

THE CHIASMUS OF TOTALITY

Gathering XI

2010



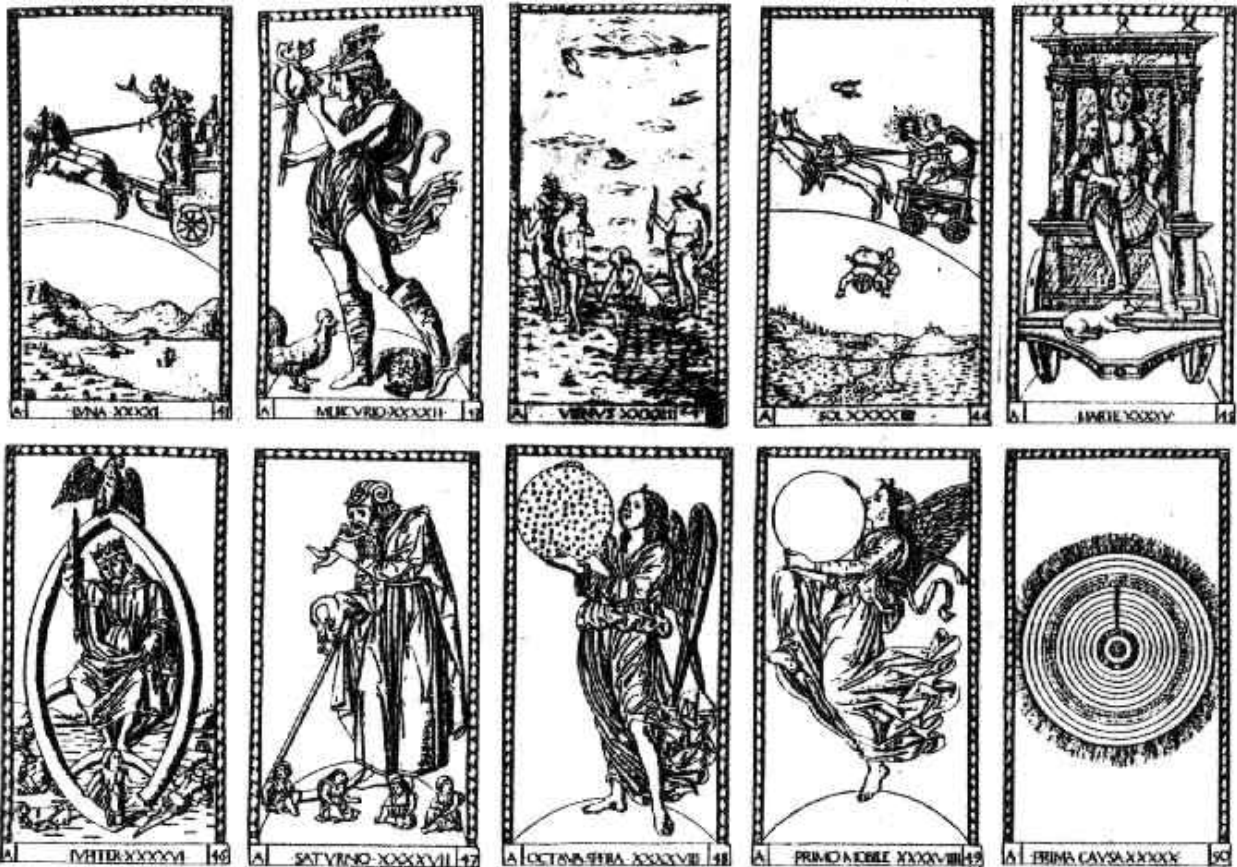
Cultural Threads

Cover illustration - *Clown Tragique* by George Rouault

It was probably this painting that much inspired David Bohm in his enquiries into wholeness. He spoke to me of how the colours created between them a sense of space quite different from that of line and perspective. The end painting *Paysage* is a supreme example.

Refrain from illusions, insist on work, and not on words. Patiently search divine and scientific truth.

