “Vertical integration is achieved by linking our data and theoretical frameworks with explanatory theory on lower disciplinary levels, so that, at the very least, they are coherent with each other and allow translation of research problems from one level to the other... That explanatory levels are vertically integrated means that, at the bare minimum, there will be nothing in the higher-level theorization that conflicts with what we know about lower-level processes.... Vertical integration also makes possible new forms of horizontal integration, by which I mean the linking of data, problems, and methods of analysis with neighboring disciplines located at the same level. This is the sort of interdisciplinarity that esotericism scholars have already been good at encouraging, building bridges not only to religious studies, but to disciplines such as intellectual history, history of science, and art history.” (Asprem 2015) I read these aims as, in effect similar (but not identical) to mine in the sense that following a deconstruction, my intention is to eliminate “opaque” elements of the idea, those constitutive illusions, or proposed transcendentals that disallow sensitive ground-level observation by asking questions that themselves impose an arbitrary selective structure. This then allows us to understand the constructed elements of both “higher” level (more abstract) and lower level (more empirical) discourses, such that we end up with a theoretical account that is maximally sensitive to observation and experiment, and where theory and practice may be made consistent. On the horizontal level, it means that the approach can interface interdisciplinarily, drawing from, not just research-based scholarship, but also from (in my case) extra-academic disciplines such as art, performance magic, circus, the experience of poetry, martial arts, and the like and incorporate proprioceptive and aesthetic knowledges alongside discursive ones. From my point of view, there is room, post-deconstruction, for creative work and novel syntheses both in academic and practical/artistic modes, by whatever name you might give to the newly opened-up subject matter.

an analyzed, explored, understood, and finally defeated ‘magic’,¹²⁶ but rather the opening of new fields of play altogether. “What can we make out of this?” becomes a more pressing question than “how do we understand this?”, although both are implied. By using the reverse-engineering metaphor in the first place, we are implying a call for some kind of appropriation and technologization of the findings, in a way very similar to how gender dualism, and gender construction under analysis, was capable of being refurbished, revealing a “queerscape”, and an array of concepts that evade the tacit dualism that has now been exposed. Similarly, although we might like to be able to examine a magical system purely *etically*, the implication involved in deconstruction, either by a postmodern or a cognitive method is hard to deny: it also enables the syntheses of novel “magicalities”, based off simpler and more robust observational and theoretical foundations, but creative nonetheless. I believe that there can be no final eticization of the *emic*, because the relationship is not, in reality, a static one. I would argue that these deconstructive treatments, and the potentials they open up, allow for a whole dynamic that is neither *etic* nor *emic*, but closer to the *enic* or *exic*. I see this shift as being part of the very reason for deconstruction. In this way, we find ourselves, I would suggest, engaging in meta-magic.

... the constructive reassembly stage is where we develop new theory and design research programs that reconnect the lower levels with the cultural and set up new comparisons between formations. Reassembling the complex, socially embedded wholes from a set of building blocks, then, does not guarantee a return to the old labels and categorizations with which we originally set out. Instead, now describing and systematizing the subject matter from below, it provides us with an alternative way of relating ‘thick descriptions’ of particulars with explanatory theory and comparative methods in a broad interdisciplinary context. (Asprem 2015)

¹²⁶ Which would vindicate the dualism inherent in the “modernist” approach.

So, what, precisely are we dealing with, when we break a system like that of the *Ars* the *I Ching*, or the *Tzolkin* down into building blocks? Do we re-assemble it in such a way that it might accrue new labels and categorizations? Do we visit other deconstructed paradigms, and compare? Do we begin to reverse engineer less “loaded”, structures with an eye to examining how certain “basic” symbolizing maneuvers pertain to both? At what point does the research move away from analysis of systems to synthesis of systems? Is this a disenchantment in any final sense, or an engagement with a more rigorous enchantment-disenchantment *dynamic*? Is acquiring an “alternative way” of linking description, explanation and comparison, limited, indeed to these three functions, or might the resultant framework also provide methods of combination and re-combination of these same building blocks, that would amount to a manual on how to construct new cognitive networks and assemblies that take up the work of a kind of magic, even if they abandon the name?

What does the assemblage of figurate systems become when we start to mine it for modules and mental space configurations? What are the driving societal factors that might demand such an engagement? We have the problem, for example, of digital hypermediation in the context of economic systems which puts the reins of that hypermediation in the hands of a few: Corporations, governments, elite gate-keepers. If knowledge is stored digitally, externally, and in such a way that it can be efficiently filtered or altered, how can we guarantee the preservation of and democratized access to knowledge? Is a digital machine, an exo-memory palace, the final and logical conclusion of the memory arts, or is there another possibility? Is there a future in cognitive and conceptual design which, learning from the techniques of both secular and esoteric magicians, applies itself toward developing a full-spectrum approach to

societal aesthetics? What would be the repercussions? What are the ethics arising from such a possibility: of a fully coded, technologically facilitated theatre of socius? Is Frank Herbert's concept of a *mentat*, or human computer, a viable one? Can we conceive of an orally transmittable computer? One that marries hardware with software, by means of wetware? Would such a technique contribute to a "failsafe orality", a substantial body of offline noesis that might stave off or retard a full technological dependency? What, in other words, are the options and perils obtaining on a technologically reverse-engineered esotericism that can operate directly on the assemblage of figurate systems? By these questions, I am not trying to argue or champion a new insider discourse on magic, but I am trying to point out that we cannot simply assume that magic can be subjected unproblematically to "outsider" discourse. An instrument sensitive enough to disenchant magic thoroughly can easily become the same instrument through which re-enchantment effectualizes. There is an overdetermination in the very act of trying to overcome magic. We find ourselves, then, engaged in a new analytic/synthetic relationship with magic, one, which perhaps will need a whole new vocabulary. I am curious to see what it will eventually become: building-block by building-block, it will be interesting to see what novel and pragmatic framings of the real might emerge, and what lights might be shed upon "the common place", that we take for granted. Applied to the assemblage of figurate systems, coupled with the manipulation of sound and vision, coupled with a robust heuristic for the study, analysis, synthesis, and deployment of such, we can conceive of both utopic and dystopic out-comes from considering magic as the art of hidden causation. Even if neither extreme is fully realized, we can be certain that many

techniques and technologies will stem from our deconstructive engagement with magic.

Part III: THE WORK OF FORGING STORMS

He made a net to enclose Tiamat within, and had the four winds take hold that nothing might escape; the south wind, the north wind, the east wind and the west wind. The gift of his grandfather, Anu, he caused to draw nigh unto the borders of the net. He created the *imhullu*: The evil wind, the cyclone, the hurricane, the fourfold wind, the sevenfold wind, the whirlwind, the wind incomparable.

Enuma Elish (Heidel 1951, p 38)

Inside the Lake there is Fire:

this is the image of Radical Change.

In the same way, the noble man orders the calendar
and clarifies the seasons.

(The Book of Changes)

(Lynn 1994, p 445)

Glossary

Image of Time: The visual (or paravisual) output of a calendar or dating system that conditions how we mentally envision the order of our moments-days-weeks-etc... The aesthetic element of time-framing. A common calendar typically creates a “checkbox” image of time.

Axial-Additive Chronology: A chronological system that uses a base date, fixed at a point in the past as a reference for timekeeping. Any moment in time is n moments from the base date in a given calendar. Each new interval adds a segment to the linear axis of that chronological narrative. Most calendars are Axial-Additive.

Moment Focal Chronology: A chronological system that uses the present moment as its base date and refers to events in the past as n intervals ago, or in the future as n intervals to come. The idea was inspired by Ursula LeGuin’s “Gethen Calendar” in *The Left Hand of Darkness* (1982). The Archaeological convention of using “B.P.” before the present, is also an example.

Demiurge: A creator god, understood by Plato and by the Gnostics to have been tasked with the creation of the stable world. For Plato, the demiurge is an Architect of the world-system, and an ultimately beneficent being, while for the Gnostics (and later, for P.K. Dick), the demiurge is a mad tyrant, who, having emerged from the limitless, imposes limit and establishes the world-system as a prison.

Augustinian Pivot: The year 0, reconceived as marking the birth of our epochal image of time, overseen by the party of Augustus.

Chapter 1: Magical Calendrics and the Image of Time

Sending and receiving signals across and through a matrix of meanings, and so semi-directing time, is magic¹²⁷. It is now appropriate to follow up on the lead indicated in the Wilhelm-Baynes translation of the *I Ching*, in which Confucius is translated as having said “Arrangement of the calendar is suggested by *Tui* [Lake], which means a magician, a calendar maker” (1950, pp 637-8). This is not a trivial statement. At its limit, the enchantment of time and space forms into a gestalt: a totalizing, rhythmic music that punctuates and regulates meaning construction for a given social order. This gestalt is composed by means of calendrics: a very powerful and fundamental magic.

The first major institution that man invented in order to establish and maintain temporal regularity was the calendar. The calendar is primarily responsible for the creation of most of the temporally regular patterns through which nearly all societies, social institutions, and social groups manage to introduce some orderliness into their lives. They do that mainly by regulating the temporal location and the rate of recurrence of socially significant collective events. (Zerubavel 1981, p 31)

Magical systems often perform a similar, order-giving function. It is no surprise that calendars and magical systems, consequently, might intersect. Even in cases where

¹²⁷ As Sybille Krämer shows, in discussing Kittler’s work, time manipulation is a critical function of mediation:

What are media? Media are practices that use strategies of spatialization to enable one to manipulate the order of things that progress in time. Such means of time axis manipulation are only possible when the things that occupy a place in time and space are not only seen as singular events but as reproducible data. Such production sites of data are ‘discourse networks’. Discourse networks are media in the broader sense: they form networks of technological and institutional elements. (Krämer 2006, p 106)

Deep mediation, then, seems likely to have its fundamental site of production, its fundamental discourse network on the armature of the calendar itself, making calendrics the primary deep mediation, the world-giving matrix *par-excellence*.

there is no overt magical intention, there is still what we would consider a “hidden causal” mechanism which functions to allow calendars to support social order, effectively as a deep enchantment. Many of the systems we have already discussed have calendrical extensions, and calendrical counterparts, providing a symbolic matrix that may be used to subtend the patterns encoded into time.

This chapter engages with the hidden-causal nature of calendars, and interprets the calendrical act, that of designing and implementing a shared social chronology, as a key act of state magic: framing time in such a way that the institutions which support the frame acquire privileged access to the *socius*. Calendars are treated as privileged “zones”, within the figurate assemblage. They host other interpretive matrices, and regulate the basic rhythms of society, as well as its tacit narratives.

Consider that Llull’s *art* constitutes the creation of precisely such a matrix. There is evidence, for example that, were he to have wanted, the seven-hundred-twenty-nine permutations¹²⁸ of his ternary wheel could easily be assigned, two combinations per-day, to three-hundred-sixty-four days, with one figure left over for the three-hundred sixty-fifth. Although we know of no such specifically calendrical composition, we do know that his mystical treatise: *The Book of the Lover and the Beloved*, did contain three-hundred-sixty-five passages, no more, no less, and we can presume that a reader was meant to spend a full year contemplating a passage a day (Bonner 1985, pp 175-6). The *Tai Hsuan Ching*, meanwhile, is a very similar system in many ways. It has seven-hundred-twenty-nine combinations, as well, and WAS

¹²⁸ Acknowledging, that in the case of Llull, because he eliminated double, triple, and mirrored combinations, that the total implication of seven-twenty-nine figures is drastically reduced. Still, we must acknowledge that figure 4, his wheel, actually has that many configurations, in total. 9^3 .

formed into a calendar proposal by its author, Yang Hsiung (Colvin n.d.). These are just two examples of overlaps between abstract divination, or combinatorial mysticism and the mass ordering of time, and there are many more. The site of the institution of a calendar is a space in which the socius is magically imprinted on a deep level.

Virtually every aspect of a modern state-organized society is governed by the divisions and subdivisions, the *pulse*, of its calendar. This pulse is partially, but not totally, an index of natural time: the real, physical cyclicity of celestial and other phenomena. Calendar time entails dressing up those rhythms with a costume of myth, symbol, and culture in order to make them mnemonically meaningful. A mass social memory. A calendar is inherently a kind of private fabrication of the unthinkable vastness of time, which has been made into a public convention. The degree to which a calendar is distributed en-mass, then, is the degree to which it enchants the societal body.

Every chronological device or system, whether it be an hourglass, a calendar, a table of lunations, or a clock, constructs a frame by which we visualize time. We begin by seeking to track a naturally occurring cyclical phenomenon: a star, a planet, a moon, or an atom. In doing so, however, we embed artificial structural elements (such as weeks, hours and seconds) into the counts used to track the cycle. Where this relates to magic is that we come to take those elements as natural, and forget that they stem from human aesthetic choices.¹²⁹ We come to live in our framing of time, and

¹²⁹ “Examining this distinctively human rhythm [the seven day week] helps us shed more light on the fundamental, yet still rather murky difference between natural inevitability and social conventionality. Unveiling this difference, and thus eliminating the common confusion between the natural and the social temporal order helps illuminate the extent to which social conventions influence the way we

forget about temporality in its raw state. In other words, the structure of these designed elements becomes naturalized, and our everyday intuitions of time become subject to them, in a hybrid, artificial temporality that we take for granted as normal. They operate as hidden causes behind a seemingly natural experience of duration.

Calendars are the magical means by which we erect an overarching societal narrative. Irina Shilova in her PhD thesis, *Perfect Calendars in Chaotic Times*, writes:

Calendars penetrate all levels of life in a society, as well as the private life of every individual, in many ways governing their political, cultural and private actions. Although it may seem very sketchy, the calendar narrative provides a great number of practical implications in the form of rituals, often very elaborate. The calendrical grand narrative reveals itself to some extent through the means of time-counting which depends mostly on the predominant religion of the state. It is represented, for example, in the number of months in a year or days in a week, or the day of starting the year according to religious belief. The greater imposition of the calendrical grand narrative on the state population happens through the system of ritual days which reinforces the moral, social and political values that the state defines as a basis for sustaining normal existence. These special days construct the narrative which directs the daily life of citizens and becomes their primary instrument for understanding events, circumstances, human actions and the world in general. (Shilova 2010, p 2)

The pulse of days deemed “sacred” and days deemed “ordinary” has a profound effect on psychological and social rhythms, and goes a long way towards fashioning the image of time as both a frame, and as a lived reality.

An official calendar has the status of law, but initially any state calendar is the product of the individual endeavors of scientists, priests, or political rulers who measure universal time and appropriate it for the everyday life of society. Therefore, every particular state calendar contains, at some originating moment, a very private element of the individual(s), who believed that it was the perfect calendar for use in their society and who had enough power to impose this calendar over their people... (Shilova 2010, p 2)

normally live our lives. And this awareness of the conventionality of social reality may help us discover the potential flexibility that awaits those who venture beyond the wall of what appears to be an inevitable rigid order.” (Zerubavel 1985, p 141)

In effect, the calendar is a kind of *enchantment-of-the-cosmos*: an interfacing between the natural and the human, shaped by propagandistic, ritualistic, magical and aesthetic concerns. The calendar contains a hidden portraiture of its designer. The calendar mediates cosmic motion into human time, and in doing so constructs the corporate social body as an extension of the calendar's grounding aesthetic vision:

It also suggests an image of the calendar as a two-faced Janus whose rational, counting face looks at cosmic time, while its human, perceptive face looks at everyday, human existence. The human face of the calendar is a narrative, solely man's invention. (Shilova 2010, pp 2-3)

There is a tension between the desire for mediated symmetry and systemization, on the one hand, and the unmediated chaos of reality, on the other. We are torn between Marduk and Tiamat, Dionysus and Apollo, *peras* and *apeiron*: between an impulse to contract ourselves into our stabilizing temporal narratives, and an impulse to expand into the reality of cosmic time at the expense of our order-giving illusions.

