

B O O K

C H A M E L E O N

A P P E N D I X

W I T H

I L L U S T R A T I O N S

B Y

C . F . R U S S E L L

A P P E N D I X

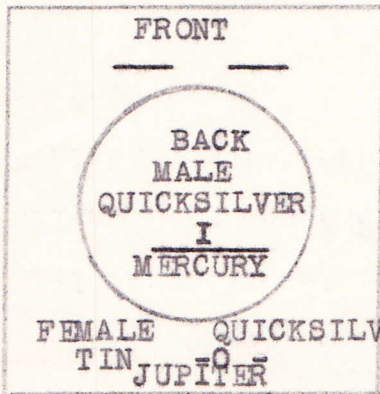
The legend is that the authors of the YI derived the basis of the work from certain arrangements of marks on the back of a "dragon-horse" which issued from the Yellow River (the HO). Confucius speaks of this. (Analects IX, viii.). The saying is that "The HO gave forth the scheme or map & the LO produced the writing, of which the sages took advantage". No Chinese, or other writer since then, has been able to make anything out of this that amounts to anything. We now explain for the first time what it is all about.

The 64 hexagrams are produced by multiplying the 8 trigrams together, two at a time. The "map of the HO" consists of these 8 trigrams arranged in the form of a FRAME which stands for a CUBE. (See illustration). Please note that we are putting this knowledge in a form intelligible to those who can read English besides giving you what cannot be found elsewhere in any language or record, outside of the Akashick Records.

The Cube, called the HOLY CUBE, represents the whole Universe of Discourse or Wisdom; thus the 64 hexagrams contain all the wisdom there is in the world. This would have to be so, since they contain the solution of all possible problems. They are produced by a logical process from the eight trigrams; thus each hexagram has a definite combination of attributions, or portion of the universal wisdom, which logically belongs to it.

Draw a square to represent the Universe. (Any enclosed space would do, but the square is most convenient.) Now, the universe as manifested in space & time has three dimensions or PRINCIPALS, as they are called in Alchemy. When these are polarised we get the six directions. The rightward & leftward directions constitute

LEFT	RIGHT
MALE SULPHUR <u>Yang</u> COPPER	FEMALE SULPHUR <u>Yin</u> IRON
VENUS	MARS
A	E



what is called the SULPHUR

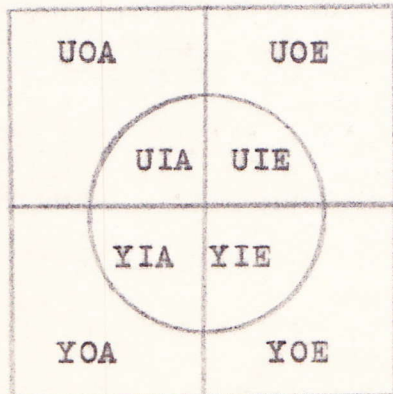
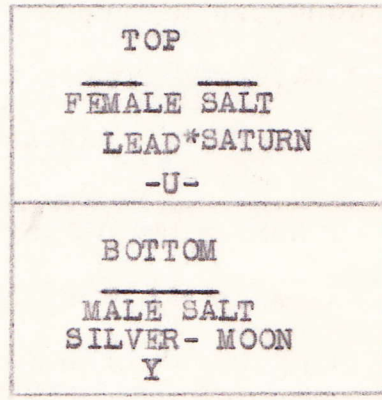
dimension or Principal. So we divide our Universe into left & right by a vertical line drawn down through the middle.

Now remember that we are using a FRAME, which stands for a CUBE, which stands for the whole UNIVERSE.

Again we divide the cube

into BACK & FRONT by drawing a circle in the middle of the square. Inside the circle is the Back, the rest of the square is the Front.

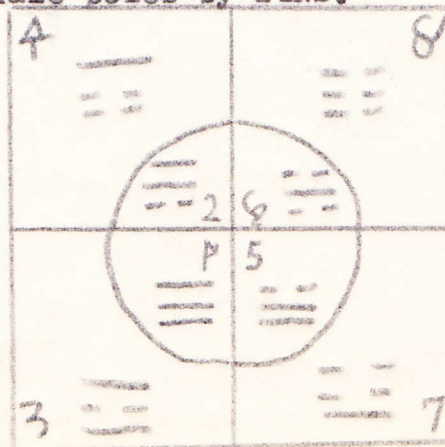
Finally, we make a third dichotomy, by dividing the universe into top & bottom, the two halves of the SALT PRINCIPAL. Put these results all in one frame & we have the primary form of the



A — E —
I — O —
Y — U —

MAP OF THE HO

The male poles of the principals are represented by YANGS, the female poles by YINS.



For study & reference it is best to place the cube in a standard position with respect to the points of the compass. Remember that this is fixed only for convenience in reference, but that, however, there is a real difference in the dimensions, though mathematicians would scoff at this. The up & down dimension, or Principal, is called SALT. The male pole of Salt is the bottom of the cube, the female pole is the top. The student or operator sits in the west facing the east. The side or half of the cube next to him is the Back or west half, referred to the metal Mercury which is the male pole of Quicksilver, the ~~xxxxxx~~ forward & backward principal. At his left hand is the North side, & the north or left half is the male pole of the rightward & leftward dimension, called Sulphur. The north or left side is the male pole of sulphur, called also Venus & Copper. These halves, sides or metals of the cube stand for the planets as named, viz., the heavenly bodies which travel in orbits, together with the essential substances as they are found in the world. Thus, e.g. Mars corresponds with IRON. All the iron in the world was brought from Mars at an early epoch. Before that time there was no iron in the earth. But iron itself is a material body which is merely the material manifestation of the iron-like or iron-spirit. Wherever this iron force is found in the universe it is called Mars, or martial essence & represented by the letter or sigil of Mars, which in English is the letter E. For convenience of reference, though we shall not deal with all these in detail, we give here the table of correspondences, bringing the LO writing up to date.

TABLE OF THE ALPHABET OF THE HOLY CUBE-

& - The AMPERSAND - which is in all & contains all -
 like the "Fool", the Tarot-card numbered 0, it rules
 over all. It stands not only for the universe, which
 contains everything, but also for nothing, viz., the
 Qabalistic Zero.----- THE SOLAR SIGIL -----
 #-----

K- the EARTH-SUN - stands for the whole cube or universe-
 has the metal GOLD attributed to it. Color-golden

THE THREE PRINCIPALS (Dimensions)

Q- SALT - up & down - power of thinking -straight lines-
 MELODY - yellow
 J- QUICKSILVER- forward & backward- power of feeling -
 HARMONY- combinations of straight & curved lines-
 colobue
 X- SULPHUR - leftward & rightward directions- power of
 will or volition - curved lines - RHYTHM

THE SIX ASTRALS

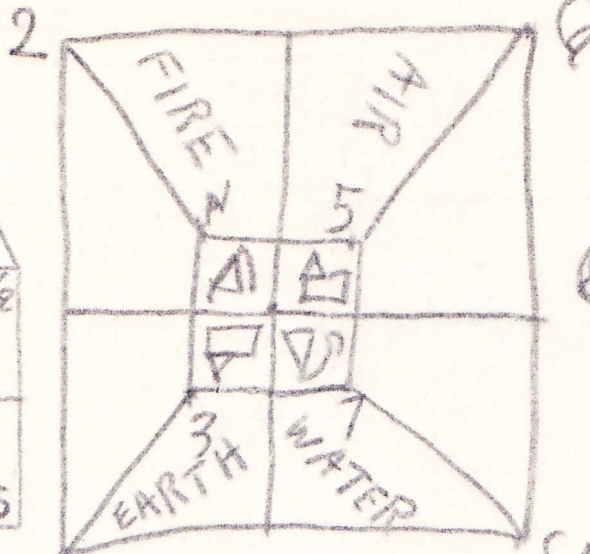
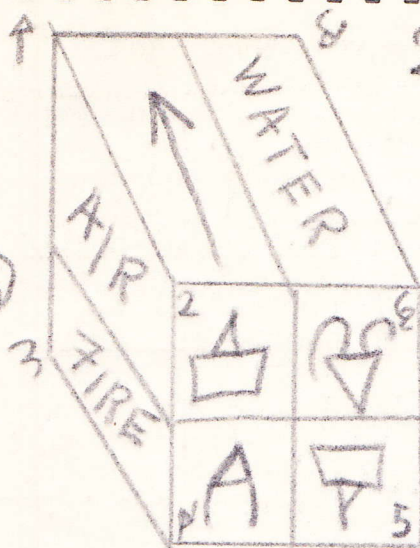
Y- the MOON- bottom of the cube - male salt pole -
 SILVER- contains points 1,5,7 & 3- color white-
 I- planet Mercury, which is the astronomical Venus.
 Conversely, the astronomical Mercury is Our Venus.
 This is the way it really is & always was understood
 before Copernicus.- the back of the cube, male
 Quicksilver pole-contains points, 1,2,6,5- orange
 A- VENUS- COPPER- left side of the cube, male sulphur
 pole- contains points,1,3,4,2- green.
 U- SATURN- LEAD- top of the cube, contains points 8,4,2,6-
 female salt pole - black.
 O- JUPITER- TIN- front of the cube- points 8,7,3,4-
 female Quicksilver pole - blue.
 E- MARS- IRON- right side of the cube- female sulphur
 pole- points 8,6,5,7- red.

THE FOUR VITALS (or Elementals)

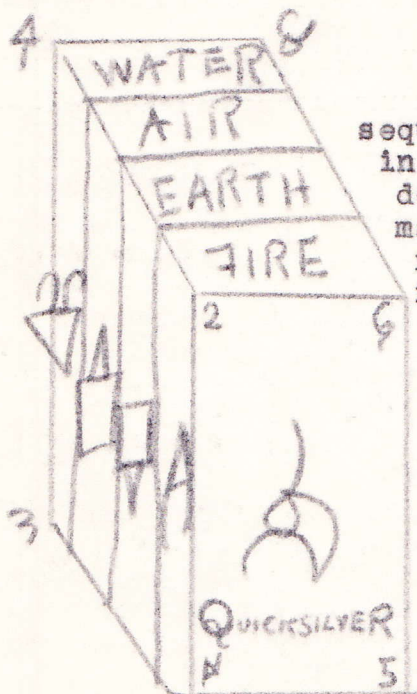
S- FIRE P-AIR V-WATER D-EARTH

There are five kinds
 of vitals or elements - viz., crystal vitals, minor &
 major; astral or "Persian" vitals, minor & major & the
 Electric Vital. Crystals vitals are quarters of the
 cube cut or sliced along or parallel to the direction of
 the principal (dimension). Astral vitals are halves of
 metals, or quarters of the cube cut across the dimension.
 See illustration. Each hexagram refers to a small block,
 one sixty-fourth of cube. Each block or hex has six faces.
 The vitals are sexed, male & female. There are five to
 each face, hence each hex has, six times five equals
 thirty elements. These are represented by distinguishing
 sigils which are painted on the blocks, using sixty-four
 different colors.

QUICKSILVER



CRYSTAL ELEMENTS

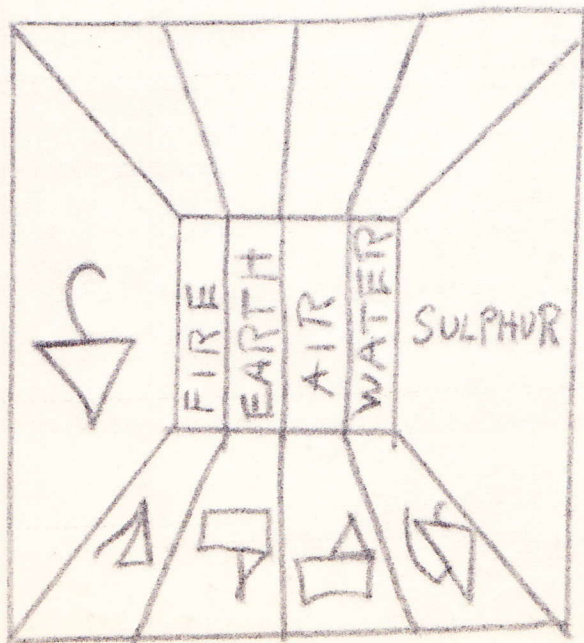


Thus the crystal elements count the corners in a circular sequence, from point 1 which is fire in all three principals, then count deosil, FIRE, AIR, WATER, EARTH on the male metal, then go through to the female metal & beginning with the female earth pole, count deosil, earth, female fire, female, air, & end at point 8 which is the female crystal water point in every principal.

The astral elements, here the Electric are shown-are quarters counted straight through the cube in each principal. Each electric element contains 16 hexes, one layer thick & four square.

The minor & major Persian elements are described elsewhere.

ELECTRICK ELEMENTS



LETTER	Sign of ZODIAC	THE TWELVE CRYSTALS		CRYSTAL ELEMENT
		POWER	POINTS Male Female	
N-	PISCES -	DESTINY-	1 - 5	Fire of Sulphur
M-	AQUARIUS-	EQUILIBRIUM -	1 - 2	Fire of Salt
L-	CAPRICORN-	PRACTICALITY-	2 - 4	Air of Quicksilver
G-	SAGITTARY-	RESOLUTION -	4 - 8	Water of Sulphur
Z-	SCORPIO-	UNDERSTANDING-	7 - 8	Water of Salt
C-	LIBRA -	JUDGMENT -	5 - 6	Air of Salt
B-	VIRGO -	SOBERNESS-	2- 6	Earth of Sulphur
T-	LEO -	ENTHUSIASM-	6- 8	Water of Quicksilver
F-	CANCER -	INITIATIVE-	5 - 7	Earth of Quicksilver
H-	GEMINI-	SUCCESS -	1 - 3	Fire of Quicksilver
R-	TAURUS -	THE DEED -	3 - 4	Earth of Salt
W-	ARIES -	THE EVENT -	3 - 7	Air of Sulphur

(Note that one crystal equals two points; the point on the male metal of the principal is the male crystal element; the opposite polar point is the female crystal element. Thus, for example, point 3 (#3) is Male Crystal Air of Sulphur; #7 is Female Crystal Air of Sulphur; & so on.)