Advice to Dimitri Mendeleev from his mother Maria



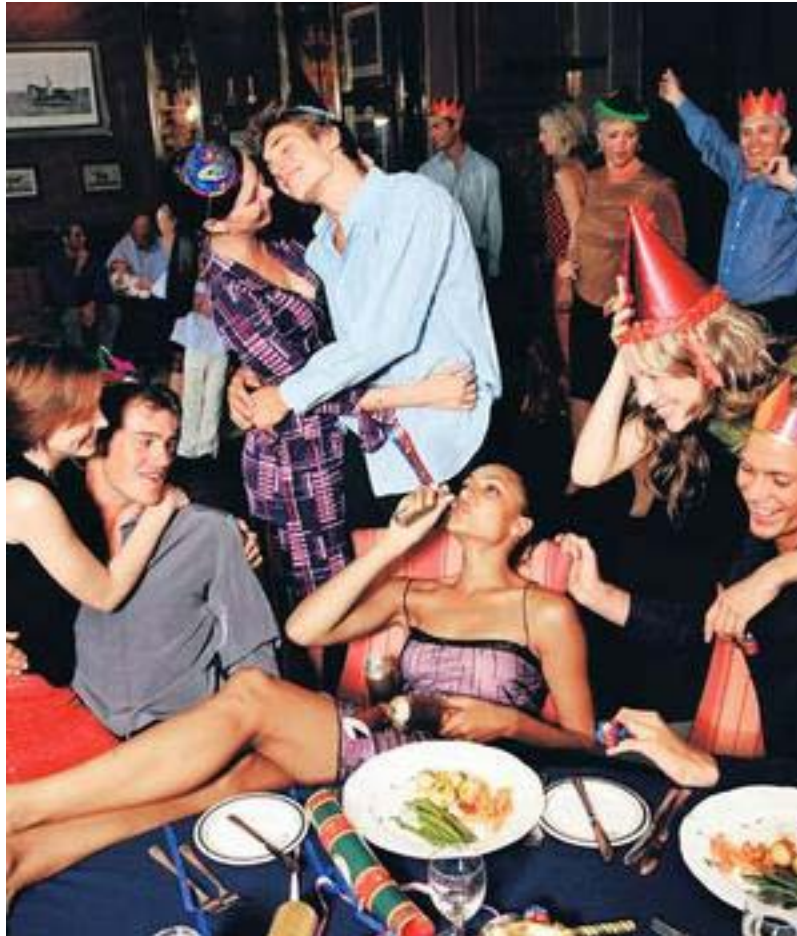
WRITINGS AND IMAGES



JORGE LUIS BORGES – THE SECRET OF THE ENIGMAS

The notion that the Sacred Scripture possesses (in addition to its literal meaning) a symbolic one is not irrational and is ancient. It is found in Philo of Alexandria, in the cabalists, in Swedenborg. Since the events related by the Scripture are true (God is Truth, the Truth cannot lie, et cetera), we must admit that as men acted out these events they were blindly performing a secret drama determined and premeditated by God. There is not an infinite distance from this thought to the idea that the history of the universe—and our lives and the most trifling detail of our lives—has an unconjecturable, symbolic meaning. Many people must have traveled this distance, but no one so astonishingly as Leon Bloy. In the psychological fragment by Novalis and in the volume of Machen's autobiography entitled *The London Adventure* may be found a

similar hypothesis: the external world—forms, temperatures, the moon—is a language that we humans have forgotten, or one that we can scarcely decipher. De Quincey made the same declaration: "Even the articulate or brutal sounds of the globe must be all so many languages and ciphers that somewhere have their corresponding keys—have their own grammar and syntax; and thus the least things in the universe must be secret mirrors to the greatest" (Autobiography, Chap. IV).

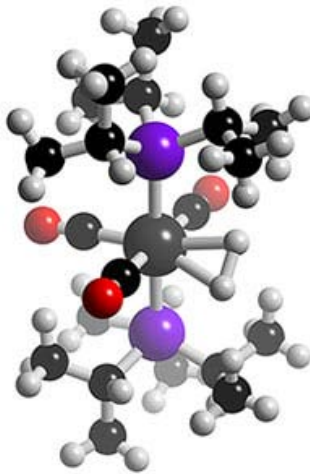


RENE DAUMAL – MOUNT ANALOGU E

Naturally we talked of mountains. He had explored all the highest ranges on our planet, and I had the feeling that with one of us at each end of a stout rope, we could that very day have attempted the most dangerous ascents. Then the conversation jumped, veered off in several directions, and reversed itself, and I began to understand the use to which he put all those pieces of cardboard which spread out before us the knowledge of the century. All of us keep a fairly extensive collection of such diagrams and inscriptions in our heads; and we have the illusion we are "thinking" the loftiest scientific and philosophical thoughts when, by chance, a few of them fall into a pattern that seems neither too conventional nor too novel. It happens as if by the effect of drafts or crosscurrents or simply by the result of their own constant shiftings, like

the Brownian movement, which displaces particles suspended in a liquid. Here, all this material was visibly outside of us; we could not confuse it with ourselves. As a garland is strung from hooks, we hung our conversation on these little images, and each of us could see the mechanism of the other's mind and of his own with equal clarity.