If our account of time is purely realist, purely empirical, then it goes beyond us, unravels us, and yet if we try to *tame* time by implementing calendars, we distort reality and live (publicly) within a private narrative. We are in a double bind. Our image of time and our humanity are inseparable: we ARE narrative. We ARE illusion.

Consider the words of *computus* scholar, Arno Borst:

The internal clock of the human organism is not fully synchronized with the external rhythms of nature... Humans can contain and manipulate time within limits because they are the only creatures that actually perceive time. They remain so rooted in nature however, that they are unable to co-ordinate measures of time at will. They have to try to synchronize the rhythm of their social lives, already complex in themselves, with the natural cycles of the earth, the sun, the moon and the stars which, however, do not conform to one single system of measurement. We thus fail to acquire either clear concepts or round numbers that otherwise regulate our existence. Time can either be aligned with perceptible experiences, in which case it will not be consistent, or else incorporated into a logical system of thought, in which case it will not be accurate. (Borst 1993, p 5)

This tension between fitting time to the shape of our minds, and fitting our minds to the shape of time, is at the cusp of our self-understanding: the threshold of the wild and the tame, chaos and order. It is here, then, that humanized time receives an *image* from chronology. We constitute the “human” on the very threshold of the non-human, by means of the calendar. Zerubavel writes:

It is specifically as a form of classification that periodizing helps articulate distinct identities, and the way men and women respectively use career moves and births of children as autobiographical benchmarks, for example, certainly underscores the fundamentally different manner in which they normally organize their identities. Temporal discontinuity is a form of mental discontinuity, and the way we cut up the past is thus a manifestation of the way we cut up mental space in general. (Zerubavel 2003, p 85)

Chronology, in addition to operating quantitatively, is involved in far more qualitative pursuits, pursuits that sit on the intersection of memory, culture, mythology, imagination, and propaganda. If we follow Zerubavel’s account, we can see how the categorical architecture of the calendar forms the empty chassis of a kind of controlled differential flux: building differences into the interstices of a system of abstract “topological” identities:

As we classify things, thereby arranging them in seemingly distinct mental clusters, we normally allow the perceived similarity among the various elements constituting each cluster to outweigh any differences between them. As a result, we come to regard those elements as somewhat interchangeable variants of an essentially homogeneous mental entity. At the same time, in order to enhance our perception of different clusters as distinct from one another, we also tend to inflate the perceived mental distance between them. Like any form of classification, periodizing thus presupposes a pronouncedly nonmetrical *topological* approach that highlights relations between entities while basically ignoring their internal makeup. That entails a somewhat plastic experience of temporal distances that involves mnemonically compressing those *within* any given conventional “period” while inflating those *between* periods. As we can see, although, utterly irrelevant metrically, the difference between *intra-* and *inter-* is critical when approaching reality topologically. (Zerubavel 2003, pp 85-6)

Calendars perform an abstract enchantment because they insinuate categorical similitudes between “periods”, and then arrange the manner in which the periods are allowed to function as a mass-memory template. Calendars shape, establish and regulate time, *before* they measure it. They establish in this way, a tacit interface between cosmos, psyche, and socius: A calendar imposes a semiotic homeostasis on the social body that is intuited as a sense of the timeless. The moments may change and vary, but the frame itself is felt to be constant, even though it demonstrably is not. The image of time seduces us into sensing the presence of a timeless order. This image also furnishes a social frame for memory. A calendar is a mass memory palace, an enchanted social theatre of memory, myth, and power, and in its own right, a *demiurge*, an unmoved mover.

Free to choose, we can view time as a straight track, or as a circle, a spiral, or something altogether other: a crystal, a bubble, a woven ball.¹³⁰ All of these are images and only such. Time is motion and motion is time. Time moves in no direction but *timewise*. Inevitably, motion implies space, but what we think of as extended space, and what we think of as the progression of moments *through* that space, are not

¹³⁰ Serres writes: “Have you ever tended goal for your team, while an adversary hurries to take a clean, close shot? Relaxed, as if free, the body mimes the future participle, fully ready to unwind: toward the highest point, at ground level, or halfway up, in both directions, left and right; toward the centre of the solar plexus, a starry plateau launches its virtual branches in all directions at once, like a bouquet of axons. This is the state of vibrating sensitivity- wakeful, alert, watchful- a call to the animal who passes close by, lying in wait, spying, a sollicitation in every sense, from every direction for the whole admirable network of neurons. Run to the net, ready to volley, once again a future participle, the racket aims for all shots at once, as if the body, unbalanced from all sides, were knotting a ball of time, a sphere of directions, and were releasing a starfish from its thorax. At the centre of the star is hidden the third place, formerly called a soul, experienced by passing through a channel that is difficult to cross. The soul inhabits this pole of sensitivity, of virtual capacity, at the same time that it throws itself forward and holds back, that is, that it launches itself halfway, the length of the floating branches of the astral body that explores space, like a sun.” (Serres 1997, p 10)

distinct qualities, but rather are completely entangled. *Times* and *spaces*: they constitute a single presence before they become divided by the introduction of a “timeless” frame.

In light of how we have seen mental spaces arise from embodiment by a process of metaphor, time as we understand it *naturally* and *intuitively* is a direct register of our experience *of having a body*. Mediated time is an indirect register of the same embodiment:

Try to think about time without motion and space- without a landscape you move over and without objects or substances moving toward you or away from you. Try to think about time without thinking about whether it will *run out* or if you can *budget* it or are *wasting* it... We have found that we cannot think (much less talk) about time without those metaphors. That leads us to believe that we conceptualize time using those metaphors and that such a metaphoric conceptualization of time is constitutive, at least in significant part, of our concept of time. (Lakoff and Johnson 1980, p 166)

In order to *think* time (as opposed to just feeling it), we begin with the most basic experiences, and extend them by means of metaphor, into the abstract.

Forward/backwards, fast/slow, visible/obscure, origin/goal: the logic of embodied encounters finds itself repurposed toward modeling time as a kind of quasi-space, with a forward and a backward, with a fixed rate of motion, subject to a logic of progress, or operating according to a plan or pattern etc.... Such an image of time is highly artificial, and many steps removed from our actual, *in-situ* experience of change.

“What time is it?”; “What day is it?”; “What year is it?”. When answered in relation to mediated, calendrical time, these questions point to positions on an array, a grid, a matrix. This is the *image* of time. It is *not* neutral, but loaded with aesthetic and symbolic elements. However time is framed, the features that that frame imports will feel as real to the experiencer as the raw flux itself. Maybe more so. They become

hidden causal agents, which reify an image of time that happens also to be a portrait of the state, and a defacto metaphysics. This is a magical illusion.

I contend that true time is this: the full range and totality of all motions whatsoever. Real time happens “in real time.” It is a tangle of cyclicalities, a cosmos, a seething vortex.¹³¹ We know this, we can see this. There is nothing of our metaphors in this reality. We must recognize that it transcends us in its immanence. Our culture-specific, calendrical temporalities are like windows opening onto a vast and dynamic field of play. A plane of immanence. All human temporalities are highly specialized, highly contingent approximations of absolutely miniscule regions of this *Pan*. Calendars are like *slices*, cross sections of time.

The creation of a calendar is an attempt to bring the solar system’s movements into the social and political life of human beings, and at the same time, dress it up in costumes. An interface between cosmos, psyche, and socius. The calendar and its family of instruments *simulate* the swerving, polydirectional seething of eternity. They truncate it and make it habitable. Notions of temporal linearity and progress-along-a-line are illusions created by the succession of the abstract elements used to count within the framework of these approximations. The calendar is a fake, a forgery, an imitation of the cosmos that has gone far enough to satisfy our need for regularity but has gone no further than the *façade* of cyclicity. We live in the eye of a counterfeit cyclone, and our lives are buffeted about by equally counterfeit winds. To forge a storm is to capture the cosmos’ image, to regulate it, and to offer it back to the public sphere as an account of time. It is a supremely powerful mediation, for in the

¹³¹ Even more than this, really: a web of vortices....

simulated round, a narrative is initiated, and pushed along an imaginary linear axis, accruing days as if they were bricks, stacked atop the other. We begin to fuse our ever-returning present with a construct essentially identical to the “number line,” (Between B.C. and A.D) and as if wielding an enormous ruler, we measure the depths of eternity, and insinuate direction where there is none. We do this because we have to: social cohesion, order, trust, sanity; they depend on this guarantee; that the storm is tamed, that Tiamat is slain. Common temporal narrative is the great, binding magic of the state.

Is it conceivable that the narrative of time could become disrupted? What kinds of factors would be involved, if this were so? There are many signs that calendrical narratives cannot and will not stay workable indefinitely, and that, conservative though they may be, there exists the potential for radical metamorphoses on the level of the calendrical matrix. Over the course of the last two millennia, even, ‘our’ calendar has been considerably altered. From its inception out of the pre-Julian systems in Rome, through the formative period in the first few centuries following the reign of Augustus, to the Gregorian reform, there have been numerous additions, subtractions, and revisions. Examples include the ancient ‘Numa’ reforms, The Julian reform, Augustus’ leap year recalibrations, the abolishment of the epoch system, the institution of the AD/BC divide, the integration of the 7-day week, the Gregorian reform, the introduction of the clock, the development of minutes and seconds, and the institution of atomic time, not to mention, the parallel development of the Julian Day count. The road to our current Western vision of time has been rough, and politically fraught. In the last three centuries, as well, there have been at least two major attempts at a state-level reform of the calendar.

The first of these occurred in France during the Revolution, where the infamous Republican Calendar was instituted nationwide for twelve years:

December 201, 1792, the new assembly ruling France, the National Convention, authorized the committee of Public Instruction to consider a general reform of the existing calendar. The committee essentially adopted a proposal originally made four years earlier by Pierre Sylvain Marechal, and proceeded to recommend the establishment of a new calendar based on twelve new 30-day months, each of which would be divided into precisely three 10-day weekly cycles called *decades* (Zerubavel 1985, p 28).

Alongside this initiative, there were other similar attempts at reconfiguring the deep mediation of time, including a metric clock, but these were less visible and prominent than the Republican calendar itself.

The second major attempt at a revolutionary, state-level, re-coding of time occurred during the Soviet period, when an attempt was made to institute a five-day staggered work week, that separated the social body into five (color coded) groups, each beginning and ending work on different days.

In May 1929, at the Fifth Congress of the Soviets of the Union, a major reform of the existing workweek, which would involve the introduction of a so-called “uninterrupted production week,” was proposed by delegate Larin... on August 26th, 1929, the Council of People’s Commissaries of the Soviet Union officially announced that, starting from October 1, a major transition of all productive enterprises as well as offices from the traditional interrupted workweek, to a continuous production week would be put into effect. (Zerubavel 1985, p 35)

Both of these attempts failed, and the reason appears to boil down to the same factor in both cases: the seven-day week. According to Zerubavel, both of these initiatives sought to eliminate Sunday (1985, p 36), principally because, as the holy day (in Christianity), it established a theistic punctuation in the societal image of time. He writes:

The complete failure of the eleven-year Soviet calendrical experiment, just like that of its French predecessor 140 years earlier, attests to the tremendous resilience of tradition in general and of religion in particular. In both France and the Soviet Union, some desperate attempts were made by two of the most ruthless totalitarian regimes in history to completely destroy the Judeo-Christian seven-day week. In both societies, to this day, it still remains the dominant “beat” of social life. (Zerubavel 1985, p 43)

Folk adherence to the seven-day week was strong enough such that people were not keen to give it up. Despite being made illegal in France, the week persisted, and despite the theoretical efficiency of the Soviet system, the actual rhythm of social life, bound as it was into a seven-day cycle, chafed with the new order so as to make it practically unworkable (Zerubavel 1985, p 38). When, during the inter-war period, there was an attempt by the League of Nations to propose a new calendar for global relations, this too was resisted, and eventually scuttled by the “Sabbatarian” lobbies, composed of citizens who view the seven-day week as inviolably sacred (Zerubavel 1985, p 81).

Globalized culture, of course brings many diverse calendrical systems into contact with one another. These include the Chinese lunar calendar, various Indian cultural calendars, and the famous polycalendrical Mayan systems; the Haab, the Tzolkin, and others. This contact between these diverse timeframes is consequential and may portend eventual developments of hybridity and metamorphosis that we have a hard time seeing at present, habituated as we are to the illusion of time’s basic, continuous, simplicity. To this it is necessary to consider the experience of individuals who, by nature of their cultural positioning (as immigrants, as colonized, as intersectional), are forced to negotiate more than one image of time. Are these images in competition, or can they become complementary? One interesting example exists in the former British colony, and now Special Administrative Region of China; Hong

Kong. Contrasts between the time-frames of the colonial infrastructure and those of the extant local culture create a world with two concurrent images of time; the Chinese Lunar Calendar, and the Gregorian Civic Calendar. Both are used in tandem, without dissonance. A few interesting observations can be made, however. For one thing, Hong Kong's "work ethic" is typically viewed as being extremely rigorous: six-day, sixty-hour working rhythms are viewed as normal. However, this intensity is mitigated by a large number of official holidays: from *both* calendars. This means that around December, a series of long breaks begins with relatively short periods in between, in a rhythm approximating: two weeks off, three weeks on, two weeks off, three weeks on, which continues until March, and includes substantial breaks for Western New Year's & Christmas, Chinese New Year's, and Easter. This accommodation of both calendars is unusual, and probably unique to Hong Kong, since in China proper, Western holidays are not celebrated, and in North America (or other places where there may be a large Chinese diaspora), the Chinese holidays are not enforced as civic holidays. The author, who has observed this phenomenon personally, would also like to note a curious linguistic feature that might give clues as to how the two images of time might be commonly parsed. In the Western mindset, it is common to think of "next week" as in front of us, and "last week" as behind us... however, in Cantonese, the words for "next," and "last," in this context are literally "down", and "up", respectively¹³². In other words, the time-flow from week to week, is coded as a movement from up, to down. Where the two intersections meet, then,

¹³² "Seung sing kei" meaning "last week" and "hah sing kei," meaning next week.

may be at a perpendicular intersection between two great temporal circles, which have been made to work in tandem in the culture and political life of this city.

If we attempt to treat learning a calendar in a similar manner to learning a language, we will find that other timeframes might provide alternative perspectives on time's behavior and structure than the currently dominant Gregorian does. The attempt to discover new perspectives in this way, and implement them, in the invention or hybridization of new calendars, "conlangs"¹³³, appeals to a revolutionary (and often utopian) mindset. The Mayan polycalendrical systems in particular,¹³⁴ with their enormous cycles of time, and their intricate sub-systems became a key component of the millennial movements which focused on the idea of an apocalypse circa 2012.¹³⁵ Different factions differed considerably in terms of what was expected. Some expected a world-destruction event, others expected a technological or a spiritual "singularity", and others looked towards it as a kind of galvanization for societal transformation. There were openly magical and esoteric elements of these movements as well.

In *Towards A Feminist Phenomenology of Time*, Christina Schües writes:

The rhythm of time concerns the appropriateness of the time structure of our activities. Who is in control of the rhythm of time, and why?... Understanding the forces and the different structures of time lays the ground for understanding the relations between human beings, between men and women, between different groups and styles of living. To understand the sense in which

¹³³ Just as invented languages, such as Esperanto or Interlingua, are known as "conlangs."

¹³⁴ For a fuller treatment of the Mayan systems, which involved interlocking calendars of varying cyclical lengths, and which tracked the movements of all the visible periodic luminaries (the Sun and Moon, as well as the planets Venus, Mars, Jupiter and Saturn), see Anthony Aveni's *Empires of Time*. (Aveni 2002, pp 167-223)

¹³⁵ For more on this see Daniel Pinchbeck's *2012: the Return of Quetzalcoatl*, which involves accounts of the different factions and factors involved in this/these movements. (Pinchbeck 2006)

time can be a powerful instrument to rule others and their activities means to take the first step toward active participation in the constitution of human relations and social norms. (Schües 2011)

Clearly, these questions signal a recognition of the architecture of power as it pertains to narrative and rhythm, and I expect the ongoing conversation to eventually expand considerably, with considerable attention paid to the revolutionary potential of reverse engineered, re-designed, re-thought time-images.

