[SIGNAL]

a book of secrets

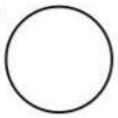
1. START
   ↓
2. HAVE YOU STUDIED INSTRUCTIONS? → NO → Go back and study
   YES
   ↓
3. IS YOUR MATTRESS COMFORTABLE? → NO → Get a new mattress
   YES
   ↓

Basic Alchemy

Construction of a Transmutation Circle

The first thing you need to worry about is what you are going to transmute or how your array is going to function. From there It would be wise to start with a basic like what's below...

1



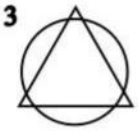
The circle. It is like the thing that makes alchemy what it is. The circle represents a balance of power and a steady flow of the power. It is best you draw your circle perfectly, otherwise, the reaction will go haywire.

2



This little beauty means that the reaction will take place within the array and will be kept steady. Now the shape doesn't always have to be a triangle. It can be any shape so long as it has meaning the transmutation.

3



When the shape extends beyond the walls of an array, that means that the reaction will be taking place outside the array. This comes in handy when building walls and such.

4



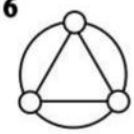
When the shape extends outside one circle, but stops at another, that means that the transmutation will extend to the next object. Say you were trying to fix a toaster. Well your technically fixing an object outside the array, but you need to contain the reaction. That's when you use this.

5



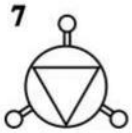
If you need to focus the reaction outside an array into a specific direction, you draw an almost arrow like V in the array. This will force the reaction in the direction of the vertex.

6



With some transmutation circles, you must have specific ingredients. Well you don't just throw all the ingredients in the center and transmute! You sort them out by putting then in a section. The little circles you see around the edges are perfect for that. By writing a symbol in a smaller edge circle, you specify either an element or an instruction that will be used within the transmutation.

7



8



I hear these things called nodes all the time, so we shall call them just that. The node are use to inject or remove a substance into or out of the transmutation. When used to add, the substance is usually burned as fuel and is seldom part of final product. This can be changed to fit the format of the edge circle things above in the instruction of your array. Now if you are pulling something out, the node should look more the individual node you see. And oval shape will aid in the ejection and the edge circle thing will have the substance you are tossing.



Instructions are a big part of transmutation circles. While the aren't always needed on smaller, more specific arrays, they are very nice for transmutations that need instructions for a good final product. The instructions are usually coded in an alchemic text. This make its look pretty, but it leaves room for people to just type random crap (not recommended)

4. IS YOUR AREA SECURE? → NO → Arrange a secure area
YES
↓
5. IS YOUR MIND AT EASE? → NO → Prepare worry list
YES
↓
6. HAVE YOU SUCCESSFULLY COMPLETED TRIAL RUN? → NO → Make necessary adjustments and complete trial run
YES
↓
7. DEFINE MEDITATIVE GOAL:
a. Inner serenity → Go to eastern-style meditation class
b. Spiritual serenity → Go to Witchcraft Lecture II
c. Getting answers to questions → same as b
d. ASTRAL TRAVEL → → PROCEED TO STEP 8
↓ ←
8. DEFINE NECESSITY
↓
9. HAVE YOU SATISFIED 'ME'S' NEEDS, ESPECIALLY SEX AND HUNGER? → NO → Satisfy 'Me's' needs as far as possible. If sex or hunger is Necessity, do not satisfy these needs
YES
↓
10. COMPLETE PROTECTION
↓
11. HAVE YOU ESTABLISHED YOUR KEY? → NO → Establish key signal
YES
↓
12. NARROW THOUGHTS TO KEY SIGNAL AND NECESSITY
↓
13. ARE YOU RELAXED? → NO → Return to appropriate step to complete relaxation
YES
↓
14. ASTRAL TRAVEL → NO → Return to Step 12
YES
↓
15. RETURN FROM ASTRAL TRAVEL
↓
16. REMELD 'I' AND 'ME'
↓
17. STOP! → Write down experiences → this minute!