As in all his outward appearance, there was in this man's manner of thinking a singular combination of vigorous maturity and the freshness of a child. But above all, just as I was aware of the action of his restless and untiring legs, I was aware also of his thinking, like a force as palpable as heat or light or wind. This force seemed to consist in an exceptional faculty for seeing ideas as external objects and for establishing new links between ideas that appeared totally unrelated. I heard him—I'd be prepared to say I saw him—treat human history as a problem in descriptive geometry, then a moment later speak of the properties of numbers in terms of zoological species. The fusion and division of cells became a particular instance of logical reasoning, and language obeyed the same laws as celestial mechanics.



"Now, like you, in my reading and in my travels I had heard about a superior type of man, possessing the keys to everything which is a mystery to us. This idea of a higher and unknown strain within the human race was not something I could take simply as an allegory. Experience has proved, I told myself, that a man cannot reach truth directly nor all by himself. An intermediary has to be present, a force still human in certain respects yet transcending humanity in others. Somewhere on our Earth this superior form of humanity must exist, and not utterly out of our reach. In that case shouldn't all my efforts be directed toward discovering it? Even if, in spite of my certainty, I were the victim of a monstrous illusion, I should lose nothing in the attempt. For apart from this hope, all life lacked meaning for me.

"But where was I to look? Where could I begin? I had already covered the world, poked my nose into everything, into all kinds of religious sects and mystic cults. But with all of them it came down to the same dilemma: maybe yes, maybe no. Why should I stake my life on this one rather than on that one? You see, I had no touchstone. But the very fact that there are now two of us changes everything. The task doesn't become twice as easy: After having been impossible, it

has become possible. It's as if you first gave me, in order to measure the distance from a star to our planet, one known point on the surface of the globe. You can't make the calculation. Give me a second point, and it becomes possible, for then I can construct the triangle."

This abrupt switch into geometry was just like him. I don't know if I understood him very well, and I learned later that there was a tiny error in his reasoning. But it had a forcefulness that convinced me.

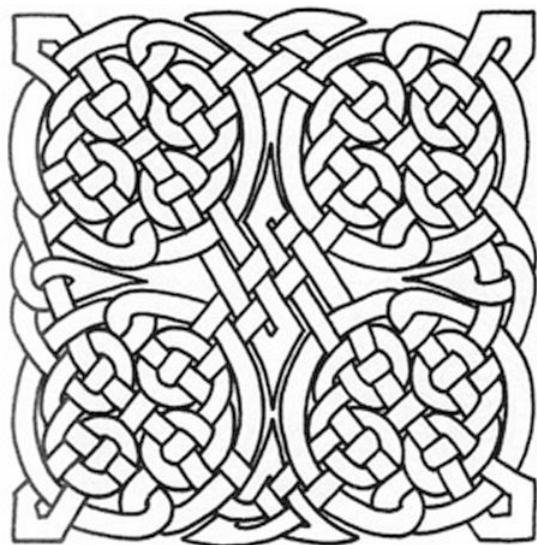


HERMAN HESSE - THE GLASS BEAD GAME

The Game had been played freely by individuals and cliques, and for a long time amiably promoted by the ministries of education, before it acquired the status of a public institution. It was first organized as such in France and England; other countries followed fairly rapidly. In each country a Game Commissioner and a supreme head of the Game, bearing the title of Ludi Magister, were established. Official matches, played under the personal direction of the Magister, were exalted into cultural festivals. Like all his functionaries in cultural life, the Magister of course remained anonymous. Aside from a few intimates, no one knew his name. Official and international communications media, such as radio and so on, were made available only for the great official matches over which the Ludi Magister personally presided. Among the duties of the Magister, in addition to conducting the public Games, was supervision of the players and the schools of the Game. Above all, however, the Magister had to keep strict watch

over the further elaboration of the Game. The World Commission of the Magisters of all countries alone decided on the acceptance of new symbols and formulas into the existing stock of the Game (which scarcely ever occurs nowadays), on modifications of the rules, on the desirability of including new fields within the purview of the Game. If the Game is regarded as a kind of world language for thoughtful men, the Games Commissions of the various countries under the leadership of their Magisters form as a whole the Academy which guards the vocabulary, the development, and the purity of this language. Each country's Commission possesses its Archive of the Game, that is, a register of all hitherto examined and accepted symbols and decipherments, whose number long ago by far exceeded the number of the ancient Chinese ideographs.