MALE CRYSTALS FEMALE

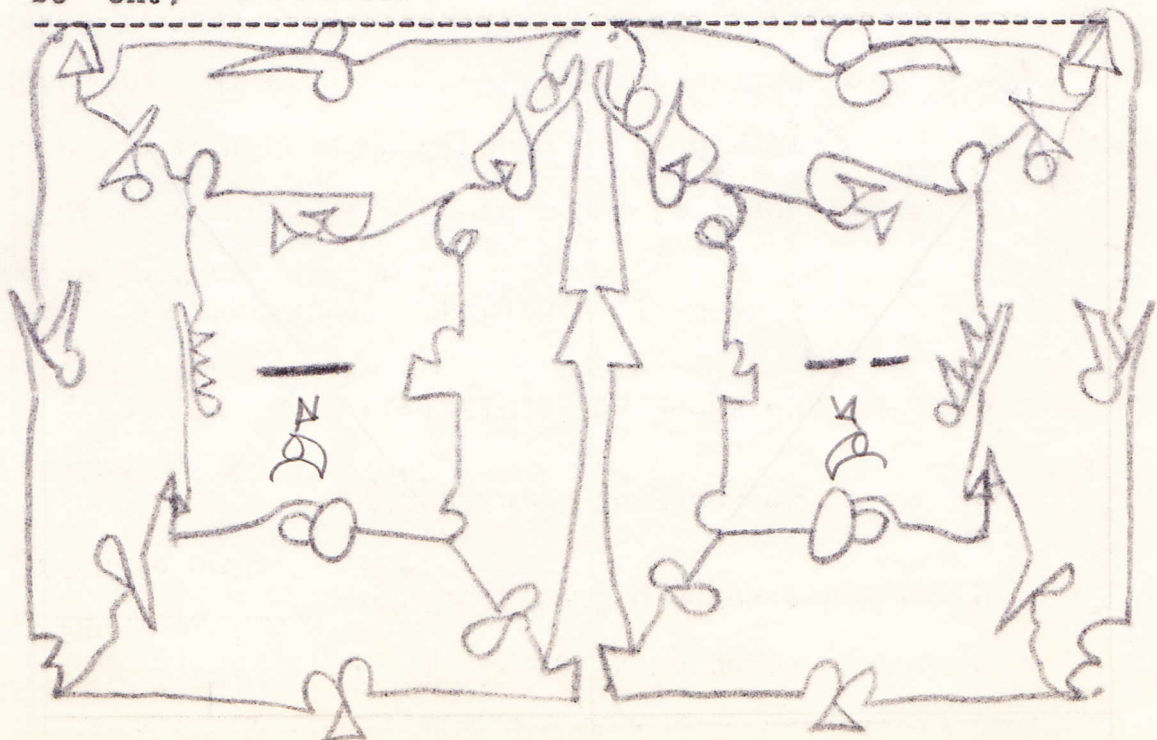


TABLE OF SIGILS - ALPHABET OF THE HOLY CUBE

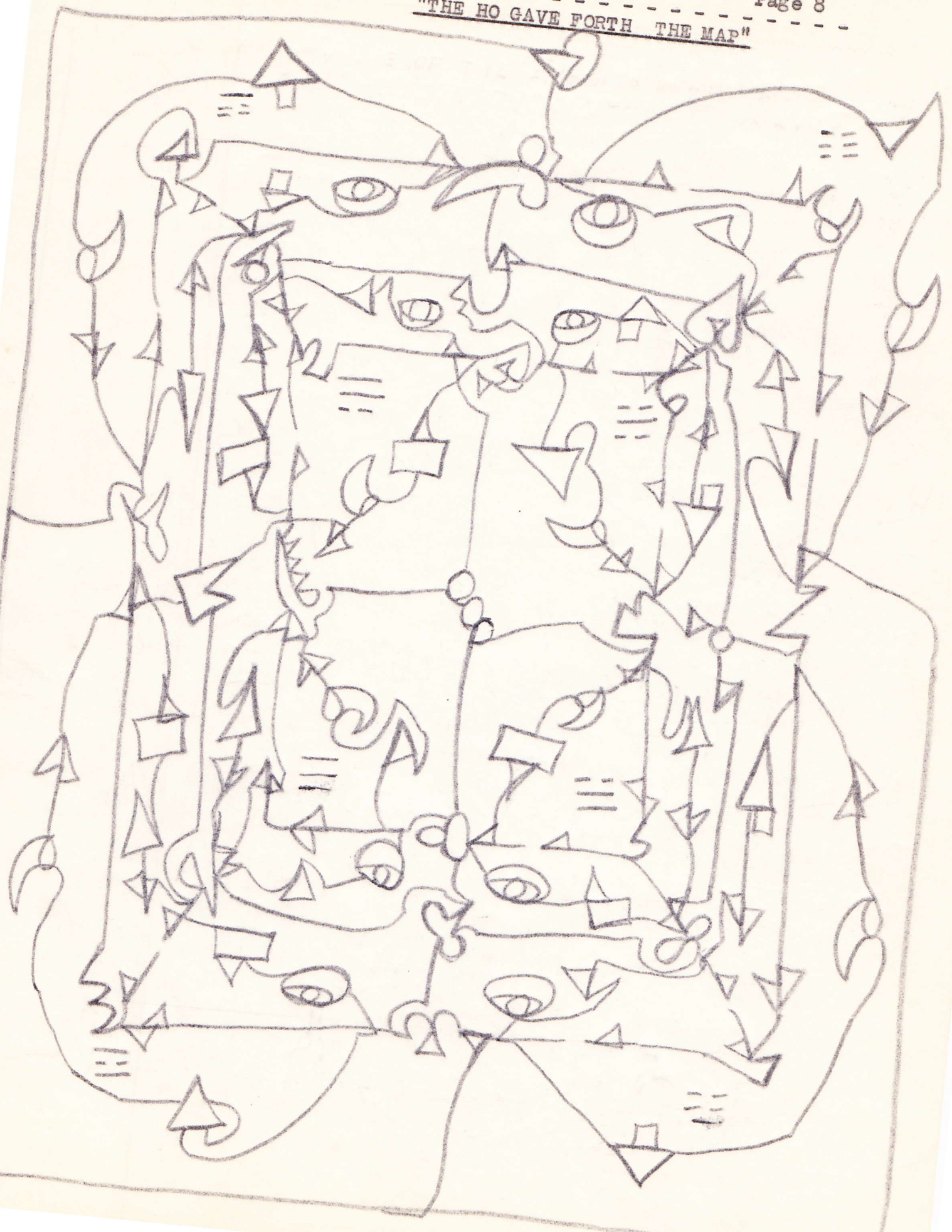
"ORDER & VALUE OF THE ENGLISH ALPHABET"
 THE "YETZIRATICK SECRET SCRIPT"

Letter	Sigil		Letter	Sigil		Letter	Sigil	
	Male	Female		Male	Female		Male	Female
A			I			Q		
B			K			R		
G			L			W		
D			M			Y		
H			N			E		
V			S			F		
Z			O			J		
C			P			U		
T			X			&		

PRINCIPALLY DIFFERENTIATED TABLE OF ELEMENTAL SIGILS OR VITALS

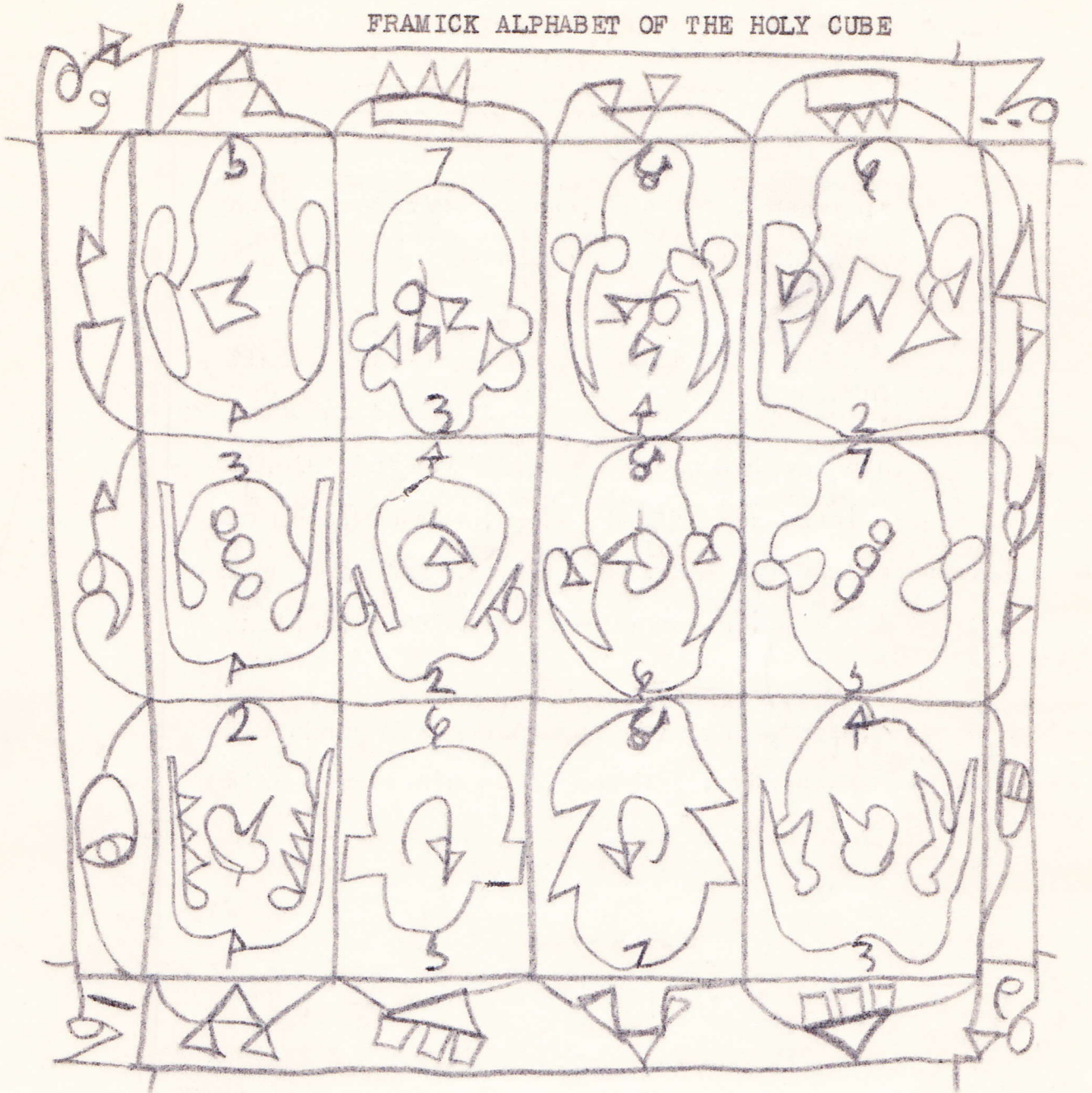
	FIRE	AIR	WATER	EARTH
SULPHUR				
QUICK-SILVER				
SALT				

"THE HO GAVE FORTH THE MAP"



"THE LO PRODUCED THE WRITING"

FRAMICK ALPHABET OF THE HOLY CUBE



Now, the lowest gram of a trigram is the Salt gram, the middle is the Quicksilver; the top gram is the Sulphur gram. Thus, the point which is on the bottom, the back & the left, is represented by three male grams, viz, three yangs, thus- . Point 2 is on the top, back & left, hence is represented by a yin, a yang & a yang, thus ; point 7 is on the bottom, front & right, hence is represented by . Similarly, with the other points & . In the following table we give the correspondences of the trigrams to points or numbers, the chinese names, the Yetziratick attribution, the sephirotick sphere, according to the Tree of Life of the Qabalah, the planetary spheres, the meaning or significance in Divination & the color & spiritual interpretation.