Figure 4.3
Flow Chart of Steps to Astral Travel

TRANSMUTATION CIRCLES

PART TWO: FORM AND SYMBOLOGY

IN DESIGNING YOUR CIRCLE, YOU NEED TO DECIDE ON THE PURPOSE AND USE OF THE CIRCLE – IS IT MEANT TO INSTRUCT, GUIDE, OR TO ACTUALLY INVOKE A REACTION.

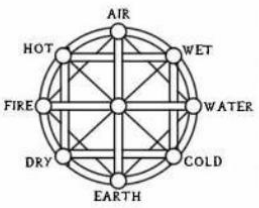


FIGURE 1: ARISTOTLE'S ELEMENTS. THIS SIMPLIFIED VERSION OF THE ELEMENTS SHOWS THE TYPICAL RELATIONS BETWEEN THE FOUR ELEMENTS AND FOUR FORCES. IT IS USED TO SHOW, BY PLACING SYMBOLS OF MATERIALS WITHIN THE CIRCLE, HOW THE MATERIAL FUNCTIONS – AND TO A LIMITED EXTENT FORMULAS. IT IS USUALLY A USED AS A GUIDE. SINCE ARISTOTLE DIED ABOUT 2300 YEARS AGO, I THINK THE COPYRIGHT & FAIR USE IS JUSTIFIED.

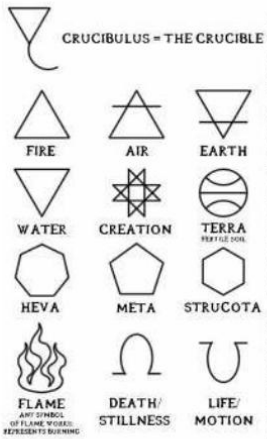
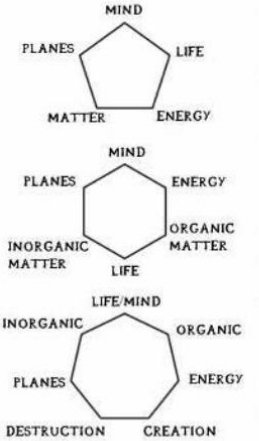


FIGURE 2: CRUCIBLE CIRCLES. CRUCIBLE CIRCLES ARE THE BASIC CIRCLE USED FOR INSTRUCTION AND INVOCATION. LIKE THE ALCHEMICAL SYMBOL FOR CRUCIBLE, IT IS THE FORM OF THE FOCAL LINES WITHIN THE CIRCLE AND DETERMINE THE ACTION TAKEN. THE FOCAL LINES CAN TAKE MANY FORMS, LARGELY BASED ON THE ELEMENTS BEING USED – BUT CAN ALSO DELVE INTO THE REALMS OF METAMAGIC AND SPIRITUALISM.

SHOWN ARE THE 12 MAIN CRUCIBLES. SOME SYMBOLS, SUCH AS THE MARK "↯" FOR ELECTRICITY CAN BE MADE INTO HOLLOW SYMBOLS TO FORM NEW CRUCIBLES. BUT FOR NOW WE WILL CONCERN OURSELVES WITH THE BASIC 12:



FIRE - FOR MELTING/FUSING
AIR - FOR BREATHING/ACTIVATION.
EARTH - FOR STONE/METAL
WATER - FOR ALL FLUIDS
CREATION - FOR MAKING THINGS OUT OF RAW MATERIALS.
TERRA - FOR SOILS/FERTILITY/ LIFE MANIPULATION.
HEVA - FOR SOUL/SPIRIT TRANSMUTATION.
META - FOR TRANSMUTATIONS HAVING TO DEAL WITH MULTIPLE MATERIALS.
STRUCOTA - FOR MANIPULATING MATERIALS TO A PRECISE DEGREE.
FLAME - FOR PURIFICATION AND DESTRUCTION.
DEATH - TO DECREASE MOTION TO ZERO. ABSOLUTE ZERO WITHOUT FREEZING.
LIFE - TO INCREASE OR INSTILL MOTION.