He was taking part in the annual competition of the Waldzell elite, from which he had abstained in the past two years. The competition involved working out sketches for Games based on three or four prescribed main themes. Stress was placed on new, bold, and original associations of themes, impeccable logic, and beautiful calligraphy. Moreover, this was the sole occasion when competitors were permitted to overstep the bounds of the canon. That is, they could employ new symbols not yet admitted to the official code and vocabulary of hieroglyphs. This made the competition - which in any case was the most exciting annual event in Waldzell except for the great public ceremonial games - a contest among the most promising advocates of new Game symbols, and the very highest distinction for a winner in this competition consisted in the recognition of his proposed additions to the grammar and vocabulary of the Game and their acceptance into the Game Archives and the Game language. This was a very rare distinction indeed; usually the winner had to be content only with the ceremonial performance of his Game as the best candidate's Game of the year. Once, some twenty-five years ago, the great Thomas von der Trave, the present Magister Ludi, had been awarded this honour with his new abbreviations for the alchemical significance of the signs of the zodiac — later, too, Magister Thomas made large contributions to the study and classification of alchemy as a highly meaningful secret language.





JOSEPH CAMPBELL – THE INNER REACHES OF OUTER SPACE

For myths and dreams, in this view, are motivated from a single psychophysiological source—namely, the human imagination moved by the conflicting urgencies of the organs (including the brain) of the human body, of which the anatomy has remained pretty much the same since c. 40,000 B.C. Accordingly, as the imagery of a dream is metaphorical of the psychology of its dreamer, that of a mythology is metaphorical of the psychological posture of the people to whom it pertains. The sociological structure coordinate to such a posture was termed by the Africanist Leo Frobenius (1873-1938) a cultural "monad." Every feature of such a social organism is, in his sense, expressive and therefore symbolic of the informing psychological posture. In *The Decline of the West*, Oswald Spengler (1880-1936) identified eight colossal monads of great majesty, with a ninth now in formation, as having shaped and dominated world history since the rise, in the fourth millennium B.C., of the first literate high cultures—(1) the Sumero-Babylonian, (2) the Egyptian, (3) the Greco-Roman (Apollonian), (4) the Vedic-Aryan, of India, (5) the Chinese, (6) the Maya-Aztec-Incan, (7) the Magian (Persian-Arabian, Judeo-Christian-Islamic), (8) the Faustian (Gothic-Christian to modern European-American), and now, beneath the imposed alien crust of a Marxian cultural pseudomorphosis, (9) the germinating Russian-Christian. Long

antecedent, however, to the world-historical appearances, flowerings, and inevitable declines of these monumental monads, an all but timeless period is recognized of nonliterate, aboriginal societies—some nomadic hunters, others settled horticulturalists; some of no more than a half dozen related families, others of tens of thousands. And each had its mythology—some, pitifully fragmentary, but others, marvelously rich and magnificently composed. These mythologies were all conditioned, of course, by local geography and social necessities.



DAVID BOHM – THOUGHT AS A SYSTEM

Normally this quality of proprioception exists for the body. And one of the things we need to see is the relation between the intention to move and the movement - to see immediately that relation, to be aware of it. We're usually not very aware of this intention to move, but we can be. If somebody wants to make his movements more accurate or skilled he will find his intention is not that well defined - he doesn't move the way he hopes. Somebody who wants to play the piano, for instance, has to learn that relation better so that his fingers will do what he wants them to do. So a greater quality of proprioception occurs in that regard.

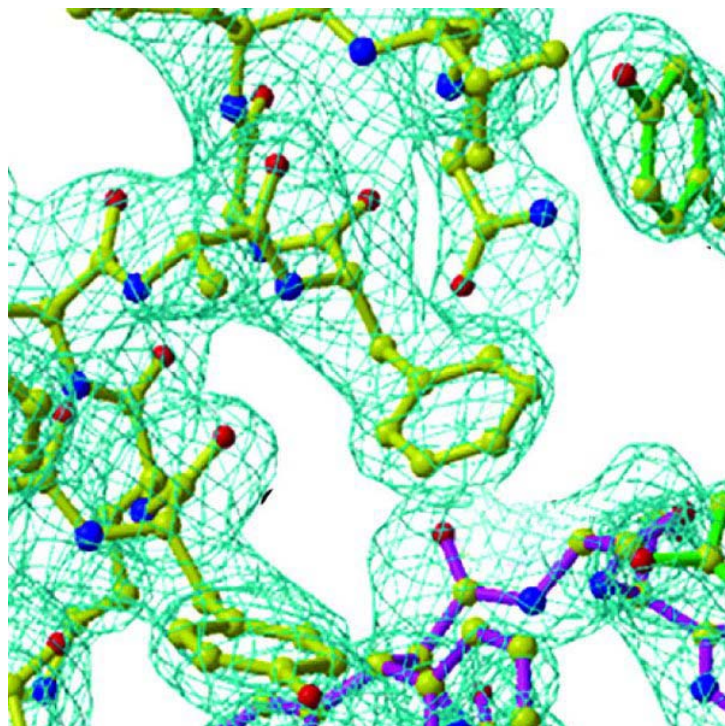
The essence of the movement may be in the intention to move, which unfolds into the whole movement. For example, we knew of a man who had a degenerative disease and was unable to move at all. He could barely talk. And yet he taught movement in a university. The question is how he could do it. You could guess that, being very intelligent and unable to move, he was somehow much more aware of the intention than we are, because we focus our attention on the result. Therefore, getting the intention right may be very crucial to making the movement right.