Science fiction has also proven to be a terrain in which the function of the calendar is examined. Ursula LeGuin composed a calendar for the citizens of the planet “Winter”, for her novel *The Left Hand of Darkness* in which the current year was always “year one”. We will discuss this in more detail in Chapter 7 of this Part, but the basic concept is to construct an image of time designed to privilege the present:

In Karhide/Orgoreyn years are not numbered consecutively from a base year forward to the present; the base year is the current year. Every New Year’s Day (Getheny Thern), the year just past becomes the year “one ago,” and every past date is increased by one. The future is similarly counted, next year being the year “one to come,” until it in turn becomes the Year One. (LeGuin pp 327-328)

David Foster Wallace, conceives of an interesting, bleak, and yet humorous calendrical reform in which Marketing takes over the measure of time altogether. In *Infinite Jest*, the years are no longer numbered in a linear sequence, but rather, they are named after products and companies: “The Year of Glad”; “The Year of the Depends Adult Undergarment”; “The Year of the Whopper”. (Wallace 1996). In light of Zerubavel’s observation that temporal discontinuity and cognitive discontinuity go hand in hand, it would be hard to imagine a more disorienting set of coordinates than this “subsidized time”: years passing by with no obvious pattern except for the sponsorship of various multinationals. Philip K. Dick’s later work betrays an

obsession with time, which we might read as a kind of visionary interpretation, or ‘detection’ of the impact of “time image” on the life of the world... in his *Exegesis*, he became increasingly obsessed with the idea that Rome as an empire continues to exist in the form of a kind of a temporal prison, a proximal region of the Now, whose function it is to keep captives unaware of the fullness of time. It seems reasonable to suppose that Dick’s “Black Iron Prison”, stands in for the Roman time signature, whose image governs the global capitalist economy, and which seems to function as an amalgam of structures, mythical and mental, which resist the irruption of time. We will look at this more closely in Chapter 6. Dick writes:

We seem to be confined within a metal prison, but something vital has secretly penetrated the enclosing ring around us and fires assistance and advice to us in the form of video and audio signals. Neither the prison ring is visible to us nor the signal system which fires nor the entity which has penetrated through us. The signals emerge as if from cores drilled through the metal: they’re in color. Thus, our prison was breached a long time ago. Help is here, but we still remain here within the prison; we aren’t yet free. I take it that the camouflaged invisibility of the signals is to keep the creator of the prison from knowing that help is here for us. The drilled out “tubes” through the prison wall to us can’t be discerned; they blend perfectly, as if alive (the signals too seem alive). It is like the penetrating roots of a plant (!!!) which over the centuries have grown through rock or concrete. These root tips come through and into here, the enclosed open space where we’re kept, and then they burst into colored changing light patterns which register on us subliminally. (Dick 2011, p 180)

The passage speaks of a tortured intuition of the manner in which time-framings constrain more oceanic visions of temporality.

The framing of time changes, and with it social, psychological, and power structures. From the point of view of a “long now”, consider what shapes calendars might take in the future, as we begin to understand more and more about celestial systems, as our quantitative measuring techniques become more advanced, and as the

cross pollination of our societies progress¹³⁶. I predict that calendrics will take on a new importance in the coming centuries. New images of time, hybrid images of time, polytemporalities, novel interfaces. Crystalline, cyclical, layered, moment-focal. The array of extant strategies for the mediation of time is vast, and the potential is revolutionary.

Let us review the work so far. We have introduced two major facets of magic as the art of hidden causation: the spectacular and the metaphysical. While, loosely speaking, the first part of this thesis has concentrated on the former, the second has dealt with the latter. There is some overlap. These two discussions meet when it is understood that they are the principal elements by which we make of time, and of history, a narrative supported by deep signaling.

¹³⁶ Recall the discussion of Hong Kong, above. This highly significant colonial experiment, has brought us not only a calendrical double-world, but also many linguistic tropes that many English speakers take for granted, such as “long time no see”, and “ketchup.” Cantonese Culture and Western Culture became subtly entwined as a consequence of this meeting of worlds. We can expect more linguistic, temporal, and cultural cross pollinations in the centuries to come, and we should begin, I believe, to anticipate how calendars might find themselves accommodated, re-configured, or disrupted.

Chapter 2: Chronos' Ruler

A calendar marks the life of a civilization; its formulation is an act of genesis, its loss a death, and its revision a form of succession. Many calendars index a point or date of origin, a base year. This is a point from which the culture's image of time is *extruded* as an axis along which the social narrative is conceived as progressing.

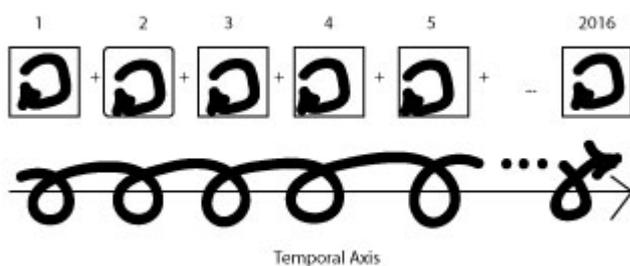


Figure 24: Segments of Chronos's Ruler

Every time the Earth circles the Sun, a new segment is added to the line. It is an abstract line, and it proceeds to an abstract infinity. Time within empire is an infinite series of annual additions to this originary moment, an eternal return of the same. This is an “Axial-Additive” chronology.

Suppose that Axial-additive calendars move along their own *exclusive* tracks. We can view them as separate, non-convergent, parallel systems. We can also view them as closed narrative architectures, or incommensurate enchantments. Internal to themselves, these calendars are compound: assemblages of multiple sub-systems, micro-images of time measuring at different scales, moving to different rhythms. Some are like interlocked cogs, others are more extraneous. Some of these sub-systems are shared in common with each other. But every calendrical system is a narratively independent *cluster* of chronometers, some held in common with other

systems, some that are unique. Weeks, hours, seconds, months. Some of the elements are exchangeable, others are not.

Calendrical systems change over time, and often the changes that are made are adopted into the cultural narrative *retroactively*. Through this backdating, the illusion of temporal homogeneity is maintained. Within a generation or so the disruption vanishes, and it appears that “it has always been thus.” The new frame comes to the fore as if it had *always* been there. The order of time appears to be the natural order of the world. It is magic. The retroactive projection of our current state of temporal organization, onto a past in which it did not exist, is a magic whereby the present order subsumes all past orders, making them serve it, making them prop it up. It makes the violence of its own implementation invisible.

Within the axial-additive structure, we transmit the coordinates of time by giving a series of numbers that pinpoint which year, which month, which day, which hour, and which second has passed since the “anchor point.” That point, and the groupings and divisions of the months, days, weeks, years, decades, centuries, and millennia are all cut along lines that establish a rhythm. Such lines also, in having names, ideas, and symbols associated to them, interfaced with the human social psyche. They are as much a part of the psyche as tides are part of the ocean. In the axial-additive system, each *annual* cycle is logged in the agglomerating records as an *addition* to that gradually increasing sum, the *year*, which increases the farther away it gets from its base date. Only the annual cycle proceeds in this way. All the subordinate cycles, such as weeks, hours, months, when they reach their limit, reset.

They are all a loop. Only the year¹³⁷ is conceived of as progressing indefinitely as if along a number line.

¹³⁷ The exception here is the remarkable Julian Day count, which treats the day itself in an axial-additive fashion.

Chapter 3: Bridges

Supreme power over time-mediation is, and has always been, the deepest magic available to the state. Consider that the word “calendar,” and the word “pontifex” (a title of the Pope), have an entangled history. Robert Hannah writes:

Macrobius explicitly derives the word *kalendae* from the Greek verb *kalo* (I call)... originally a minor priestly official was delegated the task of watching for the first sign of the new moon and then reporting its appearance to the high priest. A sacrifice would then be offered and another priest would summon the people and announce the number of days that remained between the Kalends and the Nones, ‘and in fact he would proclaim the fifth day with the word *kalo* spoken five times, and the seventh day with the word repeated seven times’. The first of the days thus ‘called’ was named *kalendae* after *kalo*... the people invested with the authority to deal with the calendar were the *pontifices*, a college of priests. (Hannah 2005, pp 100-101)

Early calendars derived from empirical observations of the moon, the sun, and the stars. They required the maintenance of these observer-priests. The duty of the *pontifices* was to ensure that human time was accurately synched with heavenly time. When the calendar began to slip from accuracy due to the incommensurability of the heavenly bodies’ orbital or synodic periods, these caretakers would intercalate months or days in order to reset the calendar:

At issue for societies which run both lunar and seasonal/solar systems of reckoning time is how to make equal the fundamentally incommensurable periods of the lunar and solar years. To put the problem in modern terms, since a solar year comprises 365.24219 days, while one lunar month averages 29.53059 days, it is impossible to have whole number of lunar months in a single solar year: a solar year consists of more than 12 but less than 13 lunar months. What societies discovered early on, however, is that it is possible to assign a whole number of lunar months to a certain number of solar years and so to attain an approximate equality between the two periods. In these various lunisolar systems, most years will require only 12 lunar months, but an occasional one will need to have a 13th added... (Hannah 2005, p 30)

The methods used to ensure that the heavenly cycles and the earthly cycles were synchronized varied considerably across different periods. There were lunisolar cycles that might run as long as eighty-four years, or as short as eight, eleven, or nineteen, for

example. These systems were mostly concerned with making sure that over the long run, the cycles of the Sun and the Moon stayed regular; that the seasons remained in synch with the months, and that the solstices and equinoxes happened more or less when they were expected. Lunar cycles were batched in terms of a quantity of solar years, such that the time-keepers could compensate for the irregularity. The famous Metonic cycle¹³⁸, of nineteen earth years, included two-hundred-and-thirty-five complete lunations, and caused the calendar to slip by only a few hours.

In what we now think of as the first century B.C.¹³⁹, Julius Caesar and his adopted son Octavian (who took the name Augustus) implemented a new, automatically self-adjusting calendrical system that was, for the most part Solar.¹⁴⁰ This calendar was inspired by the Egyptian calendar. Because the *pontifices* were focused on lunar cycles, their role in mediating and regulating time was undercut by Caesar's maneuver. It made them, at least on *one* level, obsolete. The Lunar aspect of time was displaced and sublimated into the Solar reckoning. Eventually, in the context of the early Christian church, the systems used to keep the moon in line with the seasons came to be called *computus*, a word meaning "calculation."¹⁴¹ They were

¹³⁸ First discovered in Greece, in antiquity, but widespread since that time as a means of tracking lunar cycles.

¹³⁹ Though at the time would have been framed as circa 750-800 AUC (*ab urbe condita*: "from the founding of the city.")

¹⁴⁰ The lunar aspects, were however retained, and became the means by which the *computus* of the middle ages was operated, in order to reckon the date of Easter. This innovation also drew from the Egyptians, whose calendar was Solar, and incorporated the principle of the leap-day, more so than the Greeks, whose calendars were largely Lunar. (Hannah 2005, p 113)

¹⁴¹ "This word [computus] did not begin to exert similar fascination upon pagan Romans until late antiquity, when their political control no longer kept the world in check, and when their time was no longer accurately designated by the regnal years of consuls or emperors. They soon acquired the verb *computare*, meaning 'to reckon up' to count on one's fingers, recalling the fact that Roman numerals were modelled on the fingers of human hands. *Computare* accompanied the word *numerare*, meaning

practiced by *computists*, who had committed these cycles of time to memory, and whose principal purpose was to calculate the date of Easter, the vestigial calendar of the moon, as it continued to subsist within the now Solar time of Imperial Rome.

The Julian calendar was implemented in “46 B.C.” by Julius Caesar, in his capacity as *Pontifex Maximus*. It used fixed days for the months, and a leap year system that inserted an extra day every four years. Time was radically simplified, and, at the same time, automated. Power was concentrated into a singular device and taken out of the hands of potential intervention by the *pontifices*. The corruption of these priests at the time of Caesar destabilized time.

The concentration of power over time served a pressing need. The calendar as administered by the priests could no longer guarantee continuity, eternity. There was no longer a sense that the narrative was safe. The new calendar was a solution to this deep anxiety. In a sense, salvation was offered by the implementation of a chronology that would operate automatically, making the world stable. The office of *Pontifex Maximus* became the sole point of leverage over time. This profound move was a salvific act, in which Rome became an enduring, Sun-centered empire. Julius’ work, however, merely set the stage. It was his adopted “son” Octavian who had the last word in establishing the image of time.

‘allocate, count’. Later, a term for using counting beads was added, *calcularre* (‘to count with numerals’). The noun *numeration* remained confined to the concept of ‘payment in cash’. *Computatio* and subsequently *calculation*, on the other hand, occupied a wide semantic field, from mathematical ‘addition’ and economic ‘estimation’ to social ‘assessment’ and moral ‘evaluation. Both terms grew to be favoured by Roman lawyers as if tailor-made for a balanced order of communal living. The word *computus*, formed in an analogous way to *numerus*, may have made its first appearance in the third century AD, but it remained superfluous for as long as it meant the same as computation. It was not until the fourth century that it began to denote something different, and then gained wide currency. (Borst 1993, p 19)

In “12 B.C.,” Augustus assumed the office of *Pontifex Maximus* (Syme 1939, p 469). The title means, in essence, “greatest bridge-builder.” It grants the authority to legislate and oversee the calendar. To this day, the title is still borne by the Pope. The Pope sanctions the image of time, consolidates it, and sacralizes it. If the calendar is a simulation of the heavens meant to be played out in the social reality of the earth, then it is through the ancient Papal monopoly on time that the state-time is divinized. The Pope IS a bridge. Augustus became both *Pontifex Maximus*, AND Emperor.

Chapter 4: Fiat

Upon what, truly, is our calendar anchored? What are we counting? The best answer is the simplest one. *We are counting the age of the calendar itself.* The calendar counts itself.

When Julius Caesar reformed the calendar in what was to later become “46 B.C.” the operation was incomplete. For the first several decades, the *pontifices* mistakenly intercalated every *three* years, rather than every four. As such the calendar was already three days ahead by 9 B.C.:

Caesar was assassinated in 44 BC, too soon after his reform to ensure that the instructions for intercalating the leap year were correctly followed. And in fact, as several authors inform us, the priests initially inserted the extra day by mistake every three years. This continued for 36 years, and therefore down to 9 BC, by which time 12 leap days had been added instead of the requisite nine. Put schematically, with 0 standing for an ordinary year of 365 days, and I for an intercalary, or leap, year of 366 days, the sequence of 36 years would look like this (starting from 44 BC): OOI OOI. This gives 12 leap years, with three too many leap days in comparison with the correct system, which would run thus over the same period of time: OOOI OOOI OOOI OOOI OOOI OOOI OOOI OOOI OOOI. Inserting a leap day has the effect of slowing a calendar down. In this case, it means that by the time the mistake was recognized after 36 years, the calendar was running three days behind the solar year. (Hannah 2005, p 118)

At this time, Augustus corrected the error by suspending three consecutive leap day intercalations over a sixteen-year period.¹⁴² It is the very heart of this period which we now recognize symbolically as the birth of an epoch: “A.D.1,” the second of three suspended leap years. This recalibration was launched with characteristically grandiose displays of magisterial power over time. For example, we learn from Arno Borst that:

Octavian (Augustus) surpassed his fellow citizens by making the Caesarian

¹⁴² Such that that there were *no* leap days intercalated between what we call 9 B.C. and 10 A.D. The leap days were omitted for 4 B.C., 1 A.D., and 5 A.D.

tradition sacred. About 10 BC, following the magnificent secular celebration of 17 BC held to mark the dawn of a new age, he erected an Egyptian obelisk on the Campus Martius in Rome to commemorate his recent victory against Egypt and his coming Empire of Peace. Dedicated to the sun God and the auspicious birth of Octavian, this huge needle of stone formed the gnomon of an enormous sundial, with a Greek line-grid on the floor of the square showing the length of the hours, days and months, together with the signs of the zodiac. On the ground next to this celestial calendar there would have probably been a secular calendar, perhaps with Latin characters: this was Caesar's solar calendar. *No one entering the Campus Martius could fail to see that the Caesars united heaven and earth, the Orient and the Western World, and the origin and evolution of time and History, or that they marked the beginning of a universal time.* (Borst 1993, p 17. My italics.)