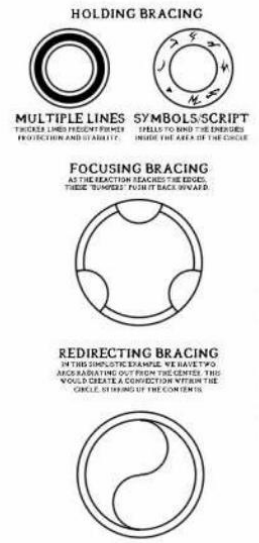
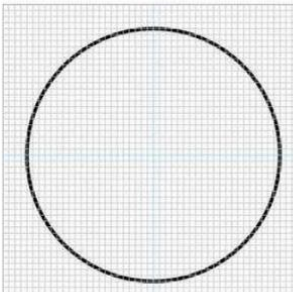


FIGURE 3: BRACING. IN THE CREATION OF A CIRCLE, ON OCCASION, ONE WILL HAVE TO REINFORCE THE FIELD SO AS TO KEEP THE REACTION WITHIN THE CIRCLE AND PROPERLY FOCUSED. THIS IS WHERE MULTIPLE CIRCLES, AND EVEN LINES OF SCRIPT, COME INTO PLAY. BRACING COMES IN THREE TYPES:
HOLDING - WHERE THE BRACING IS MERELY MEANT TO HOLD IN THE REACTION.
FOCUSING - WHERE THE REACTION IS PUSHED OR SQUEEZED INTO THE CENTER OF THE CIRCLE. AND LASTLY,
REDIRECTING - WHERE THE MATERIAL WITHIN IS MOVED ABOUT WITHIN THE CIRCLE.

AND LASTLY, A WORD ON THE USE OF SCRIPT.
SCRIPT ON A TRANSMUATION CIRCLE SERVES ONE OF THREE PURPOSES; TO TELL SOMEONE HOW TO USE IT, TO BE A NON-SPOKEN INCITATION OF A SPELL OR COMMAND, TO LOOK AWESOME AND CONFUSE PEOPLE. MORE OFTEN THAN NOT, THE ACTUAL CONTENTS AND MATERIALS BEING TRANSMUTED WILL BE REPRESENTED AS A SINGLE SYMBOL, SO ANY LONG LINES OF TEXT ARE USUALLY THERE BECAUSE IT WILL GARNER MORE ATTENTION THAN A SINGLE RUNE, SIGIL, SYMBOL, OR WEIRD LITTLE MARK; THUS MISLEADING THOSE WITHOUT THE KNOWLEDGE OF THE SYMBOL'S MEANING. THE ART OF ALCHEMY IS MOSTLY ENCODED – OTHERWISE EVERYBODY WOULD BE CLAPPING THEIR HANDS TOGETHER AND GETTING A PORSCHE AND A PILE OF GOLD TO SIT UPON.

TRANSMUTATION CIRCLES

PART THREE: DRAWING TRANSMUTATION CIRCLES

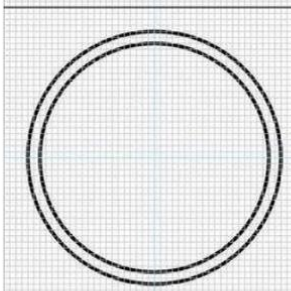


STEP 1: DECIDE WHAT YOUR CIRCLE DOES. IN THIS CASE, I HAVE CHOSEN A SIMPLE TIN & COPPER COMBINER TO MAKE BRONZE.

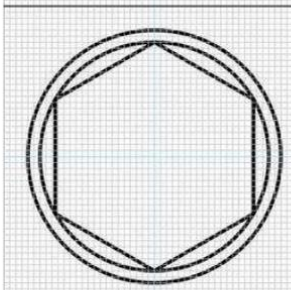
LAY DOWN A GRID OF YOUR CHOICE AND PUT DOWN A CENTER GUIDE.

WITH THE CIRCLE PATH TOOL, STROKE PATH WITH A PLEASING LINE WIDTH.

ALL STEPS ARE A NEW LAYER, MERGED DOWN WHEN NEEDED TO FORM CONSTANT SHAPES.

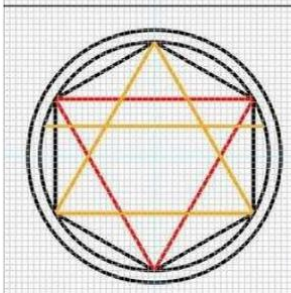


STEP 2: PUT DOWN A HOLDING BRACING OF THE SAME LINE THICKNESS.