 TABLE OF TRIGRAMMICK NAMES, NUMBERS & CORRESPONDENCES

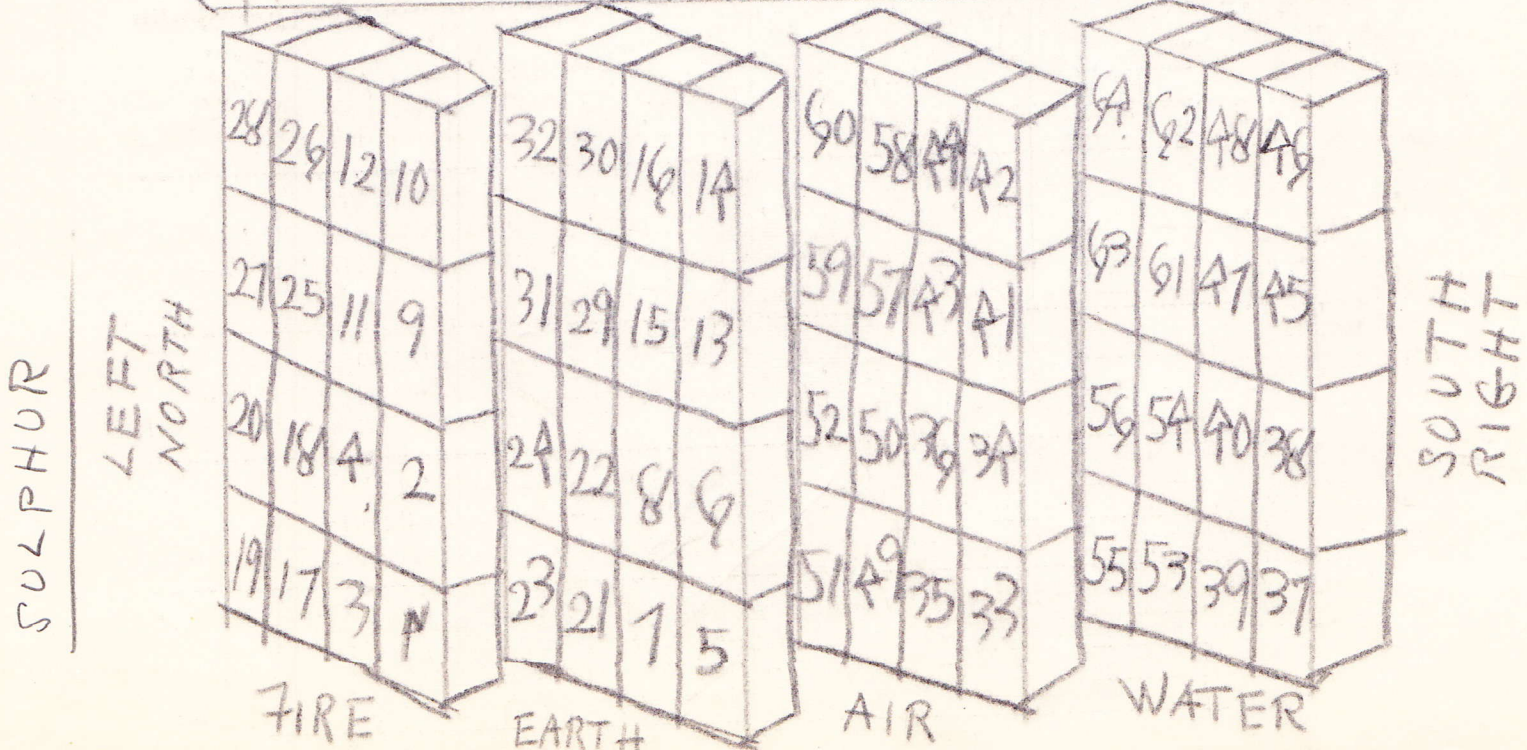
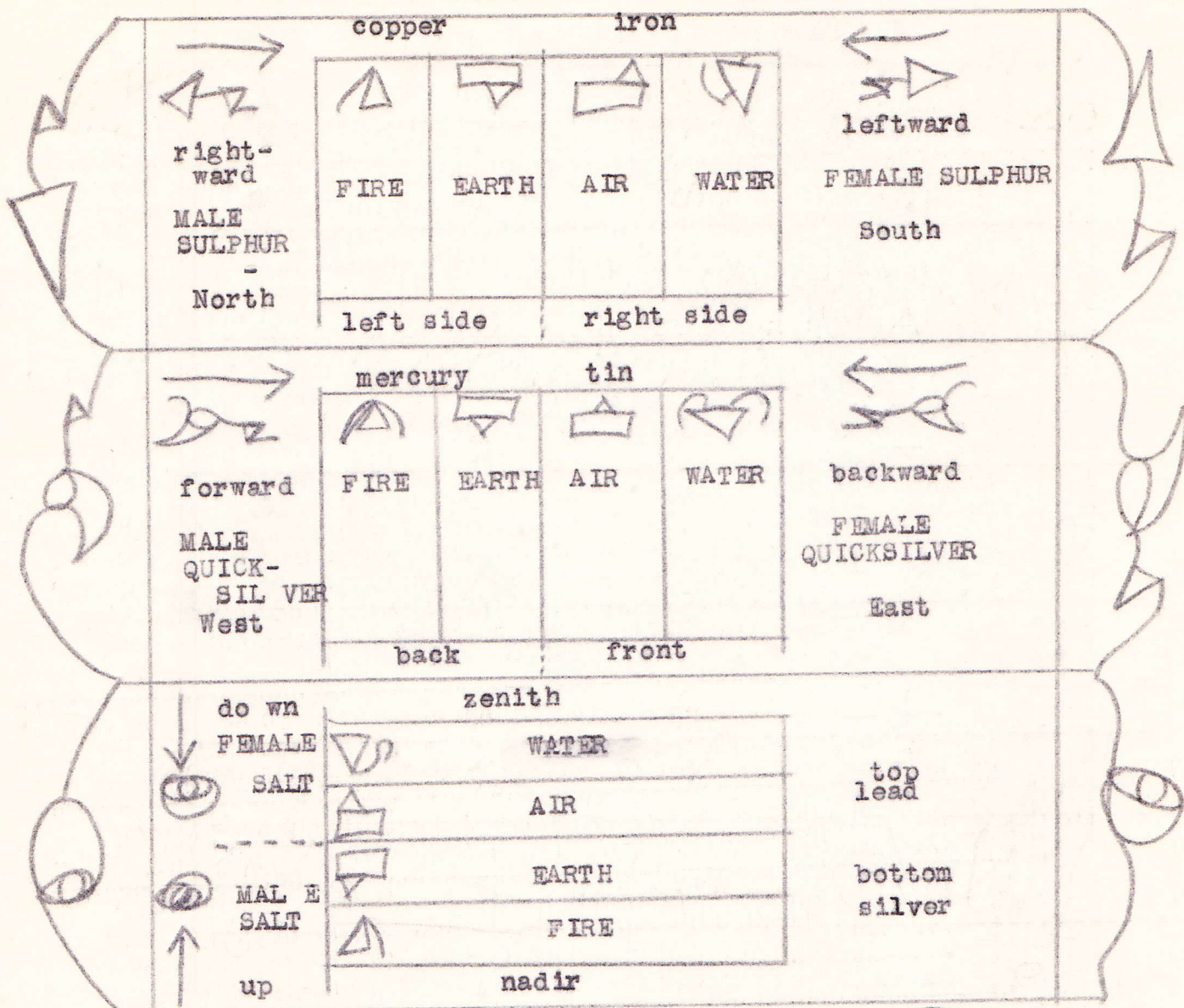
(Gnosis)

#1	_____	<u>KHIEN</u> - Lingam - DAATH (&c) - Sphere of SATURN Heaven, the sky - the creative impulse - untiring strength or power - black, brown & gray.
#2	_____	<u>SUN</u> - Air - HOD (Splendor) - Sphere of MERCURY - Wind - wood - flexibility - penetration - mind - mental conception - orange.
#3	_____	<u>LI</u> - So_1 - TIPHARETH (Beauty) - Sphere of the Sun - Realisation, realised self, Spirit - Self - Manas - Brightness - Elegance - Lightning - yellow -
#4	_____	<u>KAN</u> - Earth (element) - NETZACH (Victory) - Sphere of Venus - Material, solidifying, body - Hills, mountains, resting, act of arresting, stopping, green.
#5	_____	<u>TUI</u> - Water - CHESED (Mercy) - Sphere of JUPITER - The soul, pleasure, complacent satisfaction, Collected water as in a marsh, pond or lake - Easy movement - blue.
#6	_____	<u>KHAN</u> - Luna - YESOD (Foundation) - Sphere of the MOON - Restriction - fixation - peril - difficulty - darkness - defiles - caves - rain - clouds - springs - rivers - violet.
#7	_____	<u>CHAN</u> - Fire - GEBURAH (Strength) - Sphere of MARS - Will - thunder - moving, exciting power - red.
#8	_____	<u>KHWAN</u> - The Earth (sphere of the planet, earth) - - MALKUTH (Kingdom) - Yoni - expansion to infinity - capaciousness - submission - flesh color.

Now, when we divide the single or major cube into the eight trigrammick or major points & then divide each of these majors into eight minor points we get the 64-fold, hexagrammick or double cube. The eight minors are arranged in the eight majors just as the eight majors are arranged in the cube as a whole. Thus, for example, minor point 3 of major point 5, is the minor point on the 3 corner of the 5 corner; this is Hexagram #35. To find the hexagrammick, logical number, subtract 1 from the major, multiply by 8 & add the minor number. Thus 5, the major, minus 1 is 4, times 8 is 32, plus 3, the minor, makes #35. Or, minor 3 of major 2, for example: 2 minus 1 is 1 times 8 is 8 plus 3 is #11, which is the number of the hexagram on the 3 corner of the major 2 point.

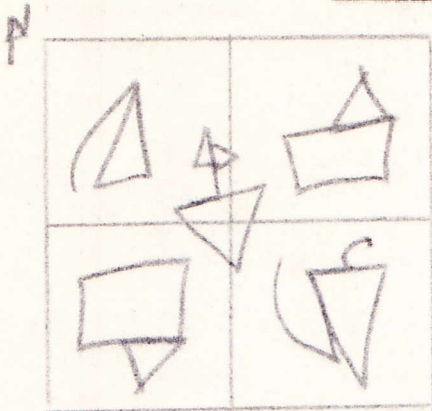
Now, when the cube of hexagrams is taken down in a certain regular manner & laid flat, we get what is called the LOGICAL SQUARE. The following tables will help to show that what can be done with the cube can be done in another, but corresponding fashion, in the Logical Square. It is important to understand the two parallel methods of working.

TABLE OF ELECTRICK ELEMENTS

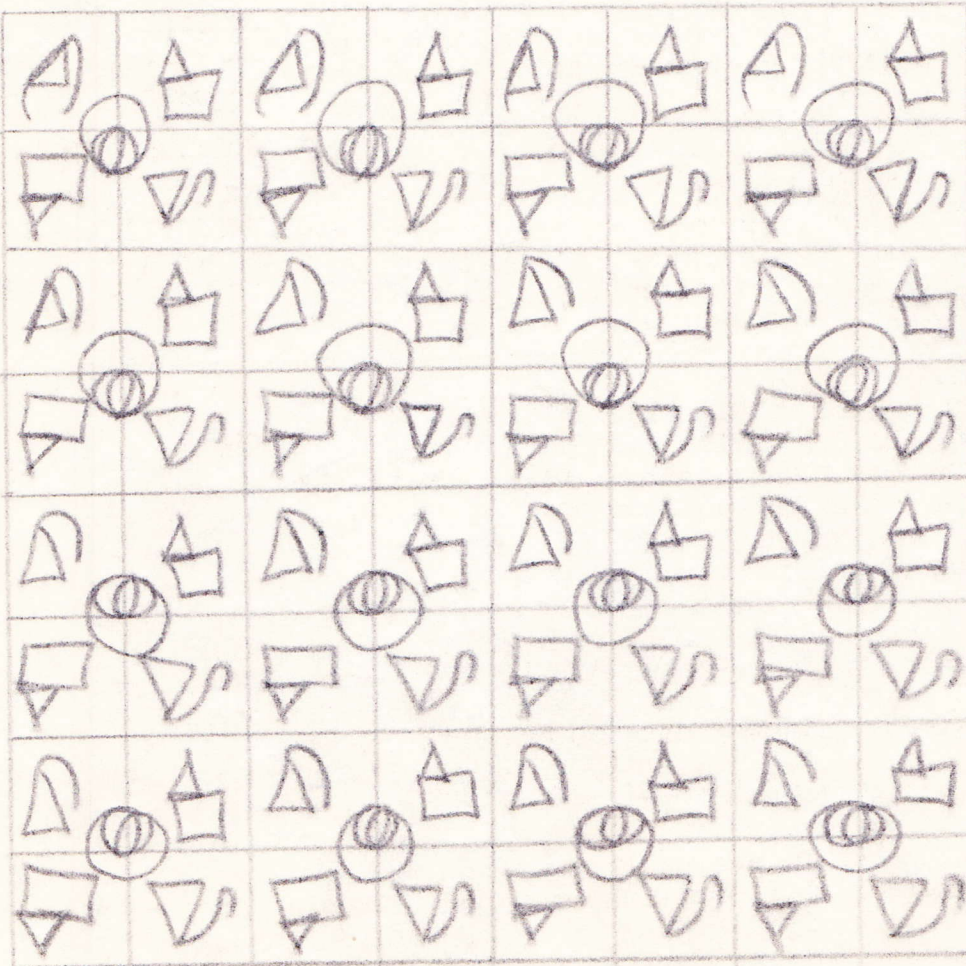
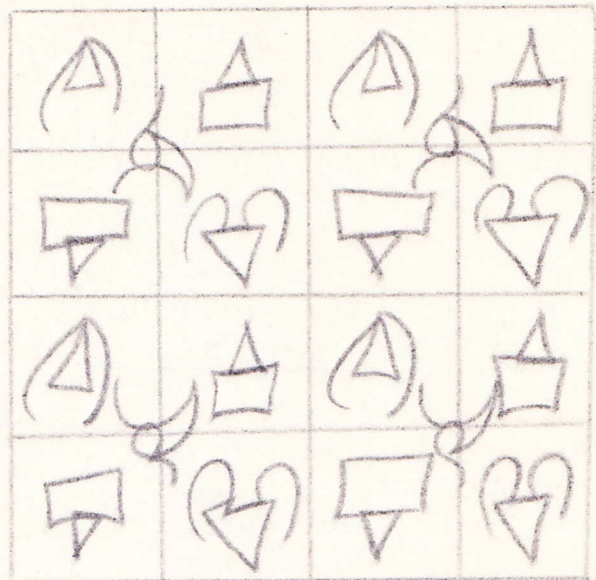


When the cube is taken down in the regular way & laid flat in the LOGICAL SQUARE, the Electrick Elements fall into quarters in a symmetrical manner, thus:

ELECTRICK ELEMENTS IN THE LOGICAL SQUARE



The first quartering makes the sulphur electrick elements. Quarter these & we get the quicksilver elements, which quartered give the salt elements.



If there were a fourth dimension, which there is not, a fourth quartering would give the electrick elements of the fourth dimension, which would involve a scheme of points represented by quadrigrams, viz. having, four instead of three grams or places—such however is only a logical fiction, since after the third, we go back to the second

dimension, not on to a fourth. The three-dimensional world, is the physical; the two-dimensional is the astral plane & the one-dimensional the higher Devachanick. Beyond that, the human mind cannot grasp things, not otherwise than with the abostick concept of the thirty aethyrs.

The up & down rows of the LOGICAL SQUARE, or files, are each one a major point, or eighth of the cube; the cross, horizontal rows or ranks, are the minors; thus there is a minor 1 in each of the eight majors & each of the eight majors contain eight minors.