I would like to entertain the hypothesis that this magnificent, ceremonial monument was both a shrine to the Caesars, and the opening movement of a twelve-year magical *fiat*, or act, whereby Augustus placed his own seal upon time. Hannah, referring specifically to Augustus' move to drop the three leap days, writes: "...it may not be coincidence that in the years 10/9 BC Augustus erected in the Campus Martius in Rome a huge 'sundial' (*Horologium*), focused on an Egyptian obelisk as its gnomon" (Hannah 2005, p 120). The erection of an Egyptian obelisk seems a fitting magical prelude to a unique and pivotal period in the history of the calendar, which has largely been forgotten.

This period marks a supreme act of time-consolidation: the final touch needed to ensure the perpetuity of Caesar's legacy, its *capstone*. Through this exercise of power, Augustus, acting (self-appointedly) as *Pontifex Maximus*, completed the installation of Caesarian time. As his propagandist, Virgil, wrote:

Here is the man whose coming you so often hear prophesied, here he is, Augustus Caesar, son of a god, the man who will bring back the golden years to the fields of Latium once ruled over by Saturn, and extend Rome's empire beyond the Indians and the Garamantes to a land beyond the stars, beyond the yearly path of the sun, where Atlas holds on his shoulder the sky all studded with burning stars and turns it on its axis. Aen. 6.791-805 (Grebe 2004, p 52)

Augustus' calendar reforms were part and parcel of an auto-deific agenda with the

specific purpose of ushering in a “new age.” He was successful beyond measure in this act of state magic. His mark on time extends further. Augustus’s party sought to establish New Year’s day on the Emperor’s birthday:

... the Roman governor Paulus wanted the community to accept Augustus’ birthday as an epoch, a date from which other events, even life itself, may be measured. He had expressed this idea a couple of times in the letter he sent to the Greek cities with his proposal: ‘We could justly conceive the birthday of the most divine Caesar to be equal to the beginning of all things... Therefore, one could justly conceive this have been the beginning of life and existence for oneself, which is a limit and end to forgetting that one has been begotten.’ (Hannah 2005, p 147)

While this New Year’s proposal was not adopted, the date that *did* eventually become New Year’s day (January 1st) was *also* related to Augustus: it was the first day of his and the above cited Paulus’ consulship, in the *same* pivotal year of his calendrical *fiat* (A.D. 1). Augustus’ apotheosis and the contemporary *epoch* are identical. Christianity may be seen as a kind of “purified” Augustus cult. Hannah explains the soteriological dimension:

For the notion is Soteriological: it expresses the belief that through Augustus’ very birth the people of Asia have been saved from the sense of hopelessness that the actual living of life generates... Soteriology, of course, lies at the heart of Christianity, and not surprisingly, as the Julian calendar becomes increasingly Christianized in the early medieval period, we can trace religious sentiments similar to those of the liberated or otherwise grateful cities the eastern Mediterranean [to whom the letter was addressed]. (2005, p 147)

The calendar year is, in effect a continuous celebration of Augustus’ rise to power, even as it purports to celebrate the Nativity.

Chapter 5: The Crease

Our images of time are *creased*. The AD/BC divide is not arbitrary, despite being retroactive. It identifies a *real* boundary between ages, or epochs, as occasioned by the introduction of a game-changing technology: the Julian Calendar. The calendar left “tracks” in the subsequent measure of time which made its establishment *in general*, and the “reset” period following the erection of the Horologium *in particular*, into a point of epochal Genesis.

A sixth-century monk and *computist*, Dionysius Exiguus, introduced the cumulative linear count of time as we currently understand it, using the Easter tables of the *computus* to determine what he called the “first year of the Incarnation.” Exiguus and his successor Bede were especially interested in a five-hundred-and-thirty-two year cycle inherited from Victorius of Aquitaine (Hannah 2005, p 153), in which the slippages of the moon and the sun were compensated for, but which also accounted for *a complete cycle of seven day weeks through the calendar*. When he backdated the Christian narrative to 1 AD, the completion of the first of these *computus* cycles was still seven years in his future.¹⁴³

¹⁴³ “Dionysius not only calculated the Easter Sundays for five nineteen-year lunar cycles in advance, from 532 to 626; using other rules of thumb he also related the main Christian feast back to Christ’s birth 525 years before, to the oriental lunar cycle with its indicators and the Roman solar year with its leap-days. Ancient knowledge of long spans of time was in this way conveniently presented to the Western World, but it also rendered further inquiry unnecessary.” (Borst 1993, p 25) Dionysius must have been in a uniquely apocalyptic mind state. Firstly, he was integrating the seven-day week with the Julian calendar (since that calendar did not originally employ the week), and furthermore, he was writing at the end of an age, given to him by his *computus*, and sanctifying it for Christ, by clearing it of the heterogeneous jumble of the Pagan emperors’ epoch. By preparing these tables, Exiguus was building a bridge into the second great Christian cycle, by making the first crystal clear, emptying it out retroactively.

Prior to Exiguus' work, despite widespread use of the Julian Calendar, the chronological landscape was far more heterogeneous, with years reckoned from such markers as key consulships, and epochs identified by the names of their respective monarchs: "The old Roman systems of dating via the foundation epoch (*a.u.c.*; 'ad urbs condita') and the annual consulship as a dating mechanism continues until the sixth century AD, when it dies out" (Hannah 2005, p 152). Exiguus was effective in erasing this heterogeneity retroactively, and creating a homogenous chronology backdated to the anchor date, which for him was associated with the nativity. The date that he calculated for this was five-hundred-and-twenty-five years in his own past:

In his new table, the last year of Cyril's table was followed by the 532nd year 'of the Incarnation' of Christ (PL 69495). The shift of Epoch is theologically similar to that proposed much earlier around 9 BC by the proconsul Paullus for the Greek communities in the province of Asia, when he recommended that the year, even life itself, start with the birthday of Augustus. (Hannah 2005, p 155).

There was already an established connection between this most important year for the Emperor cult *and* the nativity. We know this this from a consular list given in the *Chronicle of 354*,¹⁴⁴ which:

... is punctuated on a few occasions by brief historical notes. In the Republican period these are limited to notices of the election or omission of dictators, and these remain the only secular references in the whole list. Under the Empire, on the other hand, the notes shift focus to events concerning the Christian Church, including the birth and passion of Jesus Christ.... So, for the years 754... *a.u.c.* (i.e. AD...) we have the [entry]:

¹⁴⁴ So called because it was received as a gift by a man named Valentius in that year: "In A.D. 354 a certain Valentinus was presented a gift in the form of a large codex, or book. The work is known as the chronicle (or chronographer) of 354, but also as the Calendar of Filocalus, after the name of its calligrapher, Furius Dionysius Filocalus, who may have also been responsible for the illustrations which decorated parts of the work." (Hannah 2005, p 139)

‘754 Caesare et Paulo Sat. xiii; Hoc cons. Dominus Iesus Christus
natus; est viii Kal. Ian. D. Ven luna xv’

In 754 *a.u.c.* we are told that Caesar (i.e. Augustus) and Paulus (ie. Aemilius Paullus) were the consuls, that 1 January fell on a Saturday, and that the moon was 13 days old on that day. (Hannah 2005, p 151)

If the Victorian tables that Dionysius translated were the source of the starting date for his calculation (seven years in his future), then this implies that the five-hundred-and-thirty-two year “perfect” cycle was *already anchored on*, or close to the date of, our *fiat*, and that Dionysius simply cleared a path backwards to it, as it were.¹⁴⁵ Dionysius appears to have “discovered,” by means of his *computus*, the effective age of the calendar itself.

Turning the clock back, as it were, 532 years from the start of his new Easter Cycle took Dionysius to the other significant event noted in the consular list in the Chronicle of 354, namely the traditionally accepted date for the Birth of Christ, 25 December in the year preceding the consulship of Augustus Caesar and Aemilius Paullus. (Hannah 2005, p 155)

December 25th was believed mistakenly to be the winter Solstice, and so “tradition,” in this hypothetical account, may have assigned the Nativity to the winter Solstice preceding the consulship of Augustus, as a kind of basic memorial landmark. If this is the case, then we might have cause to suspect other entanglements between the Augustinian and Christian mythos.

¹⁴⁵ By means of *computus*, applied within the Julian system, Exiguus may have discovered that the *computus* naturally and accurately enables us to pinpoint the moment when that system “came online” as it were, by tracing the intermeshing of its various sub-cycles, back to the first point at which the system truly became “hands off”, and automatic. Just as the final calibrations of the Julian reform were completed by Octavian, we find the lines in time, when traced backwards, converging on the key moment when these calibrations were set: what we now call A.D. 1. As a hypothesis, this still needs to be tested, and I will propose this as a worthwhile future experiment.

Bede, who is responsible for giving us the designation “*Anno Domini*,” assigned New Year’s day to January 1st, the date of the commencement of the consulship:

We still live with Dionysius’ epoch, but under different names. Dionysius’ year ‘of the Incarnation’ is used in the Eighth century by Bede, who abbreviates it to *anno domini* (‘in the year of the Lord’), which we still use (*Ecclesiastical History* 5.24)... Bede keeps his year aligned with the Julian and begins it on 1 January. (Hannah 2005, p 156)

In this gesture, the equivalency between the epochs of Christ and Caesar is decisively cemented. Augustus, whose magical agency, it appears may have been later transferred to the figure of the “divine son”, Jesus. I suspect that tradition had married Augustus and Christ *long* before Exiguus, but he and Bede appear to have consummated that marriage, chronographically. Exiguus’ *computus* left a crease in our chronology that marked Augustus’ pivotal *fiat*. Bede pressed down on that crease, securing the AD/BC divide permanently into our image of time, making it the formal anchor-point of our chronological axis.

Chapter 6: Black Iron Prison

Fast forward to the dawn of the hyper-mediated world. In the last decades of his life, the science fiction novelist Phillip K Dick experienced a psychosis, or a *gnosis*, or a mixture of the two. He penned his surreal autobiographic novel *V.A.L.I.S.*, an acronym standing for “Vast, Active, Living Information System” in which he plays out the story of a man who is contacted by the *Logos* in the form of a pink laser-beam. *V.A.L.I.S.* was just the tip of the iceberg. More subterranean was his vast “Exegesis” which *V.A.L.I.S.* drew upon. This was an enormous document which, for the most part, remained unpublished until edited excerpts were released in 2011. In these excerpts we see flashes of Dick’s mystical experience, and gain insight into his developing understanding of the workings of time. Dick composed a bizarre account of time: he experienced it as flowing forwards, backwards, and orthogonally. He perceived a soteriological drama in which he detects that the Roman empire never ended, and that it is still, in fact, the early first century. It emerges that we are trapped in a kind of time-prison, Rome, the “Black Iron Prison,” and we are charged with a surreal, salvific mission to receive messages that flow backwards through time, to us, on behalf of the Holy Spirit, who exists *outside* of the prison, in the future. These messages constitute instructions to prepare us for an apocalyptic confrontation with the *demiurge*, which has coopted time. Dick writes:

The reality of orthogonal time, cyclic time, would make it possible for the Golden Age (The time before the fall) to return, restoring all which has been lost. There is a direct link between the hope of that return and the idea of orthogonal time; also, there is a similar link between the possibility of that hope being fulfilled and the fact that orthogonal time exists which it indeed

does. (Dick 2011, p 115)

We can read Dick's *gnosis* as if we were interpreting a dream. Dick can tell that beneath the surface of his Western, Christian experience is the deep presence of Roman time. Dick's subconscious stands here for the numerous strata of temporal and social synthesis accreted by time-mediation: the assemblage of figurate systems, in relation to time.

What is *gnosis*, in this context? It is *knowledge*. Direct spiritual knowledge. *Gnosis* implies a visionary encounter with an order above and outside the world. Translated into our model of hidden causation, we can read it as an experience or knowledge of a structure that is not fully conscious but rather *felt*, and sensed, through the medium of *phantasm*. In the practice of *scrying*, for example, the visionary induces a state in which images, like the images of dreams, crop up into the imagination and are then interpreted and decoded. To the gnostic imagination of P.K. Dick, the *demiurge* is a being who creates and controls the world through a kind of penal system. Time is warped around a secret centre, a repeating semiotic:

Is our changing world actually a sort of electron revolving in totally repetitious cycles around a nucleus, and that nucleus is the crucifixion and the resurrection? The mass of a body creates a warpage in space, so that a straight line is curved; thus planet's paths are warped into near circles (ellipses) around and around; that if they could think would imagine (as Spinoza would say) that they are travelling always in straight lines- but we can see otherwise; an invisible force keeps that straight line- makes that straight line into an endless, repeating circle. (Dick 2011, p 119)

The *passion* is a temporal warpage, for Dick. For me, it is the *nativity*. This is to say, I suspect that a temporal warpage caused by the Julian reform is the *site* of our mythology of the birth of Christ. The crease in time is a semiotic *mass*. Time flows around this mass through the perpetual turning of Augustus:

Equal to our sun, our nucleus: that moment *Urbs Roma c 45 A.D.* We will call it the second coming; i.e. the Second time around for us: and suddenly, in the twinkling of an eye, like a thief in the night, when we least anticipate it. (Dick 2011, p 119)

His date of 45 AD is inconsequential. His own interpretations of his experiences were wild, contradictory, mad, but his insight is unmistakable. Phillip Dick *saw* something. He saw that Rome was time, and time was Rome. The Empire colonizes the most remote strata of time. Beyond it, outside it, beneath it, is a lost, true time, which Dick seeks to recover:

Would it be unreasonable to speak of my first orthogonal vision, that of *Urbs Roma*, as the Age of iron? And under that I found- what's next? Silver? That would be my first glimpse of the Hellenistic world which came before (linear time), or beneath (orthogonal), and then, at last, the absolute simplicity of what must have been the Golden Age: the forests, which Euripides spoke of in the *Bacchae*... Each age of rotation retrograde was better; iron to silver, to gold, whatever metaphor. *Roma* was certainly iron; no doubt. And- the fish sign which I saw: it was made out of gold. (Dick 2011, p 115)

We interpret this as follows: these strata expose the gradual tightening of time, its progressive capture by means of calendars. From unmediated, to partially mediated, to totally mediated.

For Dick, our hope of salvation lies in the *Logos*. The *Logos* stands orthogonal, or sideways, to the arrow of time. For Dick the arrow was bi-directional. Rome moved forward, while the Holy Spirit moved backwards along the same track. The *Logos* is the matrix which both temporalities traverse. It is the *image of time* as a whole:

The *Logos* is not a retrograde energetic life form, but the Holy Spirit, the Parakletos, is. If the *Logos* is outside time, imprinting, then the Holy Spirit stands at the right or far or completed end of time, toward which the field-flow moves (the time flow). It receives time: the negative terminal, so to speak. Related to the *Logos* in terms of embodying word directives and world-organizing powers, but at a very weak level, it can progressively to a greater degree overwrite the time field and flow back against it, into it, impinging and

penetrating. It moves in the opposite direction. It is the anti-time. So, it is correct to distinguish it from the Logos which so to speak reaches down into the time flow from outside, from eternity or the real universe. The H.S. *is* in time, and is moving: retrograde. Like tachyons, its motion is a temporal one; opposite to ours and the normal direction of universal causal motion. (Dick 2011, p 4)

In his soteriology, eventually the forward and backward temporalities will merge, cancel, and transcend one another, *leaving only the Logos*. In a time-travel paradox worthy of a 1990's Star Trek episode, this event has already *occurred*, and this fact is exactly what *generates* the Holy Spirit! The entire thing is a paradox.