Thus there is some relation between the intention to move and the movement; and there is something in between that you are vaguely aware of, which is proprioception.

There is one point I would like to bring up now which is related to this. I'm going to say that thought is a movement - every reflex is a movement really. It moves from one thing to another. It may move the body or the chemistry or just simply the image or something else. So when 'A' happens 'B' follows. It's a movement.

All these reflexes are interconnected in one system, and the suggestion is that they are not in fact all that different. The intellectual part of thought is more subtle, but actually all the reflexes are basically similar in structure. Hence, we should think of thought as a part of the bodily movement, at least explore that possibility, because our culture has led us to believe that thought and bodily movement are really two totally different spheres which are not basically connected. But maybe they are not different. The evidence is that thought is intimately connected with the whole system.

If we say that thought is a reflex like any other muscular reflex - just a lot more subtle and more complex and changeable - then we ought to be able to be proprioceptive with thought. Thought should be able to perceive its own movement, be aware of its own movement. In the process of thought there should be awareness of that movement, of the intention to think and of the result which that thinking produces. By being more attentive, we can be aware of how thought produces a result outside ourselves. And then maybe we could also be attentive to the results it produces within ourselves. Perhaps we could even be immediately aware of how it affects perception. It has to be immediate, or else we will never get it clear. If you took time to be aware of this, you would be bringing in the reflexes again. So is such proprioception possible? I'm raising that question. Is it clear what the question means?



DIMITRI MENDELEYEV – PERIODIC TABLE

The periodic law, therefore, has not only embraced the mutual relations of the elements and expressed their analogy, but has also to a certain extent subjected to law the doctrine of the types of the compounds formed by the elements: it has enabled us to see a regularity in the variation of all chemical and physical properties of elements and compounds, and has rendered it possible to foretell the properties of elements and compounds yet uninvestigated by experimental means; thus it has prepared the ground for the building up of atomic and molecular mechanics.



EDWARD MATCHETT - CONTROLLED THINKING: SERIES ONE

(Primary Roulette) Ask of whole - and then successively various parts –

"How can I: -
eliminate
transfer
combine
minimise
magnify
modify

most intelligently/to the best effect?"

(Secondary Roulette) Ask of whole - and then successively of various parts

"What effects/demands/restrictions will -
A have on B, B have on A? ... etc
A have on B + C; B + C have on A? ... etc
A have on B + C + D; B + C + D have on A? ... etc.

Concentrate all your attention on a single point

Concentrate all your attention on a single line.

Concentrate all your attention on a single area.

Concentrate all your attention on a single geometric form.

Translate and transform all geometric forms into much simpler ones.

Concentrate on a single relationship between points, lines, areas or forms.

Periodic Table of the Elements																												
1	IA	H																O	2									
2		Li	IIA	Be													B	III A	C	IVA	N	V A	O	VIA	F	VII A	Ne	10
3		Na		Mg	IIIB	IVB	VB	VIB	VII B	VII	IB	IIB	Al	13	Si	14	P	15	S	16	Cl	17	Ar	18				
4		K		Ca	Sc	Ti	V	Cr	Mn	Fe	Co	Ni	Cu	Zn	30	Ga	31	Ge	32	As	33	Se	34	Br	35	Kr	36	
5		Rb		Sr	Y	Zr	Nb	Mo	Tc	Ru	Rh	Pd	Ag	Cd	48	In	49	Sn	50	Sb	51	Te	52	I	53	Xe	54	
6		Cs		Ba	*La	Hf	Ta	W	Re	Os	Ir	Pt	Au	Hg	80	Tl	81	Pb	82	Bi	83	Po	84	At	85	Rn	86	
7		Fr		Ra	+Ac	Rf	Ha	Sg	Ns	Hs	Mt	110	111	112	113	113												

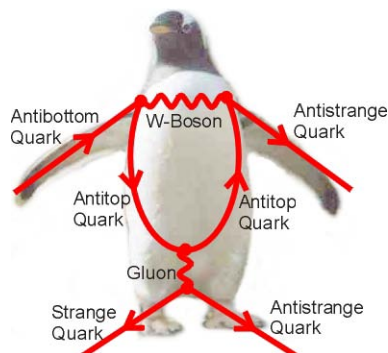
* Lanthanide Series	58	59	60	61	62	63	64	65	66	67	68	69	70	71
	Ce	Pr	Nd	Pm	Sm	Eu	Gd	Tb	Dy	Ho	Er	Tm	Yb	Lu
+ Actinide Series	90	91	92	93	94	95	96	97	98	99	100	101	102	103
	Th	Pa	U	Np	Pu	Am	Cm	Bk	Cf	Es	Fm	Md	No	Lr

LUDWIG WITTGENSTEIN

The totality of understanding is a system.