THE LOGICAL SQUARE

		<u>Major #s of files</u>							
		A	2	3	4	5	6	7	8
<u>Minor #s of ranks</u>	A	1	9	17	25	33	41	49	57
	2	2	10	18	26	34	42	50	58
	3	3	11	19	27	35	43	51	59
	4	4	12	20	28	36	44	52	60
	5	5	13	21	29	37	45	53	61
	6	6	14	22	30	38	46	54	62
	7	7	15	23	31	39	47	55	63
	8	8	16	24	32	40	48	56	64

Thus, if we take, for example hexagram #35, which is minor 3 of major 5; from our tables we can determine its Electric Elements, thus - Salt Fire; Quicksilver Earth & Sulphur Air.

This means that it is on the first or fire level of salt, the up & down dimension; the second or earth layer of quicksilver, the forward & backward dimension & on the third or air slice (astral quarter) of sulphur the rightward & leftward dimension, or principal. We can thus determine the elemental attribution of a hex in three ways: (1) count it in the cube (2) count it in the logical square, & there is a third or grammick method of finding it.

Thus, if we place the two trigrams, the minor & major of the hexagram side by side (see illustration below) we can show this method.

#35 *

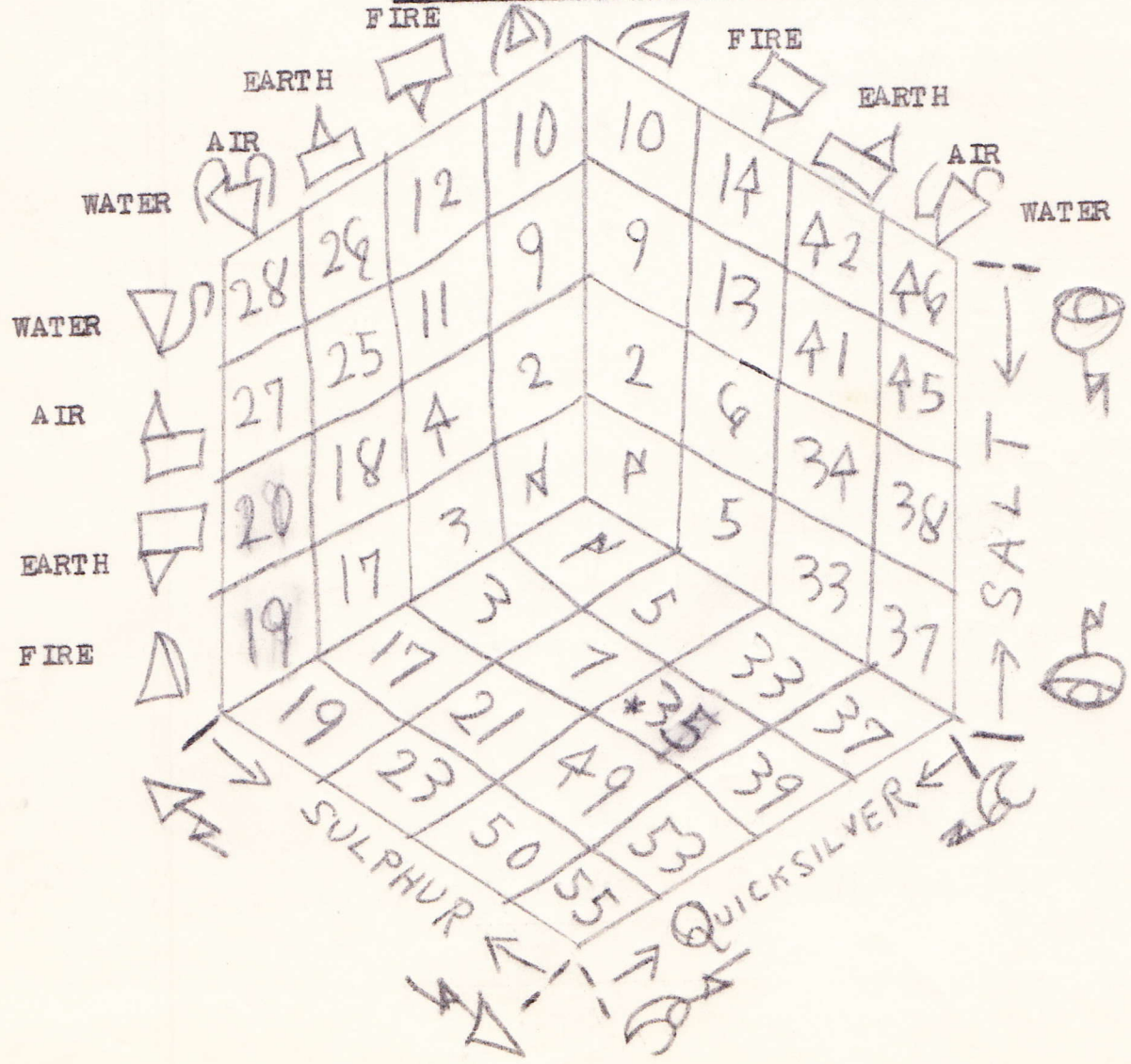
GRAMMICK DETERMINATION OF ELECTRICK ELEMENT

_____	SULPHUR	— —	AIR	— —
— —	QUICKSIL- VER	— —	EARTH	— —
_____	SALT	— —	FIRE	_____
MINOR #3			MAJOR # 5	

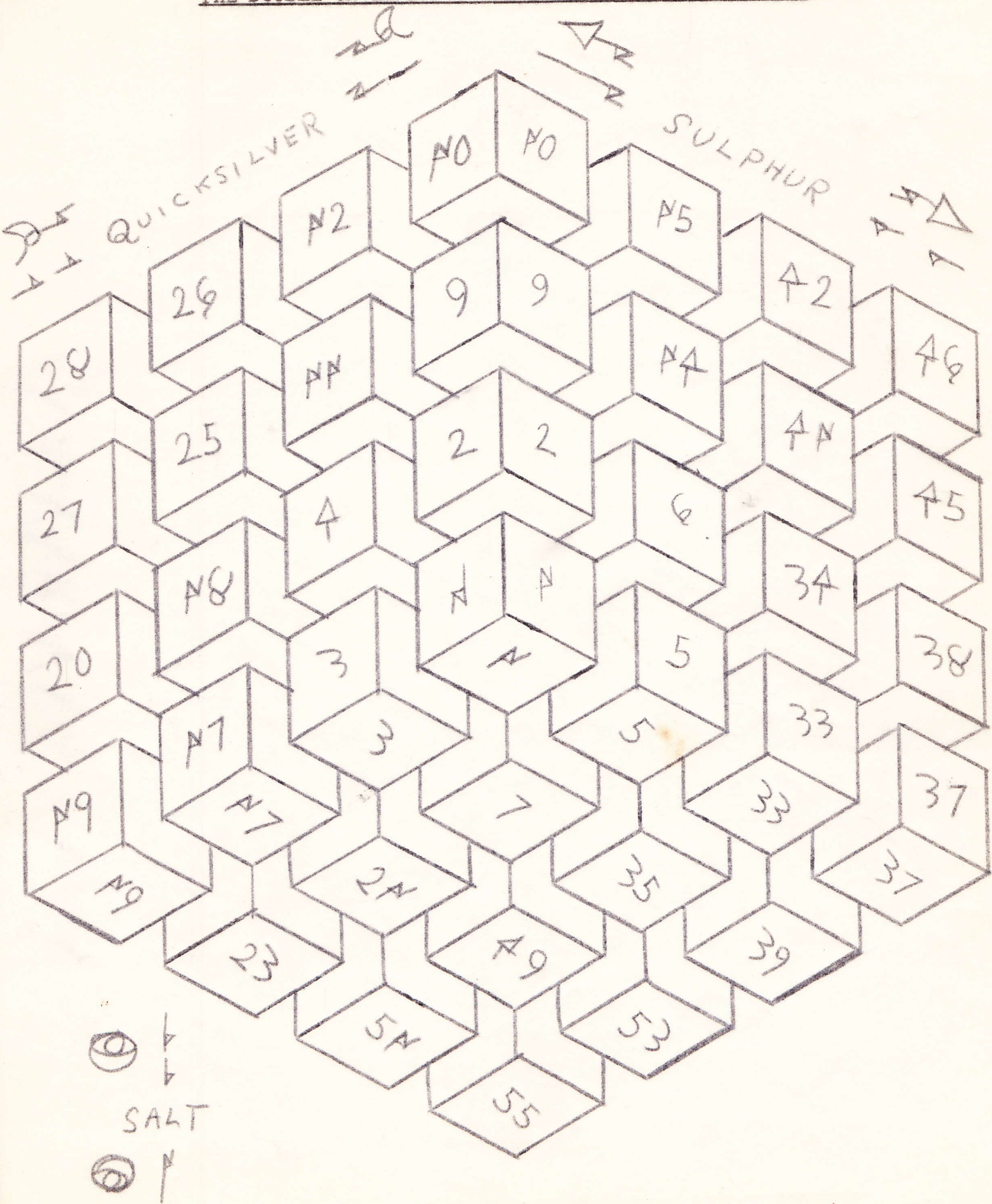
35

In adding grams we place the minor gram under the major gram to make a digram. These are the four HSIANG of the YI: the "old Yang" — — is FIRE; the "young Yang", — —, is EARTH; the "young Yin", — —, is AIR & the "old Yin", — —, is WATER.

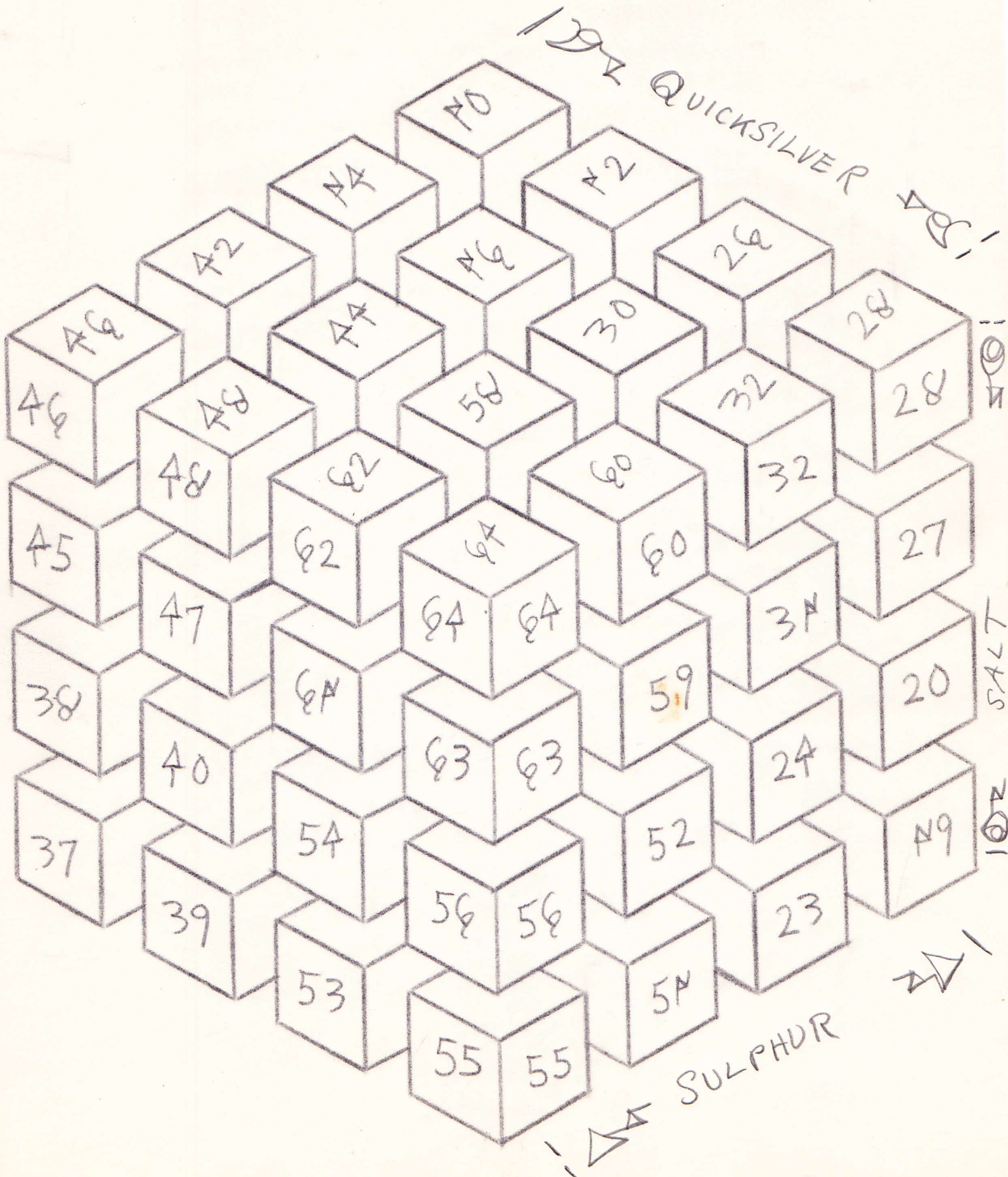
FRAME SHOWING ELECTRICK ELEMENTS IN THE CUBE



THE DOUBLE OR HEXAGRAMMICK CUBE - Triple Male View



THE DOUBLE or HEXAGRAMMICK CUBE - TRIPLE FEMALE VIEW

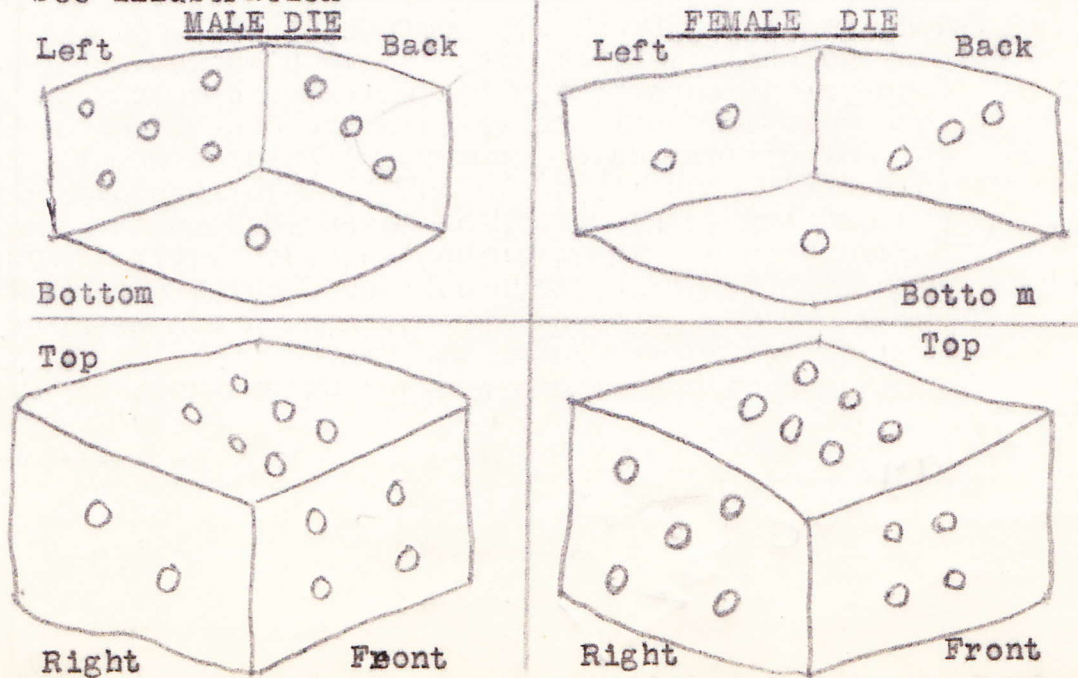


The preceding synopsis of some of the details as given in "THE PRIMER OF THE HOLY CUBE" gives an idea of the part each Hex may play as a component of the universal wisdom & how its attributions are derived for purposes of divination & the application of its own particular wisdom. The 27 letters or sigils, which constitute the Yetziratick Alphabet are components of the Word, the Logos, which was in the beginning & by which all things were made - the Alpha & Omega, which utter'd, created the Universe, the Earth & Humanity. We will now describe the standard method of erecting a Hexagram.