Dick's multi-directional time-upon-a-matrix is completely sealed within the frame, completely Hermetic. It is an apparatus of capture, and Dick is its *knowing* prisoner, seeking a way out. TO do this, he taps into the Holy Spirit. In traveling backwards, the antidiachronic (Holy Spirit) will be able to manage the time flow and nudge it towards fusion with the synchronic *Logos*. By connecting the *Alpha* and the *Omega*, forward and backwards time, Dick hopes to reveal the entire plan, the entire *Logos*:

Equilibrium is achieved by the Logos working in three directions: from behind us as causal-time-pressure, from above, then the final form, the very weak H.S. drawing toward perfection each form. But now equilibrium as we know it is being lost in favor of a growing ratio of retrograde teleology. This implies that we are entering, have entered a unique time: nearing completion of the manifold forms. Last pieces are going into place in the over-all pattern. The task or mode of the H.S. is *completing*. Not beginning, not renewing or maintaining, but bringing to the end, to the close. (Dick 2011, p 4)

Rome is the Black Iron Prison. It is lodged in the most immediate (and most hostile) layer of orthogonal time. It must be bypassed by agents of the Holy Spirit, in order to expose it in the light of the Logos. We need to *see* Rome: to expose the framing of time. To identify it as a counterfeit. A magic trick.

Chapter 7: Moment Focality

By “Moment Focality” I mean *the measurement of time from the present*. Moment Focality contrasts with Axial-Additivity. The clearest current practical example of an attempted moment focality is found in the “B.P.” timescale used by many archaeologists, geologists, and other scientists. B.P. is variously interpreted as “Before Present”, or “Before Physics”. It is not truly moment focal however, since it rests on a base date of Jan 1st, 1950, a choice made to indicate that our current scientific understanding of chronology is based on radiocarbon dating technologies which were put into major practical use in that decade, and that the nuclear weapons testing which had the result of skewing carbon dating results, *had not yet occurred*. It will eventually become another crease that retreats from us along the ruler of linear time. “Before Present” will increasingly be a less accurate reading of BP, than “Before Physics”. To explore a true moment focal system, we need to look elsewhere.

In *the Left Hand of Darkness*, science fiction novelist, feminist (and high-school class-mate with Phillip Dick), Ursula K. LeGuin¹⁴⁶ develops the story of an anthropologist on an isolated wintry world where the species of human who dwell there do not have fixed biological gender. Instead, they have ambiguous sex organs which form into either male or female members during the moon-triggered rutting season.

For our purposes, however, the most important idea which LeGuin’s novel proposes is her calendar which is Moment-Focal.

¹⁴⁶ To whom I credit the idea of moment focality.

In Karhide/Orgoreyn years are not numbered consecutively from a base year forward to the present; the base year is the current year. Every New Year's Day (Getheny Thern), the year just past becomes the year "one ago," and every past date is increased by one. The future is similarly counted, next year being the year "one to come," until it in turn becomes the Year One. (LeGuin pp 327-328)

Her suggestion that *state* time would measure "outwards" from the present, rather than forwards from the past is linked, I think, to her idea of suspending gender as a philosophical essential. For LeGuin, I suspect that Axial-Additivity is fundamentally gendered. It is a phallic trajectory, accreting in a linear order. It is an erection of the first Roman emperor. Its inverse, the Dickian idea of backwards time, is equally so, since it is merely the mirror image. LeGuin's chronology is grounded in neither the past NOR the future; it is not defined by its poles, but rather by its productive centre. It is thus more *ynic* than the Axial-Additive system. LeGuin's feminism, as well as her considerable engagement with Taoist philosophy, are at play here. Radiating concentricity in the image of time, spiraling out from the present.

A chronology centered on the present would be accompanied by a philosophy of presence¹⁴⁷. LeGuin develops this point in depicting monastic religious practice on Gethen:

They were practicing the Handdara discipline of Presence, which is a kind of trance - the Handdarata, given to negatives, call it an untrance - involving self loss (self augmentation?) through extreme sensual receptiveness and awareness. Though the technique is the exact opposite of most techniques of mysticism it probably is a mystical discipline, tending toward the experience of Immanence; but I can't categorize any practice of the Handdarata with certainty. (LeGuin 2010, p 60)

¹⁴⁷ Or what Jean Gebser terms "presentation."

A psychology of presence is entwined with an ontology of immanence, just as a psychology of absence is entwined with an ontology of transcendence.

The most obvious difficulty with such a system as the Gethenian calendar is that events in the past would recede, year by year, and so, according to critics, would have no easily fixed mnemonic by which we could locate them permanently in time. The Gethenians dealt with this difficulty by viewing historical events as occurring in constellations, with fixed times between them. Events are marked by their relation to other events, rather than by their distance from the fictional origin; as a result, the flesh of time is filled out more as a web of connected, mutually fixed coordinates:

The inconvenience of this system in record-keeping is palliated by various devices, for instance reference to well-known events, reigns of kings, dynasties, local lords, etc. The Yomeshta count in 144-year cycles for the Birth of Mesthe ... and keep ritual celebrations every twelfth year, but this system is strictly cultic and is not officially employed even by the government of Orgoreyn, which sponsors the Yomesh Religion. (LeGuin 2010, p 328)

The cyclical structure (144 years, or what have you) would impose a ring-like concentricity to the framing of time, which would allow for referencing events to *one another*, rather than exclusively to the anchor-point. The “mass” or temporal inertia is no longer fixed as a memorial to an overarching historical event, felt as timeless, transcendent, but rather *transferred* to the moment of immanence, the moment of lived embodiment.

Chapter 8: Singularity

Temporality is the site of a fundamental negotiation of para-optical power. Time is uniquely susceptible to the imposition of structural metaphor. How we visually model time tells us *everything* about how we will endure, what shape our becoming will take. Here is one possible image of time.

The present is a black hole. It is to time what a gravitational singularity is to space: a collapsed concatenation, an *oubliette*. Its inescapability bends time around itself, makes it captive. Past and future are hallucinatory dramas played out like turbulences: memory and expectation are ripples, distortions, reflections dancing across the event horizon. We are always in the cyclone's eye, but those past and future forces are no mere illusions: they are warped around each individual present like a robe of shifting colors and textures.

Consider then, that time might be like a woven ball, as Serres suggested. There are as many past-present-future vectors as there are approaches to and through the present, the point of convergence. Each line, an hourglass of cones, kissing at their tips, where they dissolve into the singularity of presence. Infinite hourglasses, overlapping. The future flows INTO the present, from ALL directions, and the past recedes outward from it, as its event horizon. A spherical hourglass.

In this image of time, Moment-Focality acts as an antidote to Axial-Additivity. It grounds, not in the past, but in the present. It grounds on the point of presence and immanence. It grounds on moment Zero. It places that moment right at the heart of presence and warps time around it. Moment-Focality locates change in the present. The past and future “fan out” from the present, as per Bergson, but do not seem to have either the geometric linearity or the independent existence that we have been

trained to give them by our calendrical, chronometrical, and narrative structures, by the pervasive and unchallenged assumption of the Axial-Additive model. The vision of time given by Moment Focality incorporates features of linear, cyclical, and spiral temporality, but re-casts them significantly. There is duration over large time scales, however it is not the endurance of a tower, grounded on a foundation, but the endurance of a maelstrom: made of difference, calm only at its heart.

The present is a black hole. If we choose to entertain this image, a rich metaphor, we may think the present is to time what a gravitational singularity is to space. The former bends light around it as it collapses in on itself due to its mass, the latter represents a massive collapse of simultaneous presence into itself. In the Now, all time-experiencing beings are simultaneously involved, in their own particular ways: there is only a single moment, universally shared, inclusive of all pasts, all futures, all moments: the singularity of *difference*. The present is inescapable: the past fans out behind it, as if it were relaxing into a great cone, in the manner that Bergson described, and the future (conceivable as hope and ambition, but only in the terms made available by memory and experience) fans out into a web of all possible future. There are infinite cones, each paired with its twin: hourglasses in a sphere around a central non-abstract aperture. Immanence. Our visions of past and future are eddies or vortices, the polar “knots” of experience warping themselves around the fact of a contracted, singular, coordinate, and substantial *Now*, filled with infinite presents....

In this same, rich image, we find that the Past and the Future are like *wakes*, displacements in the field of the Now, occasioned by presents, which agglomerate into a single whole in the same way that mass agglomerates to itself. How many true centres of time are there? We cannot answer this, we do not know. We can speak of

the one we share; whose eye is our sun. Within its field of influence, we all have different pasts, different futures; an infinite variety, but only a single, commensurating Now.

Recall what Abrams said of oral time: that it was not linear, of course, but also, neither cyclical, nor spiral. Time is an enveloping roundness; a horizon that circumscribes the point of experience. Non-directional, but encompassing: “In such a breathing cosmos, time is not a rectilinear movement from a distant past to a wholly different future. Rather, time has an enveloping roundness, like the encircling horizon.” (Abram 2010, p 271.)¹⁴⁸

The locus of temporal production is empty of measure in its intrinsic givenness. Qualitative time, not quantitative. Heterogenous, not homogenous. Defined by its experience, not by its measure. Describable, but not definable, immanent, but not abstract. It is the groundless ground, and the universal anchor. The sum total of all oscillating bodies in the cosmos. All timelines can be conceptualized around this pivot, which is a “now-here,” U-*topos*. Like the self, it is an illusion, the sum of nothing.

Consider that we model time with regards to a *topos*, or surface. When we think about time, we presuppose a medium in and on which it plays out. Such a medium is the place of our experience: normally collapsed into the flatness we have assumed of it since Plato, but formerly, presently, and soon-to-be considered in its full depth. The *topos* of flattened time is an illusion. A phantasmic slate. It is an *imaginary*

¹⁴⁸ Previously cited in Part II, Chapter 5.

surface, or object, or directionality that allows us to conceive of orientation with regards to time. Orientation *of* time allows us to conceive of mass social coordination, common purpose, trajectory, and reference. Imparting such a projection of telos onto naturally occurring flux is a profoundly magical act: a para-optics, a simulation. So much is at stake in it, and yet it is dependent on our forgotten assumption of a secret screen.

The secret screen is creased. Linear time is drawn like a track across that crease with B.C. and A.C. separated by a fold, or *caesura*, marking an absent year 0. The line is conceived as infinite, and as if there is only one of them. “History.” Nevertheless, the true multiplicity of temporalities tells a different story. A plurality of lines through the centre disrupts the monolith of power. Removal, displacement of the centre, topples it. The politics of time are a politics of topology, and by extension, of geometry. LeGuin’s initiative may not be practical on the contemporary stage, but I believe it deserves both consideration, and if necessary, adjustment. As a heuristic for *looking at* chronological narratives in general, it is quite valuable.

All this has led me to the following suggestion: The frame with which we portray time is a crucial mass-social magic that produces effects (the sense of self, history, narrative), while obscuring the causes (an imposed temporal linearity). Thus, on this deep level of mediation, where cosmos, psyche, and socius interface, there is a virtual apparatus with effects that carry “upwards” into the ways we design systems, and the ways we produce both optic and para-optic spectacle. By understanding this layer and its structures, by becoming independent from its *telos*, we encounter a direct, non-linear, non-teleological “now;” a kind of cosmic Maelstrom, a singularity, and where we convert that singularity *back* into narrative linearities, we get not one, but

infinite possible temporal vectors. Phillip Dick might consider this field to be the *Logos*.

Chapter 9: Play

By exploring the possibilities of inventing new calendars, we can play with chronological models, invent hypothetical scenarios, explore design problems, and deepen our understanding of what a calendar can do as a world-regulating matrix.

For this purpose, I have designed, produced and continue to refine a mnemo-chronological apparatus which for the sake of this discussion can be broken into three parts: 1) A neo-computus, 2) a moment-focal notation system, and 3) a mnemotechnically potent array of “visualization frames”. These three components are presented, or delivered in the form of a “game” of intelligent calendar design, which starts with the question: what *can* a calendar do?

Some salient features of this line of play can be found in the appendices, and the reader is encouraged to peruse them. This is in no way a complete or exhaustive treatment of the dynamics of this particular set of frame-games, but it should suffice to give the reader a basic sense of their structure and the logic supporting them. Selected key components of this game can be found, in the appendices, alongside examples of some of the calendrical systems I have experimented in developing.

A neo-computus, as I define, it is a method of calculating and ascertaining orbital information about any planetary (or sub planetary) orbital cycle, and then developing that information into a working calendar that tracks the body in question. It results in an image of time which is polycalendrical, and as close to a real-time image of the state of the solar system as possible. It is, in this respect, an open “orrery-image” of time. The dating system for each body in question may be represented using

a moment-focal notation system, which I have dubbed “Hourglass Notation”. This way of recording dates seeks, like LeGuin, to displace the centrality of the fixed-in-the-past anchor point, and introduces the notion of a *centralized* present. One of the advantages of this image is that it allows us to conceive of a sphere of time-vectors and does not privilege any specific calendar. It is somewhat challenging to learn to read, but it is an ideal notation system for a poly-calendrical approach to chronology.

Finally, inspired by a mathematical discovery that I made as a result of my previously mentioned *emic* esoteric meditations, I am able to provide a complete, countably infinite sequence of magic cubes of different sizes to be used as “visualization frames”. These are called Emirp Bracketed Palatial Systems, or EBPSes. Using this system, an imaginary image can be inputted or stored at an address within a complex of abstract cubes, which serve as a mnemotechnic library. I have given a basic overview of how this is done, in the appendices.

Eight separate calendars (one for the orbit of each planet) are compressed into one system using hourglass notation. The calendars have been designed so as to be broken into internal sub-divisions using figurate numbers. This means that they can be translated into the frames as symmetrical (and usually crystalline) distributions of “activated” cells. In this way, we construct a specific “crystal image” of each orbit, as well as a composite, snow-flake like image of the total data set. This act crystallizes memorial *loci* from the abstract cubes themselves, allowing the pattern of these *loci* to function doubly as an image of time and as a memory palace. These patterns, because they follow the internal harmonics of the magic squares that they are visualized within, also end up looking like the Chladni patterns which I discussed in Part II: Chapter 7.

The visualization frames can be used in two different ways: for abstract or realist visualizations. The system can be used as a Universal Knowledge Index, or as a Universal Mnemotechnic Imager, or both. In the first way, the activated “cells” within the array are used as abstract storage loci, while in the second, we use the various frames to store images of bodies, in the universe, to scale. A “proof of concept” for this latter application is given in Appendix VII.

This account of games with time is meant to provide evidence of my engagement with the topic of magic in a mode which harnesses both the *enic* and the *exic* research trajectories. As I have implied throughout the work, the ultimate purpose and focus of this work is to explore magic in such a way that the findings may become, in part, the basis of new fields of play. What I have suggested here does not exhaust these possibilities, but rather, offers one productive line of engagement: calendar design as a customization of time. Whether this particular experiment is successful or not, I invite you to entertain it, if simply for the exercise of exploring how a “magical” system might be synthesized that demonstrates the “reverse engineering” strategy in action.

Let me finish this Part (and the dissertation), then, with a design proposal for a deliverable product of the above assemblage. If the product comes in a box, the box contains: one manual, one day planner, one parapegma and a “base set” of cards. A parapegma is a “counting board”. Originally these were stones with peg-holes drilled in them, through which the operator would move a peg daily. For the sake of this proposed product, the parapegma is a painted wooden board with numerous tracks, through which pegs may be moved in order to keep track of the eight planets in question, and where they are, at any given moment, in their orbit. This product could

be expanded on by providing alternate parapegmae, and additional cards. The cards are filled with information related to which “curricula” will be hosted on which cycles. The day planner is designed to simultaneously allow the tracking of all eight calendars, the planning of everyday tasks and goals, and the translation of the “crystal image of time” into an “Orrery image.” The calendar can be customized as a learning tool, with each cycle or sub-cycle supporting a themed topic of study (supplied by the cards). The manual would detail the basic aspects of the game as well as point to more advanced applications, such as how to visualize time in the EBPSes, and how to build realist time-space imagings into the UMI. I believe that this system is in the spirit of Llull and his intellectual descendants.