STEP 3: SINCE WE WANT OUR BRONZE TO BE THE VERY BEST ALLOY, WE PUT DOWN A STRUCOTA TO FOCUS THE FORCES AND MAKE THEM MORE PRECISE.

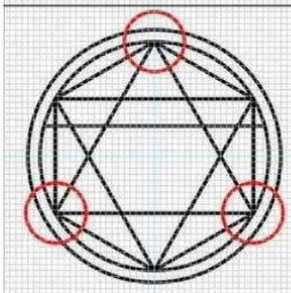
SET THE POLYGON TOOL TO 6 SIDES AND STROKE WITH SAME THICKNESS OF LINE.



STEP 4: POWERING IT UP. SINCE WE ARE WORKING WITH METAL, WE NEED TO HARNESS FIRE (RED) AND EARTH (ORANGE), AS YOU CAN SEE, THEY NEST QUITE WELL SINCE THEY ARE COMPLEMENTARY ELEMENTS.

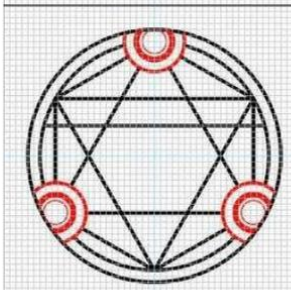
SET POLYGON TOOL TO 3 SIDES AND MAKE TWO TRIANGLES. ADD LINE WITHIN INNER CIRCLE THROUGH EARTH TRIANGLE. STROKE WITH SAME THICKNESS OF LINE.

Correction:
I'd like to point out that the triangles in step 4 should be inverted, otherwise they represent air and water, not fire and earth. Lack of sleep



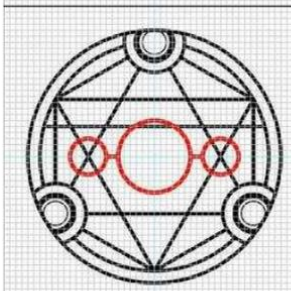
STEP 5: KEEPING YOUR FACE ON YOUR SKULL. WE NEED SOMETHING TO NOT ONLY APPLY PRESSURE TO THE REACTION, BUT TO KEEP THE HIGH PRESSURE GASES AND HEAT IN THE CIRCLE. FOCUSING BRACING IS THE MAN OF THE HOUR.

CREATE A CIRCLE WITH THE SAME LINE WEIGHT AT THE TOP. COPY THE LAYER, TRANSFORM, MOVE THE CENTER TO THE CENTER OF THE MAIN CIRCLE, ROTATE 120°. DUPLICATE AGAIN AND ROTATE THE OTHER -120°.



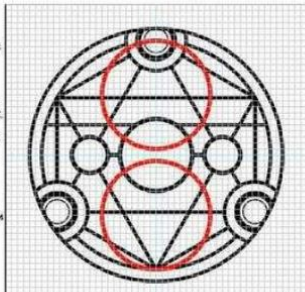
STEP 6: PUTTING IN ADJUSTMENT POINTS. THESE WILL PUT A "COMMAND" ONTO THE MATERIAL BEING PROJECTED BACK INTO THE CIRCLE.

STROKE TWO CIRCLES WITH A LINE WEIGHT OF YOUR CHOICE WITHIN THE CIRCLES MADE IN THE LAST STEP. THEN DELETE THE EXCESS.



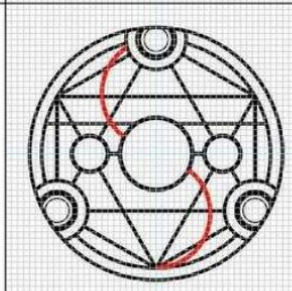
STEP 7: PUTTING IN THE OPERATIONAL NEXUS. HERE WE HAVE THE PROMARY EFFECT AREA, ALSO KNOWN AS THE STAGE OF THE CIRCLE. SINCE WE ARE GOING TO COMBINE COPPER AND TIN, WE NEED A PLACE FOR EACH AS WELL AS A SPACE AT LEAST TWICE THEIR AREA TO RECEIVE THE PRODUCT.