Two dice are used, which are thrown upon the Logical Square, placed so that Hex #1 is at the corner nearest the magical East.

The Atlantick Dice are made so that the pips are shaped & related thus - 1 on the bottom, 6 on the top; 3 on the back, 4 on the front; the male die has 5 on the left & 2 on the right; the female die has the 5 on the right & the 2 on the left.

See illustration-----



While casting the dice the operator or operators concentrate on the question or purpose of the erection. The male die is thrown from the left hand of a male or the right hand of a female; the female die is thrown from the right hand of a male or the left hand of a female. The first throw of the two dice is the salt, the second gives the quicksilver grams of minor & major & the third throw gives the sulphur grams of the minor (male die) & the major trigram (female die). Suppose that the pips which turn up ^{are} 1, 2 & 6 for the male or minor die & 5, 3 & 5 for the female; the hex is calculated as follows:

<u>MALE THROWS</u>		<u>FEMALE THROWS</u>	
	6 (even, hence yin)	<u>Sulphur Throw</u>	5 (odd) 
	2 (even)	<u>QUICKSILVER THROW</u>	3 (odd) 
	1 (odd, hence yang)	<u>SALT THROW</u>	5 (odd) 
(CHAN)	Minor #7		Major #1 (KHIEH)

1 minus 2 is 0 times 8 is 0 plus 7 is #7 Hex (WU WANG) which would be the oracle answering the questions or giving the forces to work out a given problem.

The scheme of the YI is designed to equip the operator to solve any sort of problem, for it is not only built on a perfect & complete logical foundation, but allows for the "infinite & unknown factor which" would be likely to *ruin* the results if one should depend upon unaided reason alone.

The cube is a logical framework for the whole universe, hence there is nothing which cannot be represented therein. Logick, as you know, is the science & art of thought in general, or pure reasoning. It gives the forms & substance of all language or syllogism. The cube provides the basis of a perfect geometry & algebra of Logick.

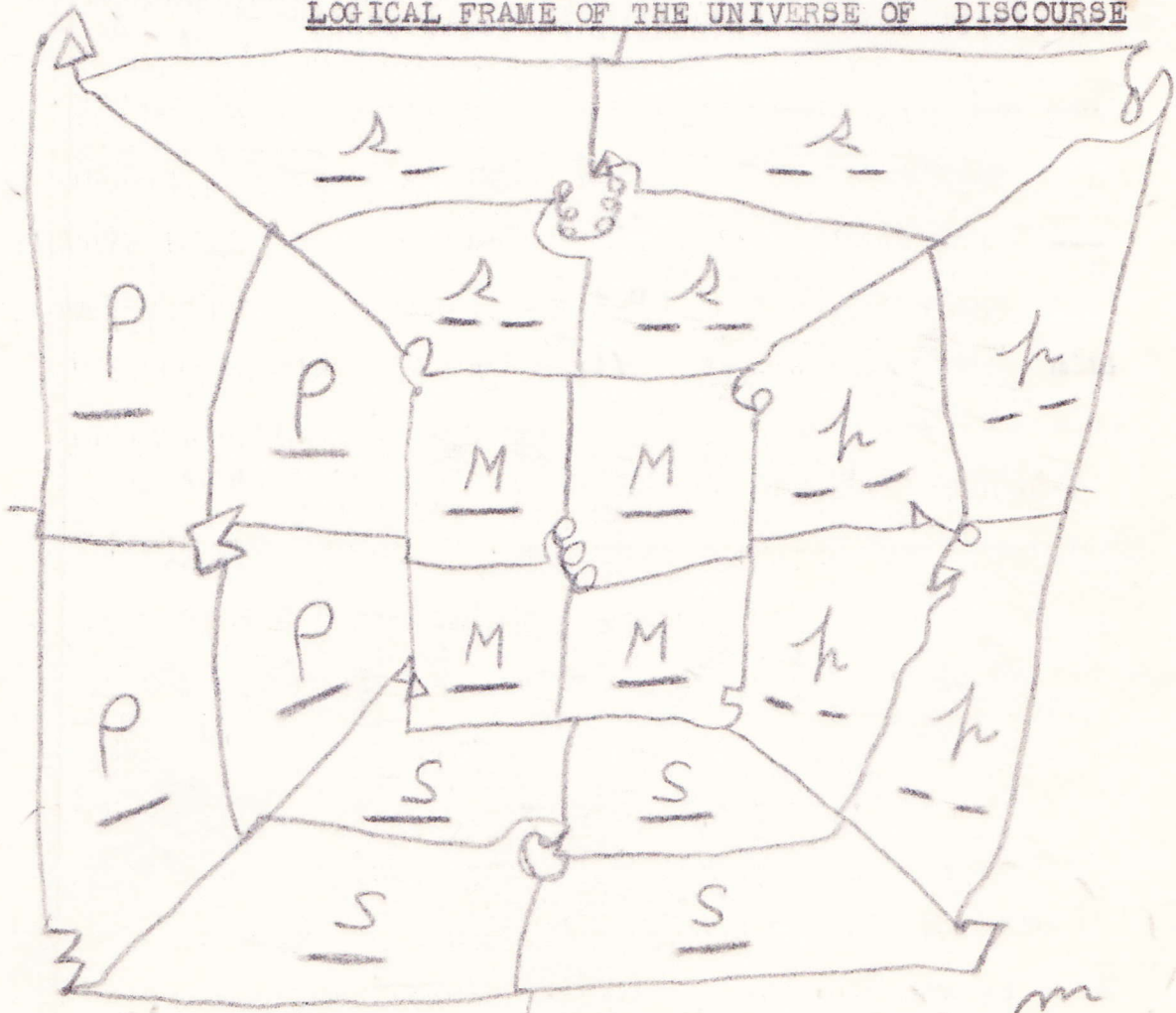
Aristotle is regarded as the father of Logick, not
otherwise than Euclid, as the originator of Geometry.
The *Dionysian* Mystery School was aware of this.
In a previous life Aristotle was an Initiate of the
School of Ephesus, together with Alexander the Great.
Later on, as Aristotle, he developed the work which
transmitted through the centuries has provided mankind
with the basis for the development of its reasoning
faculty. Euclid's work has a similar significance.

In his work on Logick, the Organon, & other
books, Aristotle arranged in a grammatical & logical
form what hitherto had been the subject of study in
the Mysteries; for example, the ten categories, which
correspond with the ten Sephiroth of the Hebrew or
Chaldean Qabalah & which also are the "parts of speech",
taught now-a-days in grammar schools. The number, however,
need not be ten, it may be eight & we have the same in
our cube, viz., the eight points or spheres; these,
together with their logical & metaphysical bases &
relationship enable the student to develop to the point
where he may read the Akashick Records, or the Starry
Script. Everything that happens or ever happened is
written in the sky. This is one phase of Aristotle's
work. The cube, as we give it, supplements his work &
carries it to completion, being in that sense a
"Novum Organum".

Take for example, the famous syllogism,
"All men are mortal; Socrates is a man; therefore,
"Socrates is mortal". This is worked out with the
aid of the cube as follows.

The student will observe that the cube has eight points & must have eight - no more & no less. This fact can be proved. Proof must always start with premises. Here, for example, we take the six sides of the cube as our premise or data. These sides are produced from a three-fold dichotomy of the universe, represented in the form of a cube, which also can be represented in the form of logical frame which is the "Map of the HO". In logical terminology this frame is made thus.

LOGICAL FRAME OF THE UNIVERSE OF DISCOURSE



P	—	P	—	P	—	P	—	h	—	h	—	h	—	h	—
M	—	M	—	m	—	m	—	M	—	M	—	m	—	m	—
S	—	Δ	—	S	—	Δ	—	S	—	Δ	—	S	—	Δ	—
1		2		3		4		5		6		7		8	

In Logick one must deal with statements which are put in the form of equations; that is to say, that both the subject & predicate must be both qualified & quantified. The quality of a term is its attribute as affirmative or negative; its quantity is the mark which shows whether it refers to the whole or just a part only of what it connotes - the opposite kinds of quantity are universal & particular. In logick, "some" as an adjective goes with the particular & "all" with the universal quantity. A term with negative quality is prefixed by "not" - affirmative terms omit this particle. Thus, for example, the sentence "ALL MEN ARE MORTAL" when translated into logical terminology becomes "ALL MEN ARE SOME MORTALS"; "Snow is not black" would become - "ALL SNOW IS SOME NOT-BLACK". The adjectives or particles which denote quality or quantity are attached to the terms, not to the copula, "is"; note also that "some" does not mean "some, perhaps all", but means definitely "some, not all"; thus the opposite kinds of quantity, as well as those of quality must be mutually contradictory. Otherwise it would be impossible to reason with exactitude; logick & mathematics are synonymous in being exact sciences; it is the rigid restriction in the terminology & the precision in the construction of their component tools of calculation which accounts for their being an exact science & art! Similarly, all terms are regarded in their general meaning. In logick there is no such thing as an indefinite or a singular term. For example, "Pinocchio", in logick, is "All Pinocchio" - thus "All (of) Pinocchio is some (of) marionets".

Now, every statement possible can be reduced to a syllogism. Many logicians have stated this as a fact, after Aristotle & his commentators, but no one hitherto has offered any rigid, acceptable proof. The proofs offered by logicians like Jevons, Venn, Keynes, etc. are full of holes & needless & ~~xxxxxxxx~~ invalidating assumptions. Similarly, with attempts to render the A FORTIORI argument in syllogistic form. An example of the A FORTIORI argument is this:

A is greater than B,
B is greater than C,
Hence, A is greater than C.

A syllogism must have three & only three terms. In the above a fortiori example we find four terms, for obviously "B" & "greater than B" cannot be the same identical term, different only (perhaps) in quality or quantity. However, if we put the argument in the following form (published here, for the first time in the history of the world) we shall see that it is a syllogism of a perfect type, even the ~~xx~~ classic type, called BARBARA.

ALL (of the) GREATNESS (of) B is (some (of the) GREATNESS (of) A.
ALL (of the) GREATNESS (of) C is some (of the) GREATNESS (of) B;
Hence- ALL (of the) GREATNESS (of) C is some (of the) GREATNESS (of) A.

Then if we let S be the subject, P the predicate & M the middle term, thus - S stands for the "GREATNESS of C"; P for the "GREATNESS of A" & M for the "GREATNESS of B" - abbreviated, the perfect syllogism runs as follows-

ALL M is SOME P
ALL S is SOME M
Hence, ALL S is SOME P

As a matter of fact, the a fortiori argument, as well as being perfectly capable of reduction to the syllogistic form, is actually the basis of the syllogism. The a fortiori argument is a type of empirical reasoning, as such; logical reasoning itself will find that all logical reasoning is indeed based on empirical analysis.

There are no such things as A PRIORI proofs. All reasoning is in the ultimate analysis A POSTERIORI. Logicians, from the post-Aristotlian period, through the scholastic era & down to date have fought over such problems as those suggested above. Their works, though regarded by most people today as dry-as-dust yet were in their day filled with plenty of enthusiasm & life & stirred people at large, helping to bring about important changes in the world scene. Genuine philosophers, indeed, *have* & must have access to the sources of Inspiration, that is, be connected in one way or another with the so-called Mystery Schools of Initiation. Take the famous philosopher Kant, for example, with his famous discussion of Free-will, Immortality & God. This is but a public version of something which goes very deep, something which is & ever has been the aim of those who investigate the realms of the natural & supernatural with the purpose of turning the results of their research to practical account; matters which present day scientists, too, are investigating, such as methods of prolonging life, making gold & acquiring the essential virtues which confer ^{health &} power of one kind & another. The present day pseudo-scientists may deride the alchemists & regard myths & fairy-stories, as well as religious stories, as childish, but no serious thinker or really informed person will believe them. In fact, the characters in Hamlet, or the Tales of King Arthur, are much more real than the college professors, themselves, who relegate them to fancy!