Deep, hidden, causal mechanisms appear to generate worlds. These worlds function on multiple levels: on the level of spectacle, on the level of categorical frame, and on the level of the overcoding of time and becoming itself. I have encouraged readers to consider strategies - games, systems, frames - that allow us to understand through play, what magic is, and what it can do. Play is key to magic.

Closing Bracket)

Build thee more stately mansions, O my soul,
As the swift seasons roll!
Leave thy low-vaulted past!
Let each new temple, nobler than the last,
Shut thee from heaven with a dome more vast,
Till thou at length art free,
Leaving thine outgrown shell by life's unresting sea!

-Oliver Wendell Holmes, *The Chambered Nautilus*¹⁴⁹

Magic's greatest feat is to provide the means of its own apparent vanquishment. Magic's greatest utility as a human faculty is to entertain: to entertain thoughts, scenarios, possible futures, and people. An agnostic relationship to the real, then, is the place where magic's role of spotlight is mitigated by the detective work of investigation and exploration into the unknown, into the mystery. If magic were to be recognized, even celebrated for what it is, then it might be possible to remove it from what it is not. Magic is mediacy, not immediacy. Immediacy is possible, AND it is essential. What is more, I suspect there to be the possibility of (*a*)mediacy, which may be a key to (*a*)*magicality*. If our questions stem from presupposed answers, we are already in the maze, but, on the other hand, if our ANSWERS, in all their creative aspects, flow from a fundamental *questioning* - our basic agnosis - then we are finally

¹⁴⁹ The inclusion of this particular verse was inspired by my grandfather, Lloyd A. Duchemin, PhD, who quoted it upon hearing of my academic intention to explore how magical narratives form. I think it captures both the sense that I have tried to convey here that magical paradigms are like "mansions of the soul", as well as the notion that something vaster than those chambered paradigms: a season-giving world, an unresting sea, is the fundament from which they arise, and toward which they will eventually collapse. And just like the mollusc who excretes a living monument, a shell that becomes part of their body, this is how I think it is with the fictions of magic that shelter us from the foundational flux.

in the position to craft our own habitats, nomads of the real that we most fundamentally are.

A brief review of the overall discussion follows. Using a technique akin to the deployment of conceptual probes, that is, through engaging varied angles of investigation, we have introduced a concept of a magic inclusive of many of the senses typically used. We have shown this magic's connection to sleight of hand, to trickery, to the philosophy of willing, and to pragmatism on the level of social virtuality. We have explored the concept of a natural magic that is a confluence of many magics: of trickster, and entertainer magic, and of occult, or esoteric magic. By introducing a cognitive perspective, we have identified a magical role being played by metaphor insofar as metaphor is the means of transportation between phenomenology and abstraction. We have pointed to the idea of "mental spaces" as evidence that a theatre of para-optic connections under-gird social and individual psyches, by means of how we use language in general, and writing in particular.

We then moved on to a more abstract discussion. We considered the mental spaces as environments that constituted patterns of subtractions/removals-from phenomenal presence. It is here that we located deep structural synthesizers: magical, mystical, and divinatory schema, meant to shape a para-optical environment such that the patterns of ab-straction attendant from the intagliation of Being (understood as a network of hollows) and non-Being (understood as a thickness of sensitive experience). We have shown that the problem of non-Being is marked (by Deleuze) as the problem of question, and the problem of Being is marked as the problem of answer. 0 and 1: "? Being" and "! Being" respectively. The sphere, infinite boundedness, is the answer to blankness, infinite unboundedness. Specific

architectures are carved out of raw presence, or *apeiron*, by means of a *mathe-poetic* matrix of figures, numbers, systems. At the zenith of these efforts appears to be the Lullian art, a means of totally encoding the world in a kind of combinatorial, mnemotechnic text. This late medieval innovation has had profound implications: renaissance magic, enlightenment *mathesis*, and modern computer science ALL owe a debt to Lull's art. It is undeniable that after a fashion, we are still its captives.

Lastly, we turned toward a significant political and historical magic: the magic of establishing temporal order. By impressing marks upon time through the means of calendars, and by establishing rituals attendant on the genesis and teleology of those calendars. We discuss the significance of a given image of time insofar as it installs topological features into the para-optic aspects of social chronology. I have put forth a conjecture regarding the Image of Time, in the Christian tradition, and the fallout of the Roman revolution. One of the most significant of these chrono-topological features, in the Western construct, is the crease in time marked by our division between A.D. and B.C. This crease operates such as to establish a number line schematic in our dating, with a perpetual privilege to the moment of its establishment, its anchoring: what I have dubbed "the Augustinian Pivot". The Augustinian Pivot becomes the prototypical "present", or the eternal moment that the calendar perpetuates. What is problematic is that this act of signification forecloses the actual present, and over-writes it with the Roman imperial moment, which has, by design, been prolonged into an eternity. The problem of calendrics then appears to be the problem of how to *arrest* time.

Following the discussion of Augustus, I turned my gaze toward two prolific 20th century science fiction writers. I presented excerpts from the *Exegesis* of Phillip

K. Dick, which show his profound concern that Rome continues to dominate time. That this is a magical effect is clear: The shape of time has been configured in a way that seems to us (habituated as we are to it), to be the natural order of things. By way of contrast, and in an attempt to show what time might look like if it were not anchored on 1 AD, I have pointed to Ursula LeGuin's portrayal of a calendar whose base date is perpetually the present, such that the crease in time marks the threshold of past and future, *as it is lived*, rather than as it memorializes an Imperial *fiat*. We looked at the nature of the present, at once a threshold between two contrasting temporal zones, and, ultimately a comprehensive singularity which commensurates these zones.

We have encountered the spurious the "two magics problem," and resolved it through a generalization of magical activity with non-determinist aesthetic interventions into meaning and structure, such that they come to appear naturalized. Mind is demonstrated to be an environment, architected by code. Our social experience of time is shown to be similarly architected, as the surface of duration is warped by the repetition of the grounding moment, and by an apparatus of ritual that cloaks raw temporality with self-reinforcing symbolic spectacle, again "naturalized," such that it is difficult to imagine an alternative.

Admitting that the work is unorthodox as a PhD thesis, we could nevertheless summarize the purpose of its three parts as follows: The first part, then, is an investigation into the surface features of a magicalized socius, bringing numerous magical modalities into communication. The second builds upon this state of affairs and constitutes a more penetrating look into how self and society might form as a deep theatre between question and answer, and how that dynamic is constrained by our

classificatory architectures. The last is a case-study of the deepest strata upon which these operations are performed and portrays a specific case of societal calendrics operating as a basin for the mass experience of time.

As a whole, then, we can detect three major magical strata running from the surface of experience down to the roots of enchantment. The three layers of magical framing are: spectacular framing, ideational framing, tempo-spatial framing.

Calendars, magical systems, magical spectacles. Consider that a “world,” then, is at heart a transport “upwards” through these three layers: Empirical/cosmic interface -> mediative code/ abstract framework i.e. “system” -> engineered public spectacle.

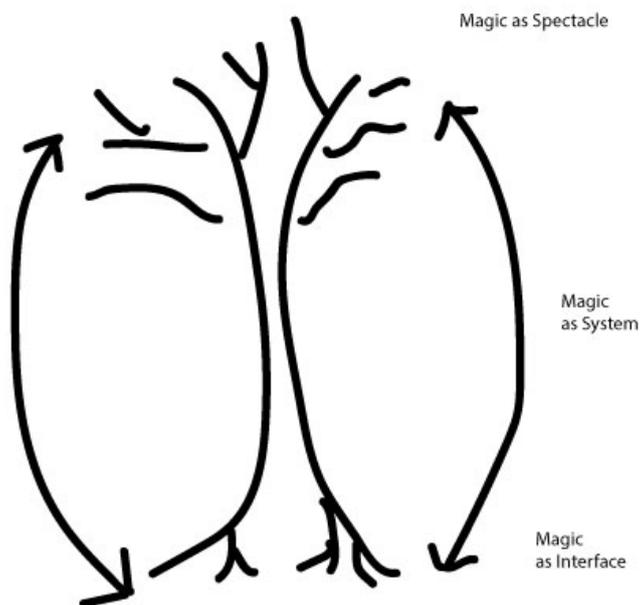


Figure 25: The Tree of Magic

The enic/exic approach that I have used opens up an enormous range of both critical and creative opportunities. Thought experiments with time and its calendrical mediation, such as those permissible in the context of art and science fiction, might unfold the issue further.

Hidden causation: a common factor in both optic and para-optic spectacle. Spoken language is itself a song, a magical and creative movement, and written language is a systematized code for constraining the ways that song can propagate, combine, and preserve itself archivally. The naturalized enchantments of an age force us to think in

conformity to that age's ethos. They are serious affairs. If magic is released from its role of restricting the process of questioning, however, then it can be rediscovered as a form of play and may become the basis of thought experiments and creative questions. Magic's greatest feat is to provide the means of its own apparent vanquishment. Magic's greatest utility as a human faculty is to entertain: to entertain thoughts, scenarios, possible futures, and people. An agnostic relationship to the real, then, is the place where magic's role is mitigated by the detective work of investigation and exploration into the unknown, into the mystery. If magic were to be recognized, even celebrated for what it is, then it might be possible to remove it from what it is not. Magic is mediacy, not immediacy. Immediacy is possible, AND it is essential. If our questions stem from presupposed answers, we are already in the maze, but, on the other hand, if our ANSWERS, in all their creative aspects, flow from a primary and sacred questioning - our basic agnosis -, then we are finally in the position to craft our own habitats, nomads of the real that we most fundamentally are.

Since the theme of the thesis, from the outset, was to explore magic from an engagement with enic/exic research trajectories, I finished the last part with a demonstration of how, through play with systems, a productive intervention may be made directly into the assemblage of figurate systems. This has been accomplished through the *design* of a system, based on an experimentally open approach to calendrics and calendarization, which functions like an orally transmittable computer.

This is how I understand it: the "assemblage of figurate systems" combines a number of the concepts which we have already introduced. It combines

“environmentism”¹⁵⁰ with intagliation. It combines deviction with combinatoria. It is a space where oracles overlap with each other, or contradict each other, and a space in which phantasmagoria are made to play out across frames and screens. It contrasts turbulences with bubbles, and it blends the notion of spheres and spotlights together. It implies an occluded *space*, the topological fundament upon which the assemblage grounds and ranges. The assemblage is stratified, and calendrics is at its very base, where it contacts the fundament, where it is forced to be most empirical. Calendrics is thus the first appropriation of the voice of time. On its deepest levels, the assemblage of figurate systems is wired into chronology. The thesis has therefore been structured as a descent to the fundament: from externally targeted spectacles to internally targeted spectacles, to the segmentation of observed natural cycles by means of calendrics. At this very foundation, I have proposed and designed my own game in the spirit of Herman Hesse’s *Magister Ludi*, about which he writes:

After Jocator Basiliensis’ grand accomplishment, the Game rapidly evolved into what it is today: the quintessence of intellectuality and art, the sublime cult, the *unio mystia* of all separate members of the *Universitas Litterarum*. In our lives it has partially taken over the role of art, partially that of speculative philosophy. Indeed, in the days of Plinius Ziegenhalss, for instance, it was often called by a different name, one common in the literature of the Feuilletonistic age. That name, which for many a prophetic spirit in those day embodied a visionary ideal, was: Magic Theater. (Hesse 1972, p 28)

The game itself as magic theatre is meant to supply a novel image of time, as both a demonstration of the creative potential in my overall approach, and as a practical tool

¹⁵⁰ The idea that there are no “things” only environments nesting and overlapping with other environments like the proverbial “stack of turtles” that is rumoured to hold up the disk of the Earth.

for enhanced learning and memorization. Details have been provided in the appendices.

This proposal, then, satisfies the need to demonstrate the emic/exic approach, and allows us to characterize magic in general as a manipulation, on some level, of the assemblage of figurate systems, for the purposes of affecting a change in the world. I have constructed the work to operate *outside* the dualism of emic/etic approaches, in order to show how the creative magical process works. The many magics may have different levels of the assemblage of figurate systems on which they operate, but they are all, I would contend, involved in the production of either external hidden-causal spectacles, internal hidden-causal spectacles, or chrono-temporal hidden-causal spectacles. We are now left, I would also contend, in a relationship to the assemblage, where we must acknowledge the necessity of confronting our illusions while at the same time being assured of the fact that we will need to engage new illusions in order to do so. For this, and all other reasons, the thesis ends by beginning play.

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Appendix I: Notes on Moment Focal Notation

In an effort to adapt the concept of moment focality into a method of chronicling time, I have developed a simple notation system that I call “Hourglass”, or Moment Focal Notation (MFN). It has a few unique features. This is a simple notation system that can be used to record any temporal or spatial movement, and that privileges “present location” in reference to motion. Moment Focal Notation lets us define ourselves as being a given number of positions in on any list.

The basic frame of an MFN expression is the hourglass shape: (>0<). The number *zero* always indicates the present, and can be considered as an aperture onto un-numberable time, whether that is an instant or an entire epoch. “0” is qualitative, fluid, and heterogeneous, not quantitative, homogenous and discrete. Put another way, “0” is ?-Being, and all other numbers are expressions of !-Being. “0” only appears in the system as pivot, and only once, in the centre of an “hourglass”. It is equal to a standard unit of the system and indicates the moment-being-experienced. The “>” and “<” signs do not indicate “larger than” or “small than”, but rather “prior to” moment 0, and “post” moment 0. The brackets close off a particular set of before/after comparisons, and allow the set, or “level,” to be viewed as a unit. This is called a “ring”. A line of MFN might have a “year” ring, a “week” ring, and a “day” ring. For example, a compound, “three-ring” expression of MFN will have the following frame:

$$(> (> (>0<) <) <)$$

In addition, there are the symbols “...” and “∞”. These also have special

meanings in MFN. Because “0” means *uncountedness*, ∞ indicates *infinite countedness*: “beyond this point, the cycle in question infinitely iterates”. For this reason, the first day of a seven day period would look like $(\infty>0<6)$: “before this the cycle of seven repeats”; and the last would look like $(6>0<\infty)$: “after this, the cycle of seven repeats”. The middle day looks like: $(3>0<3)$; “three days have gone past, and there are three to go in this cycle”.

“...” is used in cases where the system is conceived as not having a defined “reset”. It is only used by me when counting things in open ended base 10. This is deceptive, though, because it is a shorthand way of avoiding having to break the 1’s, 10’s, 100’s, 1000’s positions into separate rings. Take the year “1976”. It would be expressed “shorthand” as $(1975>0<...)$ in order to save being expressed as $(1>(9>(7>(5>0<4)<2)<\infty)<9)$.

Some symbols are used in the system in their conventional sense: If something is being measured in degrees around a circle, the $^{\circ}$ symbol could be included, and similarly, if something is being measured in minutes or seconds of arc, then: ' or: " might be used, as well. In this vein, decimal numerals could also be used to express fractions. I have not explored this.

One final comment is due regarding the potential use of different types of bracket to distinguish between “levels” of the concentric ring-structure. At the moment, no absolute conventions have been developed. I do however see potential for distinguishing levels by use of { or [type brackets to denote certain functions. One convention could be as follows: (brackets indicate periods internal to a year, or orbit, [brackets indicate periods external to a year, or orbit, and { brackets periods less than a day. We can use the bar, |, to separate temporal measurements from spatial

measurements.

I make three main claims for MFN: 1. MFN is universal across calendars. 2. MFN can be used for both temporal and spatial measurement. 3. MFN allows a spherical vision of convergent timelines. MFN may also have emergent features that have not yet been discovered. Let me demonstrate the system as I unpack these claims.