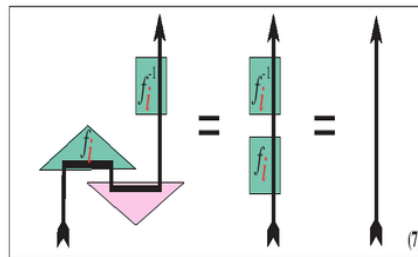
A system is in some way an infinity because I can investigate it endlessly. A system is an infinity, but one such that it can be grasped all at once.

I never speak about systems, but always only in systems...If ...I speak about a system, then I am already in another system



KINDERGARTEN QUANTUM MECHANICS

Our final example of physics by diagrams comes from the category theory-inspired view of Quantum Mechanics invented by Samsom Abramsky, who has managed to do “quantum mechanics using only pictures of lines, squares, triangles and diamonds”. This beautiful notation (or picture language, as their authors call it) is nicely explained in Bob Coecke’s [Kindergarten Quantum Mechanics](#), a very pedagogical set of lecture notes where it is applied to the problem of quantum teleportation. Bob’s thesis is that teleportation was not discovered until the 90’s (despite it’s being a relatively straightforward result in QM) due to the inadequacy of the commonly used, low-level mathematical language used to describe Hilbert spaces. Had lines, squares, triangles and diamonds been used from the beginning, teleportation would have followed almost immediately. Or so thinks Bob: go take a look at his article and see what’s your take. In any case, it’s more than sixty full-color diagrams, used instead of boring algebraic formulae, make for a fun reading (or, should I say, viewing). By the way, don’t let the mention to category theory put you off: only very basic ideas (explained in the lecture notes) are needed, if at all, in this case, and actually the author’s enthusiasm goes as far as making the bold claim that this new graphical formalism could be taught in kindergarten! Maybe that’s the gist, since i, for one, find the notation hard to follow, undoubtedly due to my old-school, algebraic upbringing. Just to give you an idea of how this preschool notation looks like and close this long post as it deserves (i.e., with a diagram), here you have how the teleportation protocol (including a correctness proof) looks like:



FRIEDRICH HEGEL (CHARLES RILEY – COLOR CODES)

The most important and yet elusive point in Hegel’s treatment of color is a “system” for creating harmony that calls for a totalizing “completeness” embracing all the hues of the spectrum in one translucent effect that he calls “the magic of color’s pure appearance.” The paradigm for this is the representation of human flesh in portraiture—the “carnation” — which unites all of the palette without giving priority to any one tone. Hegel may have had Titian in mind as he rhapsodizes upon this “summit of coloring,” but it is hard not to think of the portraits and nudes of Renoir with their intertissued veils of cool and warm tones:

The youthful and healthy red of the cheeks is pure carmine without any dash of blue, violet, or yellow; but this red is itself only a gloss, or rather a shimmer, which seems to press outwards from within and then shades off unnoticeably into the rest of the flesh-color, although this latter is an ideal interassociation of all the fundamental colors.

Through the transparent yellow of the skin there shines the red of the arteries and the blue

of the veins, and into the light and the dark and other manifold brightnesses and reflections there come tones as well of grey, brownish, and even greenish which at a first glance look extremely unnatural to us and yet they may be correct and have their true effect. . . . For this inwardness and the subjective side of life should not appear on a surface as laid on, as material color in strokes and points etc., but as itself a living whole—transparent, profound, like the blue of the sky which should not be in our eyes a resistant surface, but something in which we must be able to immerse ourselves. (Pp. 846-47)