Thus, the proper kind of research, namely - examination of the Akashick Records, which is possible for one who masters the Cube, discovers that so called histroy is but a "fable convenue" - pap & bunk. In truth we find philospphers like Kant, Hegel, etc, connected with Myste ry Schools & behind the scene in all times there are those who really instigate- the Prometheans who bring down the "fire from Heaven" & in our times it is no longer necessary that their "liver" be devoured by the "eagle".

The Quicksilver Principal is the middle term of Logick; the Salt Principal is the subject & the Sulphur or Phosphorus is the Predicate. These are abbrev iated by the letters ^M M, S & P, respectively. There are twelve crystals in the six sides of the cube, crystals being halves of sides or metals, consisting of two points, those on opposite poles of the principal. Out o f these twelve crystals only eight can meet to make points. A crystal is represented by a digram, standing for the two metals which meet to make the crystal. Thus copper & mercury meet in Aquarius or the M crystal, so the digram of M is _____, fire of salt; copper & lead meet in L, whose digram is _____, air of quicks ilver, & so on with the others. Since a point is represente d by a trigram, we find the rule that crysta ls can meet in a point only if they have one gram in co mmon. Thus M & L have a common gram, the sulphur yang _____, thus -

<u>M</u>	<u>L</u>	
_____	_____	.

sulphur
quicksilver
salt.

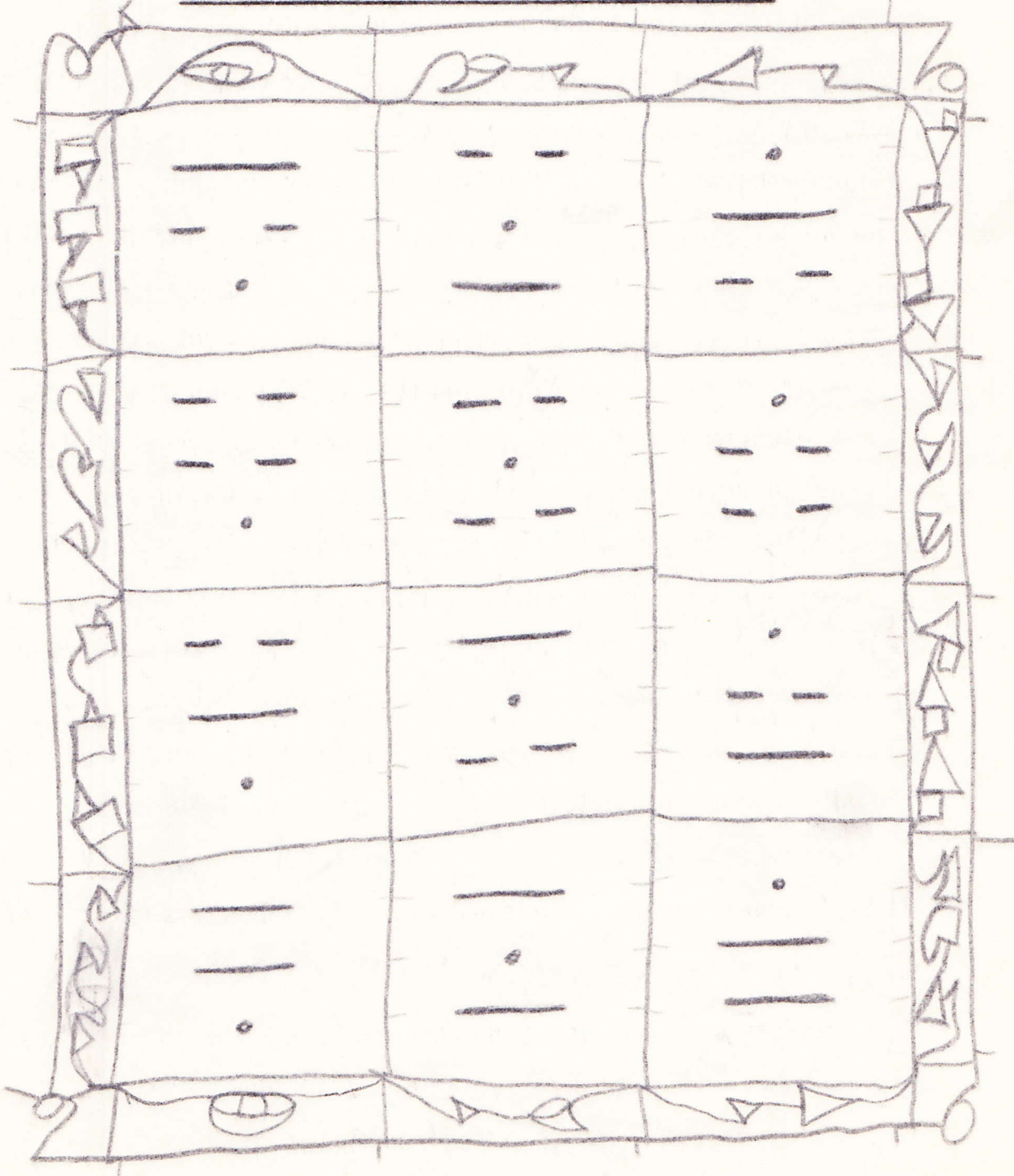
Similarly, for example, T & L cannot meet to make a point for the digram of T is _____ & there is no third gram in ano ther principal _____ to complete the consti-
tution of a trigram _____ which makes a point.

FOR TWO CRYSTALS TO MEET TO MAKE A POINT, they must together contain all three principals & they must have respectively one gram of the same quality in one of the principals. In other words this is the same as the definition of the Syllogism, viz. that it must have three terms, only three terms & one term, the middle, in common, which must be universal in at least one of the premises.

The so-called "laws of thought", viz, "of identity" "non-contradiction" & "excluded middle" result also from a cubick analysis; similarly with such axioms as "Things equal to the same thing are equal to each other" & other Euclidian axioms & logical assumptions. These matters are all discussed in the "GRAMMAR OF THE HOLY CUBE", here we will merely mention that such laws are founded really on an empirical basis. Take for example the law of "non-contradiction" viz., that "nothing can at the same time & place in the same way possess contradictory qualities" or "A is not not-A". So-called logicians have puzzled their heads trying to elucidate these laws of thought on an a priori foundation without success. The secret of the matter is that they are not A PRIORI laws at all, but founded solely & wholly on experience, perception in one form or another, even if only an imagination. Having determined by observation a certain rule, we can then employ it in deduction or in an algebraic process of calculation, but without first some picture or sign we cannot carry on any reasoning process with validity. The question may be asked - how do we know that a thing, say for example, a *marble* cannot be both in a cup & out of a cup at the

time. The answer is simply this - we never saw such a thing; or try to bring it about that a given marble is both wholly in & wholly out of a cup at the same time & you will be satisfied that it cannot be done. There is no other basis for this "law of thought" than experience.

TABLE OF ELEMENTAL OR CRYSTAL DIGRAMS

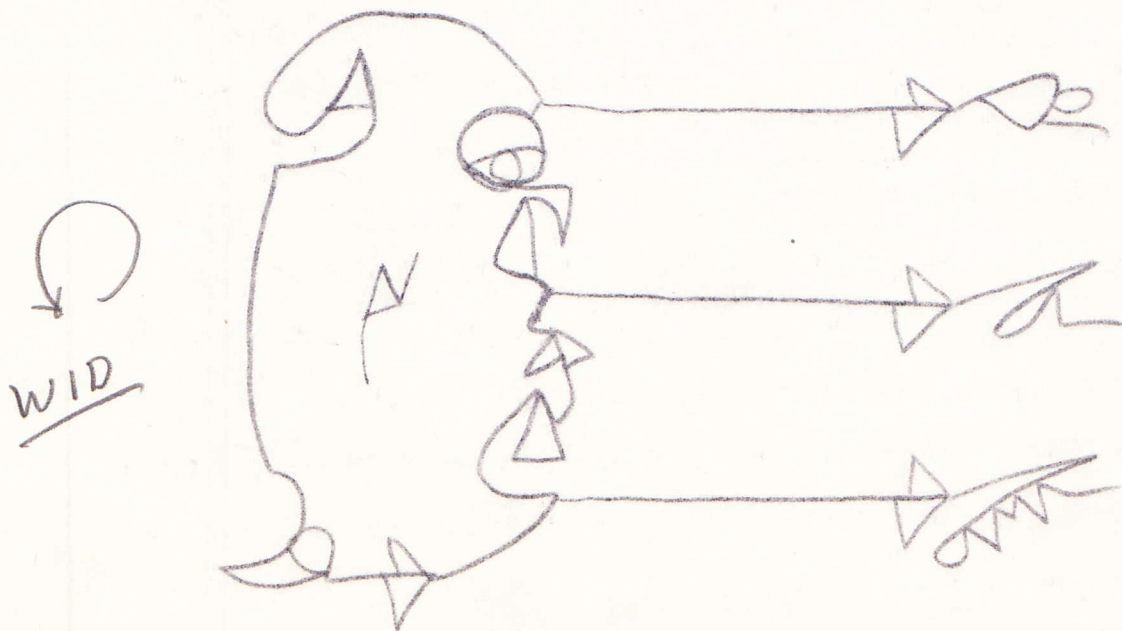


Please note that the Quicksilver Digrams are averse, that is, we read them down instead of up, as with salt & sulphur. This will be clear when we understand the Q-J-X formula explained below.

Note that the direction of the vitalit about #1 just pictured is ^{widdershins} ~~widders~~. This is shown as going around the outside of point #1. When the same vitalit is pictured around the inside of point #1, its direction is reversed. The names of these two directions are widdershins & deosil. The outside or inside of a metal, a point, or any cubick factor, is called its flex. Flex is either convex, if the outside is referred to, or concave, for the inside; these terms are abbreviated to "vex" & "cave". Thus the vex vitalit of #1 is widdershins, similarly with points # 7, #4 & #6. Whereas, points #5, #3, #2 & #8 have deosil vex vitalits. The vitalits of the opposite flex are in each case of opposite direction.

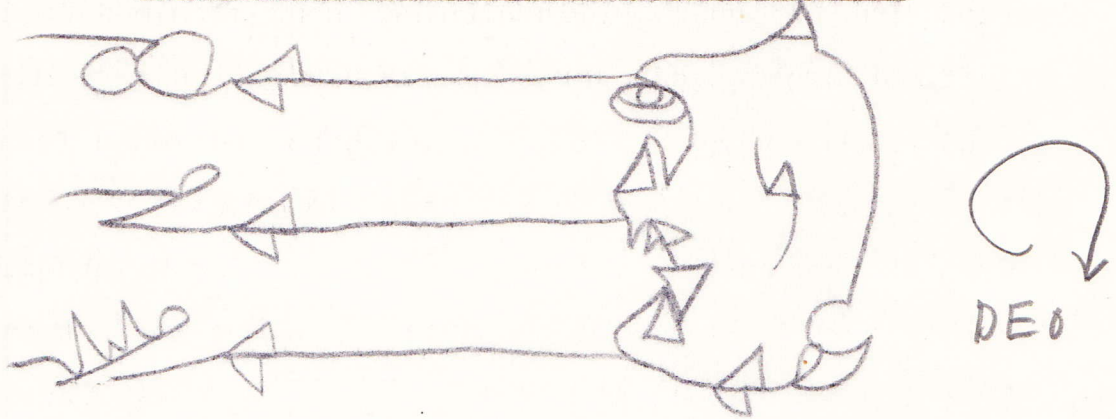
Now, on the trigrammick representation of the point we make the vitalit of the point in the same way & direction to represent the same flex, hence we use the left side of trigrams for widdershins vitalits & the right side for deosils.

WIDDERSHINS OR CONVEX VITALIT OF #1 TRIGRAM

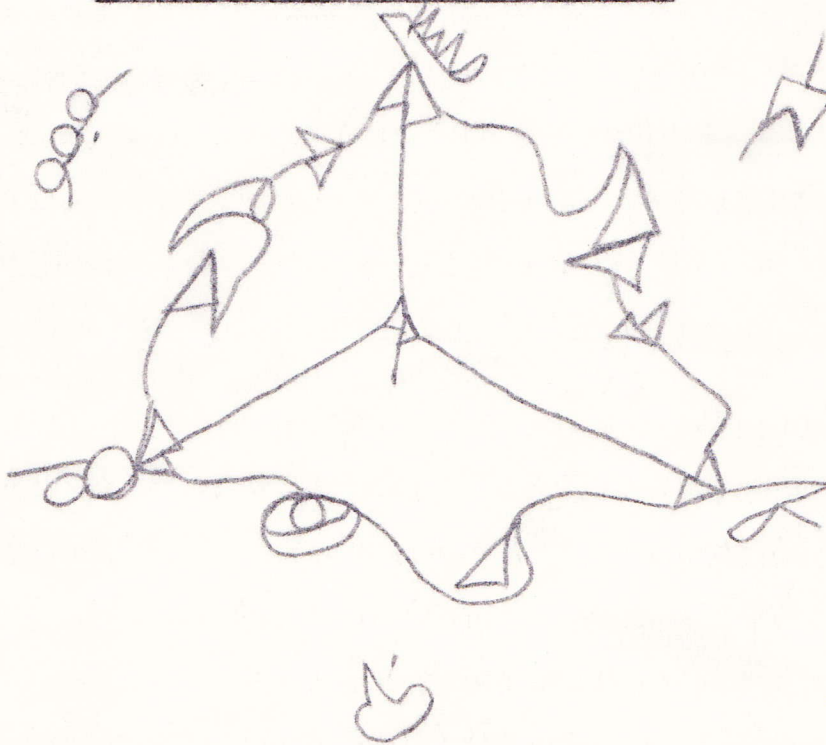


The convex vitalits have the crystal element & the principal of the same sex; the widdershins vitalits have the element & principal of opposite sexes.

DEOSIL OR CONCAVE VIT ALIT OF #1 TRIGRAM



CONCAVE #1 CUBICK WITH VITALIT



Thus in the trigram, a gram represents either a metal, sexed pole of a principal, or sexed crystal pole. That is, for example, the vital- female fire of salt may be regarded as uniting the left & the back on the top of the cube, or else as connecting male L with male B; in either case the salt vital is the product of the quicksilver & sulphur poles.