MFN is a notation system that can be used to express any date or time in any chronological system. In order to do this, the system must be expressed in terms of its segmentation. We have to have a sense of how many levels of depth are in play (for instance a clock typically has three: hours, minutes and seconds), and how those levels are partitioned (again, with a clock, 60, 60 and 60, but with a Gregorian Year, 12, 52 and, 365). It is important that the reader know how the calendar works: A reader interpreting an MFN expression of the Gregorian, for example, would have to know the irregular month-sizes, and also the leap year system.

Let's look at an example: "Thurs, Jan 28th, 2016", has four levels of depth to it: the day, the week, the month, and the year. There may be a number of ways of expressing this in MFN, but here is a simple one:

$$(2015 > (\infty > (4 > (27 > 0 < 3) < 2) < 11) < \dots)$$

The expression is broken into four nested brackets that pivot around *moment zero*. Using the bracketing convention discussed above, we would put square brackets around the outside ring:

$$[2015 > (\infty > (4 > (27 > 0 < 3) < 2) < 11) < \dots]$$

We can do this with any chronometric system. 4:31:27 PM would look like $(15>(30>(26>0<33)<29)<8)$. Again, the number on the left side of the hourglass indicates how many units of the system are in the past, and the number on the right indicates how many units of the system are in the future. By choosing to use { brackets to indicate timescales less than one day, we might nest this inside the previous expression:

$$[2015>(\infty>(4>(27>\{15>\{30>\{26>0<33\}<29\}<8\}<3)<2)<11)<...]$$

Any calendrical or chronological system can in theory be rendered in MFN, and any line of MFN can be nested inside of another.

MFN is applicable to both time and space. “0” need not only mean “now”, it can also mean “here”. It can mean these simultaneously: *nowhere*. Just as MFN pivots on a moment in time, when it is used to track time, it pivots on a body-in-motion when it is used to track that body’s movement through space. For example, if a distance x between two cities is expressed axially, there are two possible expressions relative to the two reference points. If the cities are ten miles away from each other, and we are three miles away from our starting city, we would say, that we were three miles out, or had seven miles to go. Of course, this is probably simpler, but there is value to using MFN here, because the two expressions, +3, and -7, can be summed up as $(2>0<6)$. This helps when using MFN to describe both timelines *and* the orbits of celestial bodies that those timelines track. For instance, Mercury might be described both as being, say, $(89^\circ>0<270^\circ)$ around the ecliptic, AND 23 days into its “count”:

(22>0<43). Using our bracket conventions, we could combine these:

|89°>(22>0<43)<270°|

Convergent Timelines. Using MFN, a date in a given system may be expressed as a fairly lengthy, semi-symmetrical string of symbols centering around the key symbol “0”. Take our translation of the “Gregorian” date, Thurs, Jan 28th, 2015:

[2015>(∞>(4>(27>0<3)<2)<11)<...]. Now compare it to the same date in a different calendar, the Baha’i. In the Baha’i calendar it is the 10th day of the 17th month of the 172nd year. The day of the week remains the same. The year can be further broken down, since Baha’i calculate in periods of 19, and of 361. In this case we are the first age of 361, in the 10th 19-year period, in the first year of that period. In axial/additive notation we might write: 10/17/ 1:10:1, or just 10/17/172. If we moment focalized it, using our convention of square brackets for cycles of years, and round brackets for sub-cycles, we could express the Baha’i date as:

[∞>[9>[∞>(16>(9>0<9)<2)<18]<9]<18].

Now, the two axial-additive expressions give us parallel, non-intersecting narrative lines. With MFN, however, we can express *both* dates with a single line of symbols. We can do this one of several ways. They are all problematic: they result in enormous strings of symbols, they require new bracketing conventions to distinguish the separate counts, and they appear to merge distinct chronological axes into a single line. For example, if we adopted a bracketing convention where “[“ indicated Gregorian, and “(“ indicated Baha’i dates, we could write them as follows:

[2015>[∞>[4>[27>(∞>(9>(∞>(16>(9>0<9)<2)<18)<9)<18)<3]<2]<11]<...]

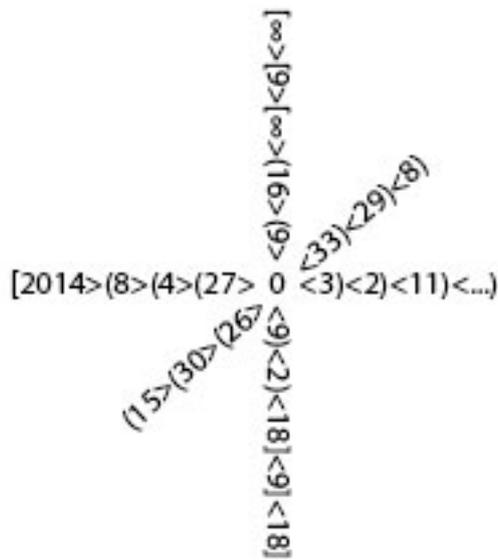
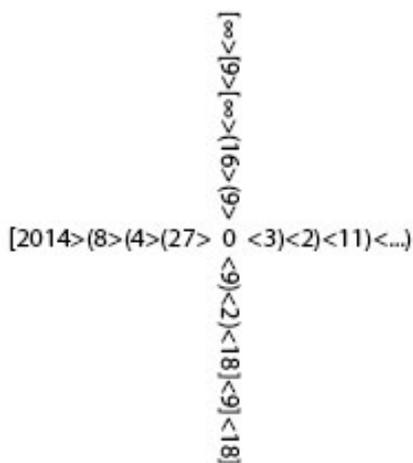


Figure 26: MFN merger of Gregorian and Baha'i systems

simultaneously, but also that they are internally *distinct* systems, separate images of time. A better method, then, is to keep the lines distinct, and visualize them as *intersecting* at moment 0:

Figure 27: MFN of Gregorian, Baha'i



We can add as many lines of MFN as we like through the fulcrum, or pivot, in theory visualizing all the major cultural chronologies in a single “star”.

Initially I devised MFN as an experiment in how one might implement LeGuin’s calendar idea.

Very soon I realized that this way of

“seeing” the temporal narratives opened up many different options, among them the

Clearly, this strategy fails. We are not aiming to conflate narratives, but rather to craft a visualization of poly-temporality that demonstrates, on the one hand, that the separate narratives are happening

“intersection”, the “swivel”, and the “Moment Focal Sphere.” The Intersection is the crossing of two lines of MFN through a single center. We saw this above, in the discussion of convergent timelines. The “swivel” is the de-merging of a specific level, or “ring”. For example, when I combined the Baha’i and the Gregorian calendars by means of MFN, that was a “merger” operation. In the “swivel”, I can take a merged line, say, a day-week-year expression, then isolate the “week” level, and write it running *through* the central 0 from above like so:

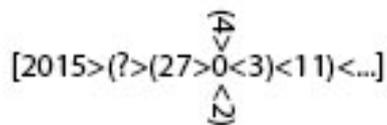


Figure 28: The "swivel"

It is as if I have swiveled that ring *around* the central 0-moment and *out*. In theory, then, a given line of MFN pertaining to a single count or measure should be viewed not as a line at all, but as a series of hourglasses all sharing the same center: a mini “globe.” Timelines are commensurated by having the same point of convergence, the same *moment*. The swivel maneuver shows us that MFN need not be “flat”, like a wheel, but can, and should, be conceptualized as a

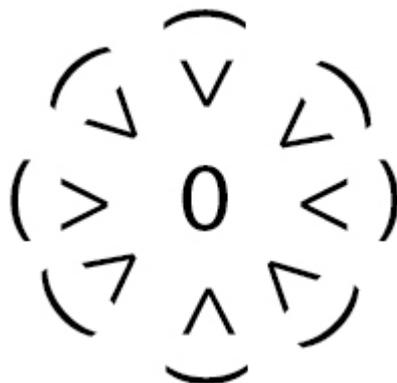


Figure 29: The Rosette

sphere. The result, then, of this experiment in notation is an all-commensurating Moment Focal Sphere in which *all* timelines under consideration share a common present.

For those who would play with it, it provides a powerfully simple image of the co-operation of temporal narratives. If multiple times are flowing through it, it can be pictured as a wheel, or sphere. Multiple timelines converge on a single center, and that center can be rotated to select any one of the timelines. Axial additive times can only be seen as parallel linear times, as their origins are all incommensurate. Only the present moment is common *across* timelines. In a moment-focal time notation all times are made commensurate by passing through the present. MFN can thus be used to correlate parallel measurement conventions within a single notational scheme due to its unique graphic form, timelines which would be typically seen as incommensurate. “Parallel” realities can be viewed as commensurate and concentric, as passing through the center of a sphere. We can envision all human-designed calendrics as convergent into the moment-focal sphere. The *creative* role of the MFN is used to design new calendrical and chronographic systems.

MFN reveals something about how we process time. Past and future are virtual zones, whereas the present is an *actual* zone. We can reframe (>0<) into an image of two Bergson cones kissing, with the future and the past in a strange circuit around a present that is constantly gushing, constantly agitated, constantly unstable.

Appendix II: Examples of Calendars

Figure 30: Mercury Count

Mercury Count (50>(3>0<4)<93)				
(∞>0<10)	(1>0<9)	(2>0<8)	(3>0<7)	(4>0<6)
(33>0<54)	(34>0<53)	(35>0<52)	(36>0<51)	(37>0<50)
2457424.5	2457425.5	2457426.5	2457427.5	2457428.5
2/6/16	2/7/16	2/8/16	2/9/16	2/10/16
Vela	Volans	Chameleon	Leo Minor	Cancer
		220°		
		(5>0<5)		
		(38>0<49)		
		2457429.5		
		2/11/16		
		Hydra		
		Bootes		
		SN 230°		
(6>0<4)	(7>0<3)	(8>0<2)	(9>0<1)	(10>0<∞)
(39>0<48)	(40>0<47)	(41>0<46)	(42>0<45)	(43>0<44)
2457430.5	2457431.5	2457432.5	2457433.5	2457434.5
2/12/16	2/13/16	2/14/16	2/15/16	2/16/16
Pyxis	Antlia	Leo	Sextans	Crater
			240°	

Here is an example of an 11-day, Mercury “week”. All 88 days have provisionally been assigned modern constellations (in alphabetical order)¹⁵¹. Dates are noted in MFN, by Julian Day Count, and in Gregorian notation. Mercury’s position around the ecliptic is indicated in “leaps” of 10° of Right Ascension¹⁵². Furthermore, the number 88 is reconstructed as a visualization of 88 “activated” cells in the visualization frame. These cells are centred and symmetrical, and as a result appear as a crystal-image of time within the frame. This same crystal image of time is treated as a loci-system for the mnemonic storage of the constellations. In this manner, we can marry auto-pedagogy with experimental chronology, and create an image of time which is also a large, socializable store-house for the collective memorization and “chronic familiarization” of important, interlocking knowledge sets.

The result of play with this system is the perception of multiple, independent flows of time (at least one for each orbital body being considered by the system), moving through crystalline memory circuits, and at the same time being portrayable in a “realist” visualization of the body as it appears in space. There is no ultimate cap on how many bodies are calendarized. The system could be made to incorporate dwarf planets, moons, and exoplanets. The addition of each cycle adds a layer to the simultaneous cross-study of all the topics which have been assigned to the cycles.

¹⁵¹ In the gamification of this system, this data set (the constellations), will be given by cards which will contain detailed information (and a map) of the constellation in question. Users following this calendar would do so in part by simply turning over a card, and taking some time each day to study the information. In this way, the Mercury count becomes a perpetual frame for delivering a constellation-curriculum.

¹⁵² The data to construct these calendars is obtained from Jet Propulsion Laboratories’ HORIZONS system, a detailed online scientific ephemeris. (HORIZONS 2016)

Uranus Count(6>(71>(9>0<9)<13)<2)						
(∞>0<18)	(1>0<17)	(2>0<16)		(10>0<8)	(11>0<7)	(12>0<6)
2457412.5	2457413.5	2457414.5		2457422.5	2457423.5	2457424.5
1/25/16	1/26/16	1/27/16		1/4/16	2/5/16	2/6/16
Precambrian	Cambrian (pl)	Ordovician (pl)		Cretaceous (ms)	Paleocene (3 Cn)	Eocene (3 Cn)
(3>0<15)	(4>0<14)	(5>0<13)	(9>0<9)	(13>0<5)	(14>0<4)	(15>0<3)
2457415.5	2457416.5	2457417.5	2457421.5	2457425.5	2457426.5	2457427.5
1/28/16	1/29/16	1/30/16	2/3/16	2/7/16	2/8/16	2/9/16
Silurian (pl)	Devonian (pl)	M Carbonifer (pl)	Jurassic (ms)	Oligocene (3 Cn)	Miocene (3 Cn)	Pliocene (3 Cn)
(6>0<12)	(7>0<11)	(8>0<10)		(16>0<2)	(17>0<1)	(18>0<∞)
2457418.5	2457419.5	2457420.5		2457428.5	2457429.5	2457430.5
1/31/16	2/1/16	2/2/16		2/10/16	2/11/16	2/12/16
P Carbonifer (pl)	Permian (pl)	Triassic (ms)		Pleistocene (4 Cn)	Holocene (4 Cn)	Anthropocene (4 Cn)

Figure 31: Uranus Count

Here is an example of a 19-day Uranus “week”. Dates are noted in MFN, by Julian Day Count, and in Gregorian notation. Uranus’ position would be marked (not shown here) around the ecliptic in “leaps” of 1° of Right Ascension. In *this* example, the geological ages of the earth (including the “Anthropocene”) have been assigned as topics to the nineteen day cycle. As with Mercury, above, these topics will be delivered using a deck of cards which contains detailed information about the topic,

and which the user is assumed to spend a small amount of time studying when prompted to by the system.

It is possible to conceive of a sophisticated curriculum of various scientific (or other) topics being associated with the possible calendrical cycles within this overall system, and which is delivered by means of customized card deck. Users cycle at various rates through interconnected topics which have assigned to the calendars, and this in turn, helps them track those calendars. In addition, these topics become “arranged” as crystal-like combinations of loci within the visualization frame of the EBPSs, and are “stored” there, as if in a computer. By this I mean that we would use a centred and symmetrical selection of cells within the EBPS cube to store parts of larger data sets that have been broken into a set number of parts. For example, with the Uranus Count, I have suggested that we might use the Geological Eras as a “curriculum”. We would take these nineteen concepts and arrange them into an order-3 octahedron (See Part II Chapter 8). If such a structure, or multiples of such a structure were to be set up within the EBPS1 cube, centred around the central cell, this would constitute a “structurally resonant activation,” just as would an 88-cell representation of the constellations (depending how you centred it). There is an immense room for exploration within the EBPS system, and a wide (and yet finite) variety of ways to achieve resonance.

Appendix III: EBPS1

13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97
101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119
123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141
145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163
167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185
189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207
211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229
233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251
255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273
277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295
299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317
321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339
343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361
365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383
387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405
409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427

Figure 32: EBPS1

This magic square is the first of the countably infinite series of Emirp Bracketed Palatial Systems. It is generated by a procedure that is identical for every EBPS. An “emirp” pair is a set of two symmetrical primes (herein referred to as the “opening” and “closing” brackets) such as 13 and 31, or 17 and 71, such that a linear sequence can be construed, which begins with the opening bracket, and ends with the closing bracket. These sequences will always be odd, and will always contain a number, called the “pivot”, in the exact center of the sequence. In the case of EBPS1, the pivot is the number 22. The “span” is the number of integers in the sequence. EBPS1 has a span of 19. The “span total” is the sum of all the numbers in the sequence, in this case 418. Each EBPS has the following feature: $(s \times p) = t$. Span multiplied by Pivot = Span Total. If the pivot is added to each number in the sequence, a new sequence is generated such that this second sequence is $2(t)$. If this is repeated a number of times equivalent to the span (19 times), a square is generated with “magical properties”. If this is repeated a number of times equivalent to the span *squared* (361 times, then a number of these magic squares is generated that is equivalent to the span: 19 magic squares, each one an order of magnitude greater than the previous. These are stacked, and become the layers of a magic cube. Within this cube, there are sufficient mathematical harmonies to allow us to “select” cells as “active”, in such a way that we can know procedurally whether that selection of cells “resonates” by producing a sum that is evenly divisible by the Span Total. In this case, any centred, symmetrical selection of a number of cells in the cube which is divisible by the span (19), will always result in a total that is a multiple of the Span Total (418). As long as these basic principles are followed, the cube can be used to visualize 3d patterns of

structurally resonant activations, and serve as a mnemonic loci system which organizes its contents as frozen-music.