STROKE TWO CIRCLES CENTERED OVER THE JUNCTION OF THE MAIN ELEMENTAL FOCAL LINES AND ONE IN THEIR CENTER. CONNECT THE THREE WITH 1, 2, OR 3 LINES. LINE WEIGHT IS TO TASTE.



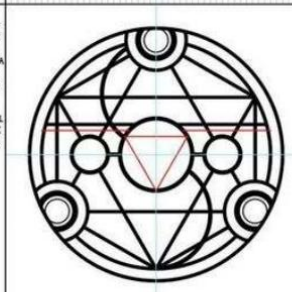
STEP 8: TAKING IT FOR A SPIN. TO ASSURE THAT THE TIN AND COPPER ARE FULLY AND FINELY COMBINED, WE WILL SWIRL THEM TOGETHER WITH REDIRECTING BRACING.

STROKE TWO CIRCLES AT 90° TO THE PRIMARY STAGE. LINE WEIGHT IS BEST AS HEAVIER BUT CAN BE MULTIPLE LINES TOO.



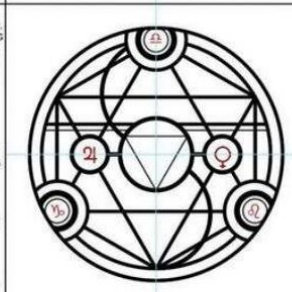
STEP 9: CLEANING UP THE REDIRECTING BRACING.

DELETE EXCESS FROM CIRCLES TO FORM TWO OR MORE GRACEFUL ARCS.



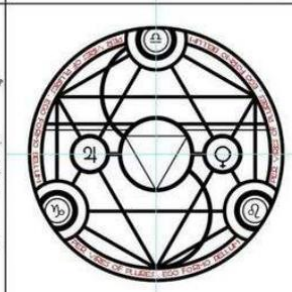
STEP 10: ADDING BALANCERS. ADDING A LINE TO THE EARTH ELEMENT WILL HELP KEEP THE METAL IN A METALLIC STATE, WHILE ADDING A SECOND FIRE ELEMENT WILL SLOW DOWN THE BRONZE'S COOLING SO IT DOES NOT CRACK OR EXPLODE.

STROKE A TRIANGLE AND LINE IN A FINER LINE WEIGHT.



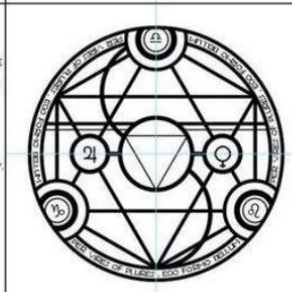
STEP 11: ADDING THE FUNCTIONAL SYMBOLS. STANNUM (JUPITER) FOR TIN AND CUPRUM (VENUS) FOR COPPER ON THE STAGE. THEN ADD THE SYMBOLS TO SUBLIMATE, COMBINE, AND STRENGTHEN WITH LION'S STRENGTH.

GET OUT YOUR SYMBOL FONT AND HAVE AT IT.



STEP 12: ADDING WORDS THAT SEEM TO MEAN SOMETHING, BUT ARE ACTUALLY INTENDED TO DISTRACT OR MISLEAD MORE OFTEN THAN ANYTHING ELSE. IN THIS CASE, I USED A RANDOM LATIN SENTENCE THAT KIND OF HAD TO DO WITH THE THEME.

PICK A COMPLIMENTARY FONT AND WRITE SOMETHING. LATIN, ANCIENT GREEK, ENGLISH, ANY LANGUAGE WILL DO. THE MOST IMPORTANT THING IS THAT EVEN IF YOU USE A SYMBOLIC OR FANTASY FONT, THAT IT ACTUALLY SAYS SOMETHING - PEOPLE ARE TRAINED TO SEE WORD PATTERNS IN READING, SO THEY CAN OFTEN SUBCONSCIOUSLY PICK UP ON RANDOMNESS AND THE EFFECT FAILS TO ACCOMPLISH THE GOAL OF DISTRACTION.



STEP 13: FINISHED CIRCLE. GET SOME TIN AND COPPER, FIRE THAT SUCKER UP.