The Quicksilver connects the sulphur & salt poles & the sulphur vital links the salt & quicksilver poles. Thus the student may get an understanding of the Q-J-X formula; fo_r further information see Primer.

Now, further to develop the logical analysis - note that any statement can be represented by an equation, "the subject equals the predicate". If we distinguish between the three sorts of terms, letting the subject of the conclusion be S, the predicate of the co_nclusion P & the middle term M then the general type of syllogism is

M P - major premise
 S M - minor premise
 S P - conclusion.

No w, if terms are both qualified & quantified, the n we have generally ~~four~~ kinds of terms. The affirma_tive are represented by capital letters, the ne_gative by small; the particulars by attaching a (') prime, the universals by letters without a prime.

	<u>AFFIRMATIVE</u>	<u>NEGATIVE</u>					
<u>UNIVERSAL</u>	S	s	<u>S</u>	<u>P</u> SP	p Sp	<u>P'</u> SP'	p' Sp'
<u>PARTICULAR</u>	s'	s'	<u>s</u>	sP	sp	sP'	sp'
			<u>s'</u>	s'P	s'p	s'P'	s'p'
			<u>s</u>	s'P	s'p	s'P'	s'p'

Then if we take, for example, the conclusion, S P as a type of equation (M P or S M would do as well) we see that there are sixteen kinds of equations. Thus, any possible statement may be put into the form of one of these sixteen types. The classification is exhaustive!

Now, each of these different types of statements or equations has its own identical representation, so far

as it has unique logical force. But there are some of these types which have the same identical logical force as other types in the list, which is therefore redundant for practical purposes. Those types which have the same logical force as each other are called obverses, or one is the obverse & the other the obvertend; it is immaterial which is named first in this respect. Generally speaking any equation which can be deduced from another is called its converse & the original is the convertend. If the converse & the convertend have the same identical force they are obverses; if the force of the converse is less than that of the convertend, the former is called a subverse. Any equation has an obverse if at least one term thereof is universal, but both terms may be universal. Any equation has a subverse if at least one term is particular, but both may be particular. When one term only is particular the subverse is of the first degree, if two, then of the second degree. Obverses are deduced by changing the quality of both terms in the equation & exchanging their quantities; thus the obverse of SP' is $s'p$; the obverse of SP is sp . Subverses are deduced (first degree) by changing the quality of the universal term & attaching a prime, that is making it particular, leaving the other term as is; (second degree) by changing the quality of either term, but of only one term at a time. If the convertend is true, then the converse must be true. But while we can always deduce the obvertend from the obvertend, we cannot deduce the subvertend from the subverse, ~~xxxxxxxx~~ except in the case of second degree subversion. Thus, for example,

S'P', s'P', S'p' & s'p', all have the same identical logical force, which is nil, except formally.

At least one term of an equation must be universal, otherwise we have no general statement which can be used in deduction. To say, for example, that some men are some honest people tells us nothing of any particular value, for from it we can deduce also that some men are dishonest, some not-men are honest & some not-men are dishonest. In order for a statement to have real logical force it must have the power to eliminate at least two sections or points of the cube & these must be adjacent, viz. a crystal. We identify the types of equations by their framick

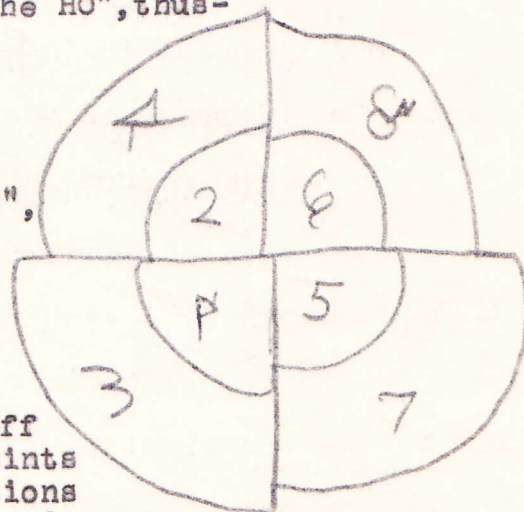
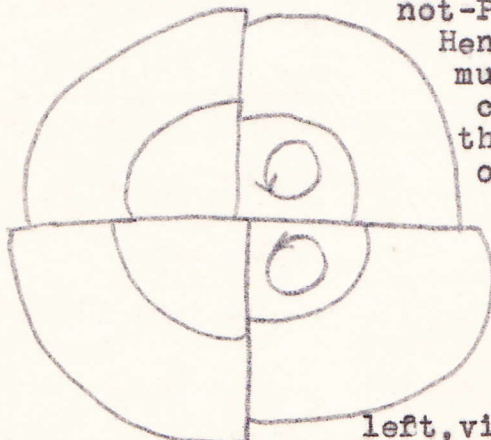
pictures. Draw the "Map of the HO", thus-making the male quicksilver view with mercury in the middle.

Now, if we take the premise M P', which may stand for "ALL MEN ARE SOME MORTALS", as a major premise - we see that if all M is some P then there can be no M which is not-P (p).

Hence, we must

cross-off those points or sections of the frame

where M & p are found together. These are points 6 & 5, the C crystal (Libra). The symbol used to eliminate by a major premise is a widdershins circle or large zero made toward the



left, viz. opposite to the way the hands of a clock move.



Now, let us take a minor premise, say,

S M' which can stand for "SOCRATES IS A MAN", viz.,

"ALL SOCRATES IS SOME MEN". Here the minor elimination

symbol is X. It is easy to remember these elimin-

ation symbols since the major one reminds us of the

 salt sigil (Q) -  - & the minor one reminds of the sulphur sigil (X) -  - which is interesting since we find that major premises always eliminate salt crystals & minor premises always cross-off sulphur crystals from the map.

Now if $S \supset M'$, viz. if all S is some M then there can be no S which is not-M (m), hence we must cross-off the points, numbers, or sections of the map where S & not-M are found together, thus:

we eliminate the W (Aries) crystal, which is air of sulphur; points 7 & 3.

Or, to put it in the plainest cubick terms: if all of the bottom is some of the back, then none of the bottom is on the front, hence where the bottom & front meet there can be nothing.

Now, draw a map & put the result of elimination from both premises upon it & what is left of the frame gives us the conclusion, thus: eliminating C & W we

have left points #1, #2, #4 & #8.

We can see at a glance that "All S is some P" ($S \supset P'$), but this is only one of the possible conclusions.

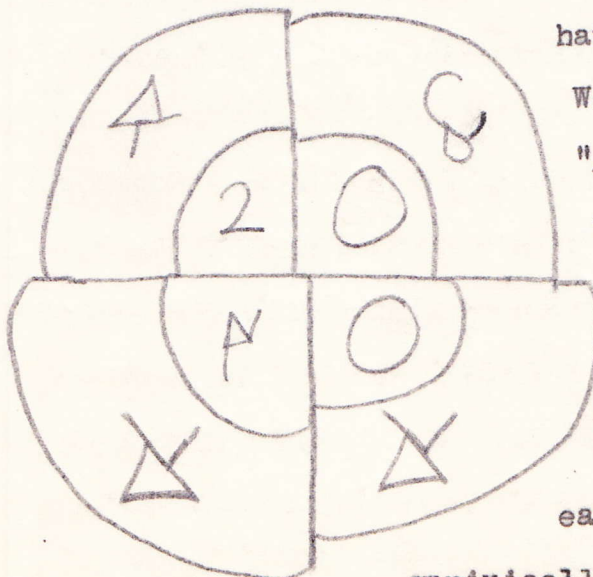
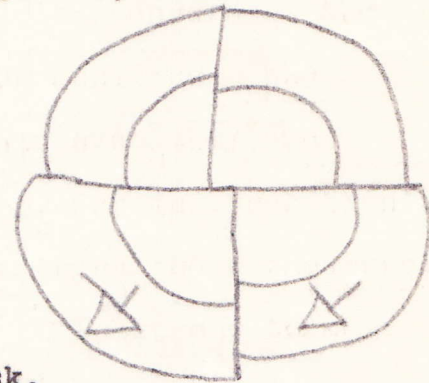
There is a separate,

(though, of course it is a converse) conclusion for

each point. These can be read

empirically. However, we need not

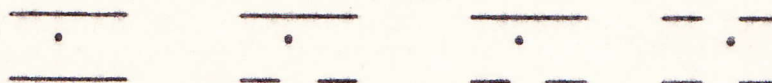
depend entirely on eyesight since there is a neat method of assembling them exhaustively & accurately.



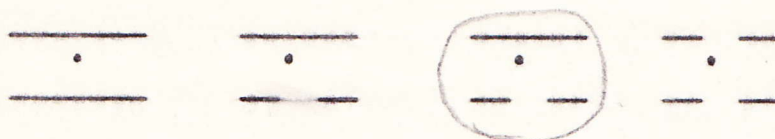
Write the numbers of the points not eliminated across the page thus -

1 2 4 8

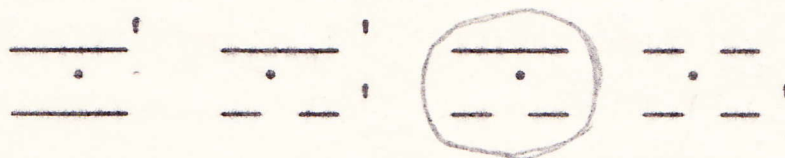
then beneath these numbers in the same columns write the quicksilver digrams of the points, viz. the trigrams of the points omitting the quicksilver grams thus -



Now, where the digrams are the same, draw a circle around the second (counting from the left) one, to indicate that we disregard it in the following operation which is



to attach a prime (for particular) when there ~~exam~~ is more than one gram of the same quality in the same principal, reading across. Thus there are two yangs in sulphur, so we prime them both; similarly in salt we see two yins which we prime, thus:



Now, write the above in logical terminology & we have all possible conclusions from the given premises.

S P' s' P' s' p

#1 & #8 here are obverses of each other & #2 is the first degree subverse of either #1 or #8; hence if we write the conclusion as S P' or "SOCRATES IS MORTAL" we can deduce the obverse & subverse from it, viz.

(#8) "ALL NOT-MORTALS are SOME NOT-SOCRATES" &

(#2) "SOME NOT-SOCRATES are SOME MORTALS". In our Map

these conclusions, respectively, are -

- (8) "ALL OF THE RIGHT IS SOME OF THE TOP",
(there is none of the right on the bottom);
- (2) "SOME OF THE TOP IS SOME OF THE LEFT",
(there is some of the top on the right & there is some of the left not on the top);
- (1) "ALL OF THE BOTTOM IS SOME OF THE LEFT";,
(there is none of the bottom on the right).

Now, the sixteen types of equations, for practical purposes are reduced to seven; we select (say) the following seven as sufficient to represent all without redundancy. We take SP & disregard sp, which is its obverse & therefore has the same logical force, viz., crosses off the same sections of the map. Thus - if all S is all P there can be no Sp & if all P is all S there can be no Ps or sP, hence S P eliminates the crystals where the bottom meets the right & where the top meets the left, viz., F & L, leaving only points 1, 3, 6 & 8. With sp (the obverse of SP), we must cross off sP, for if all s is all p there is no sP & if all p is all s there is no pS or Sp; thus we see that these two obverses both eliminate the same points. We should find this to be the case with any two obverses. Similarly we take Sp & leave out sP; we take SP' & leave s'p; we take Sp' & drop s'P; we take sP' & omit S'p; we take sp' & do not take S'P; then from the equations where both terms are particular we select S'P' as an adequate example, leaving the other three, viz., S'p'; s'P' & s'p' since they are deducible from S'P' by second degree subversion. We have then selected the following list of non-interchangeable equations:

SP Sp SP' Sp' sP' sp' S'P' . Note that these are forms which may hold either of the premises or the conclusion, thus M P, or S M, as well as S P types.

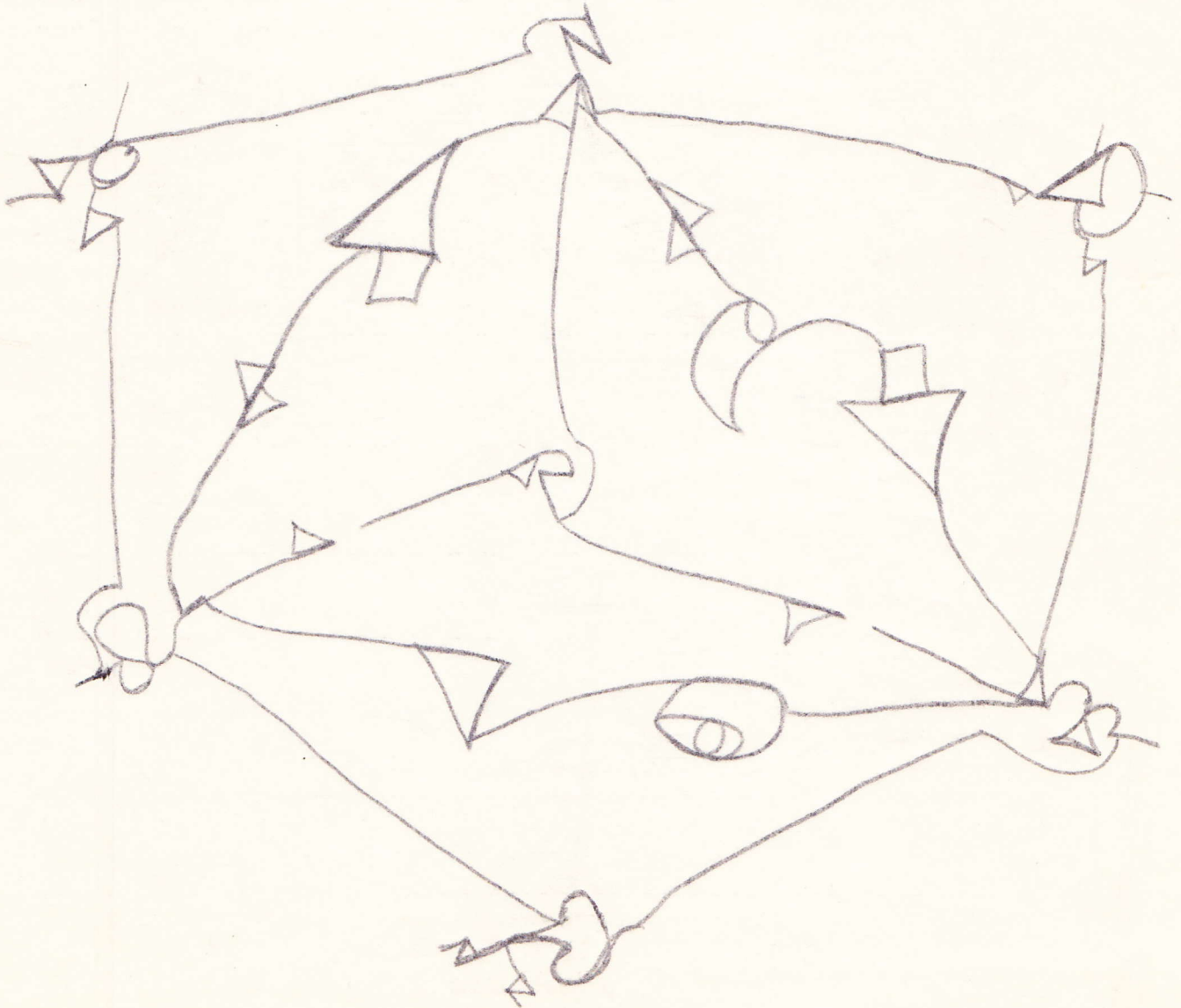
The two premises, major & minor, of the syllogism make what is termed a syzygy - M P. Since we have seven non-interchangeable SM types of equations, there are seven times seven equals forty-nine types of syzygies; all of which yield valid conclusions except that in which all terms are particular, since it eliminates no point from the map. We make up the table of syllogisms as follows.