Appendix IV: The EBPS Chain

EBPS1 is the first of, I conjecture, a countably infinite number of EBPSs, ordered in terms of the size of the opening bracket. This generates an “EBPS chain” with discrete properties that can be observed or tested for. The same procedures are used, in each case, for expanding the basic sequence given by the brackets, into a cube. “Grid” and “Gap” relate to specific mathematical properties of a given EBPS which will be discussed in Appendix VI. “Range”, classes the EBPSes in terms of how many digits appear in the brackets. EBPSs of different ranges have different common features. This chart gives us the eighteen unique EBPSs in the first two ranges.

Range	EBPS #	Open Br.	Close Br.	Span (s)	Pivot (p)	Grid (g)	Gap	Span Total (t)
1	1	13	31	19	22	1	3	418
1	2	17	71	55	44	3	-11	2420
1	3	37	73	37	55	2	18	2035
1	4	79	97	19	88	1	69	1672
2	5	107	701	595	404	33	-191	240380
2	6	113	311	199	212	11	13	42188
2	7	149	941	793	545	44	-248	432185
2	8	157	751	595	454	33	-141	270130
2	9	167	761	595	464	33	-131	276080
2	10	179	971	793	575	44	-218	455975
2	11	199	991	793	595	44	-198	471835
2	12	337	733	397	535	22	138	212395
2	13	347	743	397	545	22	148	216365
2	14	359	953	595	656	33	61	390320
2	15	389	983	595	686	33	91	408170
2	16	709	907	199	808	11	609	160792
2	17	739	937	199	838	11	639	166762
2	18	769	967	199	868	11	669	172732

Figure 33: EBPS Master list 1-18

Appendix V: EBPS Chain Topography

The EBPSs have their own, discoverable topography. The chain itself can be pictured by superimposing cubes of the correct size onto the number line, as if we were stringing a cubic bead of say 19x19x19 (EBPS1) onto the line such that its center rests on the number 22, and its forward and backwards faces sit on 13 and 31 respectively. This can be done for a cube of 55x55x55 (EBPS2) or 37x37x37 (EBPS3), and so on, with the cubes being conceived of as permeable to each other and overlapping. In this way we get the following topography of all the EBPSs of range 1 of the chain:

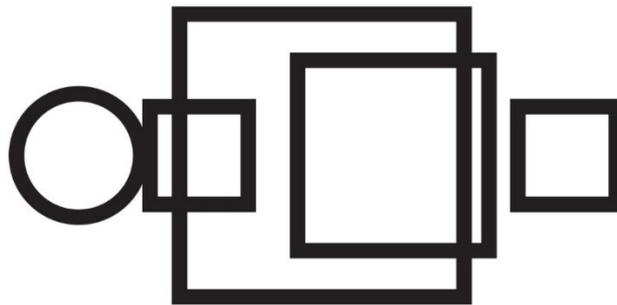


Figure 34: Range 1 EBPSes These are designed to scale in Adobe Illustrator. The circle represents 12 units of measure along its radius from the centre, and the squares are 19x19, 55x55, 37x37, and 19x19, respectively.

Similarly, the range 2 EBPSs have the following shape:

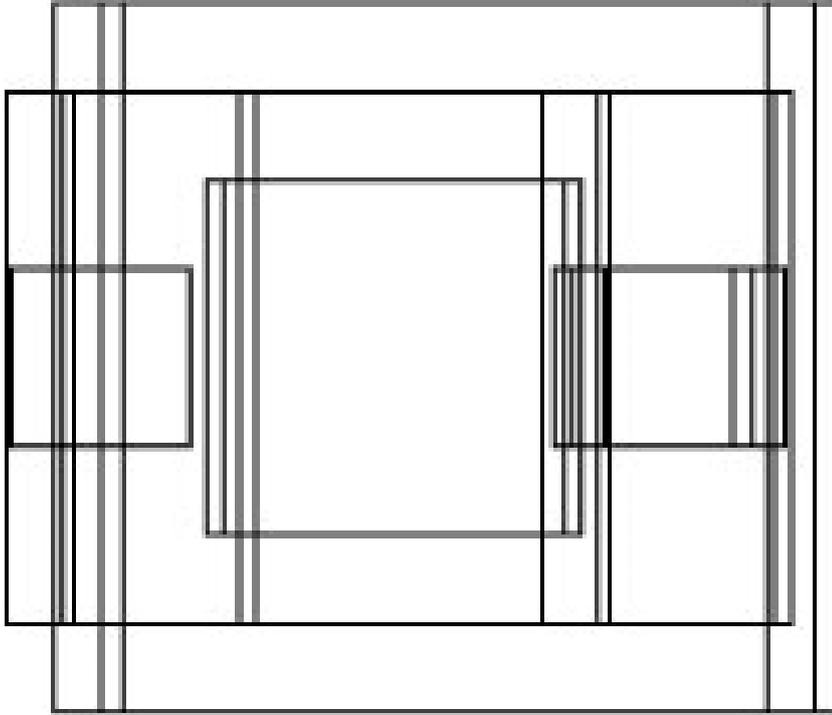


Figure 35: Range 2 EBPSs (Topography)

Of the one hundred and twenty EBPSes that the author has studied so far, only EBPS4 is isolated, not overlapping or intersecting with any other cube. It is a “floater”, and possibly the only one.

Appendix VI: EBPS Checksums and Properties

There are also a number of universal features which operate as “checksums” for the EBPS sequence, in that if they are found absent in a given EBPS, we can reliably assume that we have made a mathematical mistake. The first of these checksums is the “span=1” principle. This tells us that no matter how large an EBPS might be, by adding up all the digits of the span, and repeating this procedure until only one digit remains, it will always equal 1. The second of these checksums is “the uniform gridding effect”, which tells us that any EBPS span, no matter how large, can be described as $n(18)+1$, where “n”, becomes the “grid value” of that EBPS. If an EBPS is encountered which does not feature the Universal Gridding Effect, then we can again, safely assume that our math is wrong. Unlike the “span=1” principle, the Universal Gridding Effect is useful in another way, because it allows us to treat EBPS1 as a fundamental unit. For example, if the span of EBPS1 is $1(18)+1$, it has a grid value of 1. EBPS2, however with a span of 55, is equivalent to $3(18)+1$, and EBPS35, with as span of 1999 is equivalent $111(18)+1$. In all of these cases, the grid number indicates the number of blocks, equivalent to the size of EBPS1, which may be tiled across the initial square (and by extension, the cube), such that one edge is always “shared”. We use this principle, therefor to reduce the manageable size of a given EBPS to its grid. For instance, instead of treating EBPS35 as a $1999 \times 1999 \times 1999$ cube, we can treat it as a $111 \times 111 \times 111$ grid, where each cell is a span-analog to EBPS1. In this way, the universal gridding effect lets us treat really large cubes as if they were smaller than they actually are.

A final checksum is discovered in the grids themselves. If the EBPSs of the first three ranges are organized by size, fragments of a pattern emerge:

Size <	EBPS#s	Span	# of Grid Cells
1	1,4	19	1
2	3	37	2
3	2	55	3
4	37,82,107,118,120	91	5
5	20,71,99,88,110,113,117	181	10
6	6,16,17,18	199	11
7	21,49,119	271	15
8	29,85	361	20
9	12,13	397	22
10	43,77,100	451	25
11	23, 101	541	30
12	5, 8, 9, 14, 15	595	33
13	31,102, 105	631	35
14	74	721	40
15	7,10,11	793	44
16	25	811	45
17	66	1279	71
18	67	1459	81
19	59,116	1549	86
20	60	1639	91
21	52,109	1729	96
22	16	1819	101
23	27,33,103	1909	106
24	35,104,107	1999	111
25	106,48	2089	116
26	22,54,111,114	2269	126
27	30	2359	131
28	42	2539	141
29	32	2719	151

30	97	3277	182
31	91	3727	207
32	95	3907	217
33	87	3997	222
34	83	4087	227
35	89	4177	232
36	93,97	4267	237
37	73	4537	242
38	98	5365	298
39	94	5455	303
40	63	5635	313
41	64,81	5815	323
42	34,57,76	5905	328
43	96	5995	333
44	38,69	6085	338
45	84	6175	343
46	50,55,73	6355	353
47	78,86	6445	358
48	80	6625	368
49	75	6715	373
50	26	6805	378
51	56,68	7543	419
52	45	7633	424
53	46	7813	434
54	65	7903	439
55	19,53,58,68,36	7993	444
56	62	8083	449
57	39	8173	454
58	40	8263	459
59	41	8443	469

60	44	8533	474
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Figure 36: EBPS sizes and grids

We can see that there are 60 different unique size groups, some of which are more represented by EBPSs than others, however, and there seems to be a pattern in terms of size difference. The General rule is that the cubes come in “runs” that are five (or a multiple of five) grids sizes apart. This is certainly true of the Range 3 EBPSs, but something similar is happening in the other ranges. In any event, I have been able to use this pattern as a checksum to catch mistakes.

There are several other layers of nuance to the EBPS system that are outside of the scope of this work but should be mentioned. There are the more numerous DPSEs, or Derived Palatial Systems, which identical to their EBPS in terms of span total (t), but have different sizes, do not conform to the Universal Gridding Effect, or the Span=1 principal. They are obtained through manipulating the prime factors of the span total. There are also “nesting groups”, which consist of EBPSes that share the same pivot. On the topographical representation of the chain, these appear as concentrically nested squares or cubes. I have discovered twenty-six such groups in the first three ranges. A little over half of all EBPSes are members of nesting groups, even though in the first two ranges only EBPS7 and EBPS13 are nested. Lastly there is “gap” value, which represents how many spaces (or how much overlap) exist(s) between one line of an EBPS and another. For instance, the gap value in EBPS1 is 3, because there are three spaces in between 31 (last cell of the first row), and 35 (first cell of the second row), while in EBPS2 the gap value is -11, because the last cell of row one is 71, and the first cell of row two is 61, implying an overlap. It is unknown whether these values will disclose a pattern in the future or not.

Appendix VII: A Universal Mnemotechnic Imager

Here is a tentative design or “proof of concept” for a “Universal Mnemonic Imager”, which we can use to compare things mentally in terms of scale, as well as for the purpose of constructing memorizable, 3-dimensional star maps. This UMI interacts significantly with the whole EBPS system. If we imagine a 19x19x19 cube that contains the entire observable universe, we can assign a fixed size to each cell. If we continue to subdivide the cells, using the same standard, we end up with fifty divisions spanning the scale between the universe and the Planck length. This chart was set up using the estimated size of the Laniakea Supercluster¹⁵³, and the cell sizes were all derived from this base. For this reason, the supercluster is designated “1”, and the three orders of magnitude above it are “0, 00, and 000”, respectively. From 1, we subdivide by a factor of 19, forty-seven times, converting the units of measure, as necessary, from megaparsecs, to parsecs¹⁵⁴, to light years, astronomical units, kilometers down to meters and fractions of a meter. At the 47th rung of this “ladder of scales”, we find the Planck¹⁵⁵ length. There are thus fifty orders of magnitude in total, when we “set” it to the estimated size of the Supercluster. The structure is such that any cell in the entire system may be given an “address”. As one commentator said: “It’s a universe-sized memory palace!” In this implementation of the idea, note that

¹⁵³ The “supercluster” in which our galaxy is located, and, at the time of development (2016), the largest known structural feature of our universe.

¹⁵⁴ A parsec being a distance determined by watching a star shift in relation to its background by a 1° of arc (or Right Ascension), due to the foregrounding phenomenon known as parallax, where background elements appear to move more significantly in relation to foreground elements. In astronomy, this is used to measure distances.

¹⁵⁵ The smallest possible “grain” of measurability, based on physical constants.

scale always shifts by a factor of nineteen. This is to accommodate it into a fractally extended EBPS1.

UMI Rung	Span Size of Cube	Example of Contents by Size
000	1090581mpc	Observable universe in central cell.
00	57399mpc	Size of universe
0	3021000000pc	Laniakea Supercluster in central cell
1	159mpc	Laniakea Supercluster
2	8368421.05pc	
3	440443.21pc	The Milky Way Galaxy in centre cell.
4	23181.22pc	Size of Milky Way
5	1220.06pc	
6	64.21pc	
7	11.02LY	
8	0.58LY=36689.94au	
9	1931.05au	
10	101.63au	
11	5.35au = 800224161.33km	
12	42117061.12km	
13	2216687.43km	
14	116667.76km	
15	6140.41km	
16	323.18km	
17	17.01km	
18	0.995km	
19	0.0471km	Size of house, approx.
20	0.00248km =2.48m	A tall man would occupy approximately three cells.
21		

	0.13m	
22	0.00687m	A tardigrade (A very interesting, robust micro-animal)
23	0.000361m	
24	0.000019m	
25	0.000001m	
26	0.0000000527m	
27	0.00000000277m	
28	0.000000000146m	
29	0.00000000000769m	
30	0.000000000000404m	
31	0.0000000000000213m	
32	0.00000000000000112m	
33	0.000000000000000059m	
34	0.0000000000000000031m	
35	0.000,000,000,000,000,000,163m	
36	0.000000000000000000086m	
37	0.00000000000000000000452m	
38	0.000000000000000000000238 m	
39	0.000,000,000,000,000,000,000,0 0125m	
40	0.000000000000000000000006 6m	
41	0.000,000,000,000,000,000,000,0 00,00347m	
42	0.000000000000000000000000 347m	
43	0.000000000000000000000000 000962m	
44	0.000,000,000,000,000,000,000,0 00,000,000,506m	
45	0.000000000000000000000000 00000266m	
46	0.000,000,000,000,000,000,000,0 00,000,000,001,4m	
47	0.000,000,000,000,000,000,000,0 00,000,000,000,0738m	Planck length

Figure 37: Universal Mnemotechnic Imager

This “calibration” of the UMI is provisional. It is without a doubt highly inaccurate, and in need of a focused and systematic re-working. Nevertheless, it is important to

present it here, as a statement of the basic problem involved in creating a UMI. While the calculations and conversions were done with an online scientific calculator that was capable of handling many digit-places, there are questions about the estimated starting size. Alternate versions of this framing could be based on other anchors: on AU, or on LY, or even on the Planck length itself. It will be interesting to explore and refine this technique in the future. Frame size (19) can also be changed to that of any EBPS or DPS. The EBPS system thus entrains very discrete para-optical scale manipulations.

The main use of this frame is to compare things in size, mentally, and to be able to zoom in and out. If this gridding system were to be used to map, for example, a handful of local stars, the stars, their positions, and their relative sizes can be framed within the UMI to allow an off-line retention of the position of these bodies as well as their sizes and even any bodies that may be orbiting them. The UMI is thus a technique, which in tandem with the neocomputus and the EBPS system in general, allows for a wide variety of different mentalist framings, and serves to help us map and compare the objects in our world, on any scale. It is an example of “scientific abduction”, in the sense that, it is an idea that “fits”, even if it is currently inaccurate, and it is an idea that through testing and revision has the potential to become increasingly powerful. It is right to present it here, as an indication of the “outer limits,” of this experiment in *enic/etic* play.