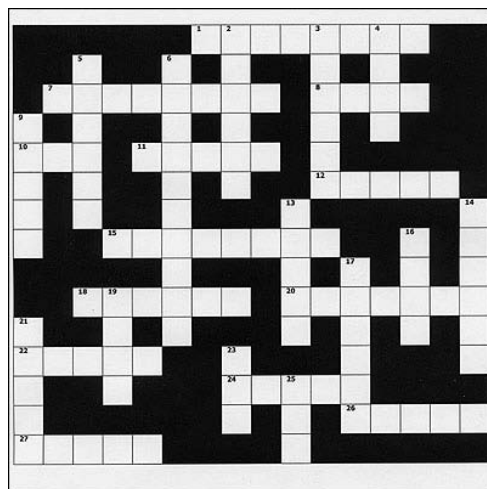


SAMUEL BECKETT – JOYCE AND NUMBER

Another point of comparison is the preoccupation with the significance of numbers. The death of Beatrice inspired nothing less than a highly complicated poem dealing with the importance of the number 3 in her life. Dante never ceased to be obsessed by this number. Thus the poem is divided into three Cantiche, each composed of 33 Canti, and written in *terzi rima*. Why, Mr Joyce seems to say, should there be four legs to a table, and four to a horse, and four seasons and four Gospels and four Provinces in Ireland? Why twelve Tables of the Law, and twelve Apostles and twelve months and twelve Napoleonic marshals and twelve men in Florence called Ottolenghi? Why should the Armistice be celebrated at the eleventh hour of the eleventh day of the eleventh month? He cannot tell you because he is not God Almighty, but in a thousand

years he will tell you, and in the meantime must be content to know why horses have not five legs, nor three. He is conscious that things with a common numerical characteristic tend towards a very significant interrelationship. This preoccupation is freely translated in his present work, see the 'Question and Answer' chapter, and the Four speaking through the child's brain. They are the four winds as much as the four Provinces, and the four Episcopal Sees as much as either.

A last word about the Purgatories. Dante's is conical and consequently implies culmination. Mr Joyce's is spherical and excludes culmination. In the one there is an ascent from real vegetation — Ante-Purgatory, to ideal vegetation — Terrestrial Paradise: in the other there is no ascent and no ideal vegetation. In the one, absolute progression and a guaranteed consummation: in the other, flux — progression or retrogression, and an apparent consummation. In the one movement is unidirectional, and a step forward represents a net advance: in the other movement is non-directional — or multi-directional, and a step forward is, by definition, a step back. Dante's Terrestrial Paradise is the carriage entrance to a Paradise that is not terrestrial: Mr Joyce's Terrestrial Paradise is the tradesmen's entrance on to the sea-shore. Sin is an impediment to movement up the cone, and a condition of movement round the sphere. In what sense, then, is Mr Joyce's work purgatorial? In the absolute absence of the Absolute. Hell is the static lifelessness of unrelieved viciousness. Paradise the static lifelessness of unrelieved immaculation. Purgatory a flood of movement and vitality released by the conjunction of these two elements. There is a continuous purgatorial process at work, in the sense that the vicious circle of humanity is being achieved, and this achievement depends on the recurrent predomination of one of two broad qualities. No resistance, no eruption, and it is only in Hell and Paradise that there are no eruptions, that there can be none, need be none. On this earth that is Purgatory, Vice and Virtue — which you may take to mean any pair of large contrary human factors — must in turn be purged down to spirits of rebelliousness. Then the dominant crust of the Vicious or Virtuous sets, resistance is provided, the explosion duly takes place and the machine proceeds. And no more than this; neither prize nor penalty; simply a series of stimulants to enable the kitten to catch its tail. And the partially purgatorial agent? The partially purged.