* MINOR PREMISES	<u>MAJOR PREMISES</u>						
	<u>MP</u>	<u>Mp</u>	<u>MP'</u>	<u>Mp'</u>	<u>mP'</u>	<u>mp'</u>	<u>M'P'</u>
	-eliminate-						
	C-R & Leave	M-Z	C	M	Z	R	O
<u>SM</u> W-B <i>Eliminate</i>	1-8	4-5	1-4-8	4-5-8	1-4-5	1-5-8	1-4 5-8
<u>sm</u> G-N	2-7	3-6	2-3-7	3-6-7	2-3-6	2-6-7	2-3 6-7
<u>S'M</u> B	1-7-8	3-4-5	1-3-4 7-8	3-4-5 7-8	1-3 4-5	1-5 7-8	1-3-4 5-7-8
<u>s'M</u> N	2-7-8	3-4 6	2-3-4 7-8	3-4-6 7-8	2-3 4-6	2-6 7-8	2-3-4 6-7-8
<u>S'm</u> G	1-2-7	3-5-6	1-2 3-7	3-5 6-7	1-2 3-5 6	1-2 5 6-7	1-2 3-5 6-7
<u>s'm</u> W	1-2 8	4-5 6	1-2 4-8	4-5 6-8	1-2 4-5 6	1-2 5-6 8	1-2 4-5 6-8
<u>S'M'</u> O	1-2 7-8	3-4 5-6	1-2 3-4 7-8	3-4 5-6 7-8	3-4 5-6 5-6	1-2 5-6 7-8	1-2-3 4-5-6 7-8

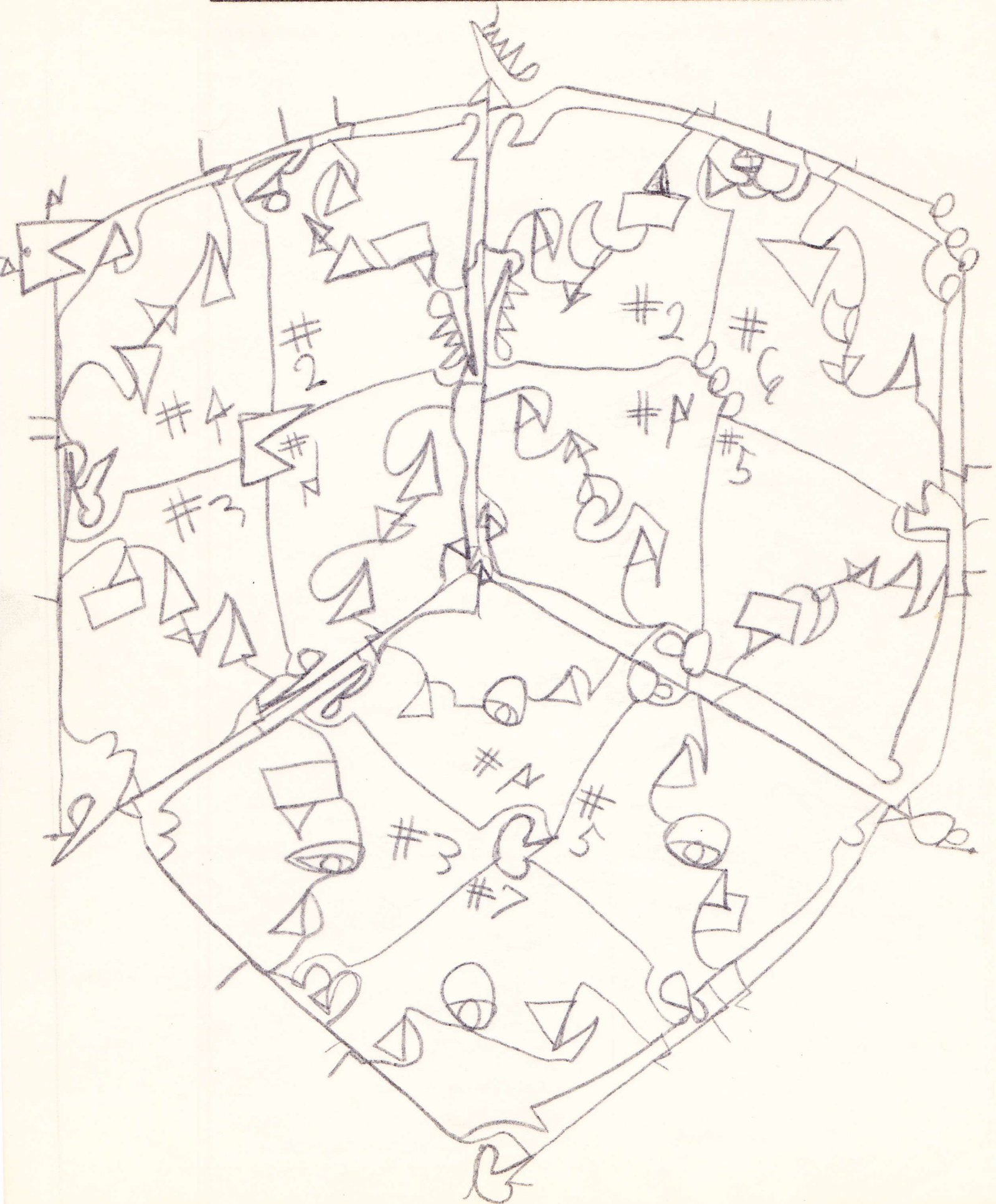
* selected for universal middle

This table can be worked out in detail, elaborately, but the above sums the result completely. It is to be noted that the conclusions do not refer to #1, or #8 etc. absolutely but depend on the result of leaving, these or other numbers together with various other numbers. Thus, if 1 & 8 are left the conclusion is not the same as if 1-2-8 are left. The above are the only possible combinations that can be left with any & all possible arguments. For example, there is no argument which could cross off all but #1 & #7, for example. In the compartment where we have 1-8, the conclusions are SP & sp; of these, only SP is necessary to use, for sp can be deduced from SP. We will leave the student to make these deductions, as this is all handled in detail in the "LOGICK OF THE HOLY CUBE".

We believe we have said enough now to show that
 the cube is valuable as an engine of reasoning, besides
 being an ideal device for divination. With both poles
 of thought, thus covered, there is little left ~~to say~~^{that needs to}
 be said
 in demonstration of its value. We will close this Appendix
 with examples of complete frames of the two points, for
 example, convex #7, ^{TRIGRAMMICK} & convex #1, ^{HEXAGRAMMICK} & then a so-called
 "Electrick Frame" of the Hexagram 7 x 1 = #7 (WU WANG);
 the electrick frame is only one of several varieties
 of hexagrammick frame, the student is referred to Part II
 of the Primer, to the GRAMMAR & the BLOCK-WORKING Section.



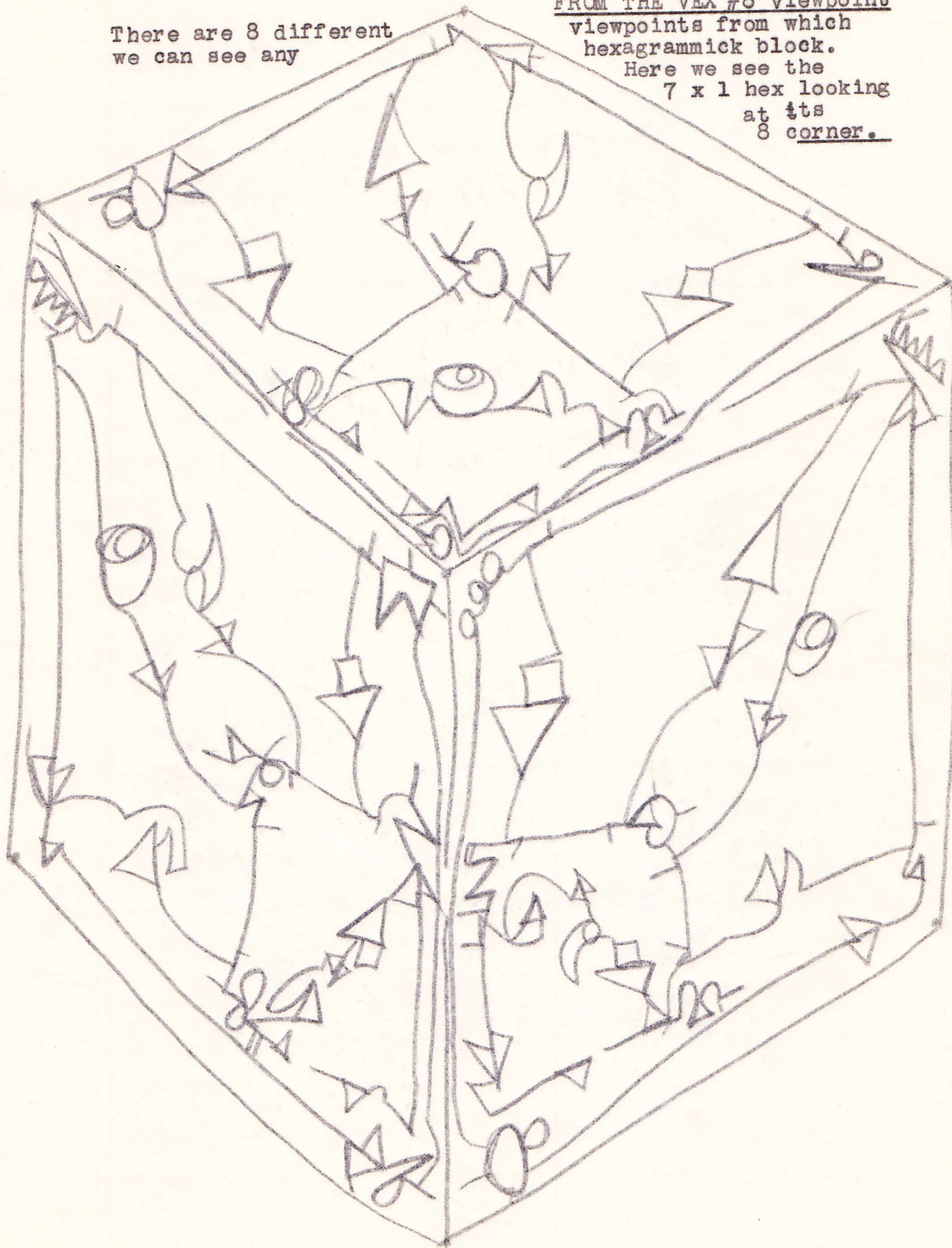
MAJOR #1 CONVEX of the DOUBLE CUBE showing HEXAGRAMS



ELECTRICK FRAME OF HEXAGRAM 7 x 1 = #7, WU WANG

FROM THE VEX #8 viewpoint
viewpoints from which
hexagrammick block.
Here we see the
7 x 1 hex looking
at its
8 corner.

There are 8 different
we can see any



The various components of the hexagrams are painted on wooden blocks two inches square & sets of blocks to make up the 64-fold cube are made in various styles, such as the EGYPTIAN, BABYLONIAN & CHALDEAN styles, in which the flexual numerals are given certain postures according to certain rules: here the Aristotlian category of posture is dealt with in its practical esoteric significance. Then there are the ROMAN & THE CHINESE styles of blocks in which it is made possible to set the cube up in one principal separately; working with the Chinese type it is possible to develop the separation of the human faculties of thinking, feeling & willing & their equilibration through the higher-self. There are Persian & IRANICK sets of blocks which deal with the pentelemental phase of the Art. There are the GREEK & the ALEXANDRIAN sets which develop the architectural & other faculties. It is not so difficult to master the Art as it might seem for in the PRIMER & GRAMMAR the subject is handled in such a way that one proceeds from the primary matters to the more complex in a continuous, consecutive manner which brings about what is termed an astral catharsis, viz. a purification of the astral body & a concentration of the mind which enables one to think without using the physical brain. This sort of thinking does not fatigue & leads to Inspiration; one obtains specific control over the blood & nerves & is enabled to gain first-hand knowledge of things which prophets & seers describe, but without losing any freedom or equilibrium. We may say that in this brief Appendix we have scarcely touched the fringe of the MAGICAL ART & SCIENCE which originates in the YI!