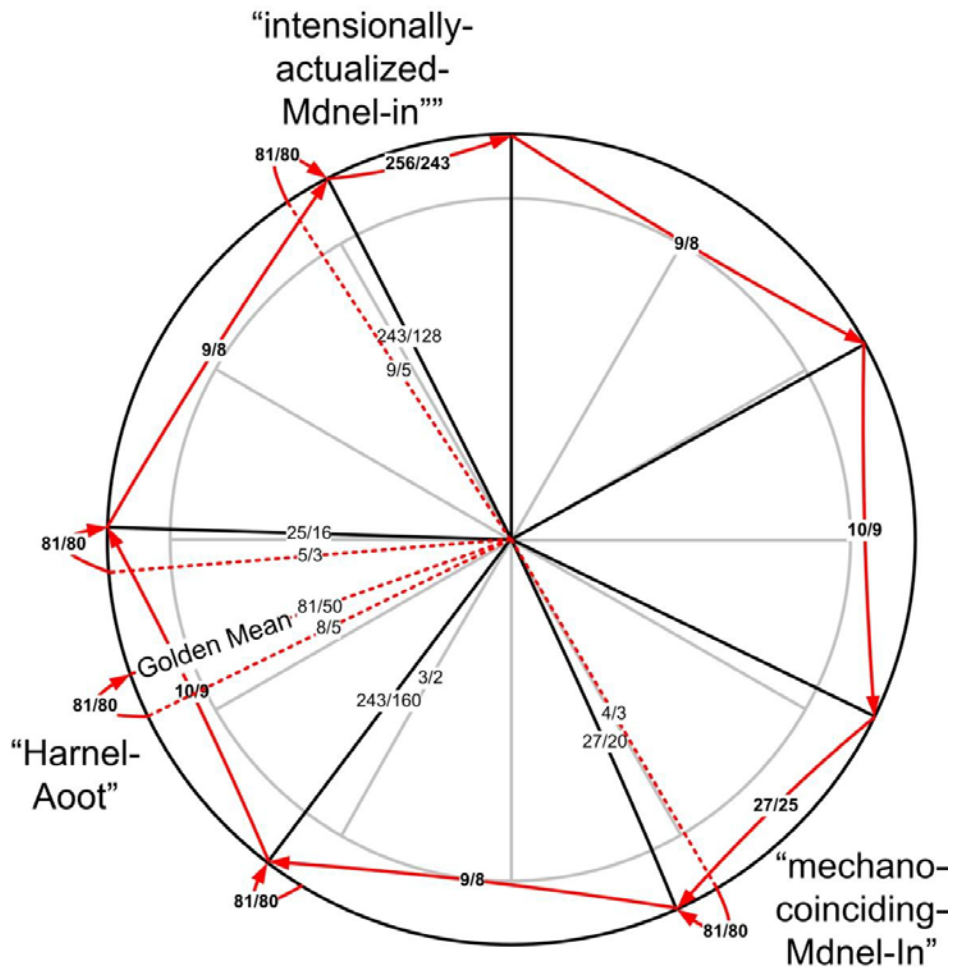


WILLIAM BLAKE

I must create a system or be enslaved by another mans; I will not reason and compare: my business is to create.

Letter to Thomas Butts

"Now I a fourfold vision see,
And a fourfold vision is given to me:
'Tis fourfold in my supreme delight
And threefold in soft Beulah's night
And twofold always, may God us keep
From single vision and Newton's sleep!"



HOMER'S ILLIAD – RING COMPOSITION (MARY DOUGLAS)

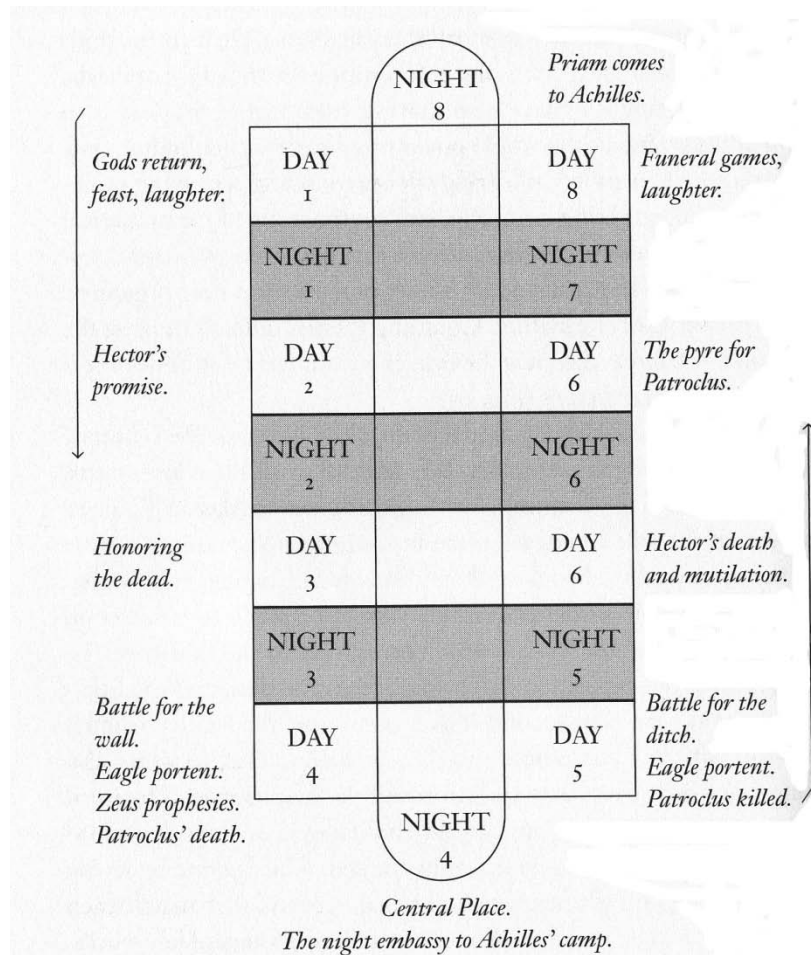


Fig. 13. The Iliad: A pattern of days and nights.



The Meaning is in the Middle.