USUALLY I DO NOT MAKE CIRCLES THIS SMALL – THIS WAS DONE WHOLLY FOR THIS ONE TUTORIAL. NORMALLY, LIKE ANYTHING DONE IN PHOTOSHOP OR GIMP, THE LARGER THE BETTER AS IT TENDS TO LESSEN AND MINORITIZE THE APPEARANCE OF SMALL MISTAKES AND INCONSISTENCIES THAT POP UP WITHIN THE APPLICATION. I PREFER 1200, 2400, AND 4800 SQUARE CANVASES.

BRINGING YOUR TRANSMUTATION CIRCLES OUT OF THE DIGITAL REALM

THE UNDERLYING RULES OF THE STRUCTURE OF TRANSMUTATION CIRCLES STAYS THE SAME REGARDLESS OF HOW THE CIRCLE IS MADE. THERE ARE, HOWEVER, A FEW RULES THAT APPLY TO PHYSICALLY DRAWN CIRCLES.

FIRST ARE THE MATERIALS: A TRANMUTATION CIRCLE, AT LEAST A FUNCTIONAL ONE, SHOULD ALWAYS BE DRAWN WITH AN ORGANIC OR TRANSORGANIC SUBSTANCE. THE INORGANIC INKS AVAILABLE IN MOST COMMERCIAL WRITING INSTRUMENTS JUST WILL NOT DO. A NATURAL INK MADE OF SQUID INK, SEPIA (BARK), OR SUCH IS PREFERRED. BOTH FROM A METAPHYSICAL STANDPOINT AND A FLOW STANDPOINT. TRANSORGANICS ARE THINGS SUCH AS CHALK, SINCE IT IS MADE OF THE CALCIFIED CORPSES OF PLANKTONIC LIFEFORMS.

SECONDLY ARE THE DIRECTIONS: THE MAIN CIRCLES MUST BE DRAWN IN A SMOOTH, CLOCKWISE MOTION. POLYGONS MUST BE DRAWN FROM THE FARTHEST POINT TO THE RIGHT OF THE CIRCLE, THEN TO THE NEXT FARTHEST RIGHT, AND FROM THERE ON IN THE DIRECTION, CLOCKWISE OR COUNTERCLOCKWISE, TO COMPLETE THE SHAPE. TAKE A PAINTBRUSH, CALLIGRAPHY STYLUS, OR BRUSH PEN AND TRY IT. YOU'LL SEE HOW THE LINES FORM AND WHY DOING IT IN THIS METHOD IS BOTH PROPER AND SIMPLY END UP LOOKING "RIGHT."

AND JUST AS A RELATED SIDE NOTE, THIS IS WHY IN FULLMETAL ALCHEMIST ED WAS NOT SETTING OFF THE CIRCLES IN THE BOOKS HE READ RIGHT AND LEFT. THE CIRCLES IN THE BOOKS WERE INORGANIC INK PRINTED BY ROLLING STOCK PRINTERS, AND THUS WOULD HAVE BEEN WHOLLY NON-FUNCTIONAL AS ACTUAL CIRCLES.

In the Name Unknown of the First of Witchblood,
Blessed be mine Eyes that they may witness the First Vision,
become strong in the Power of the Sight,
pierce the Veils and Fetters of Time,
and be witness unto the Fire of the One Spirit.
Blessed be my Hands that they may fashion the Houses of the Gods,
that they may touch and hold the Beloved in Worship,
open all Gates and bring forth Truth,
and show forth the Fivefold Sign of the One Spirit.
Seed of I at this Instant become:
Point become Space; mine own Form unfold.
Prototype of all Sorcery dreamt, in Man become manifest;
Lowest root become highest bough; Star in Heart ignite!

THE FORMULAE OF THE SECOND HOLY LETTER,

BY WHOSE POWER THE SECRET INTERPRETATION OF ALL MYSTERIES IS KNOWN UNTO THE BODY OF THE CULT



Pure Formulaic Spell
of the Azoëtia

Hekas Hekas Este Bebeloi.
Zazas Zazas Nasatanata Zazas.
Protos Eos Mii.
Nama Weica Aster,
Nama Hekau Ashemu Sek.
Xenar, Xenar, Xenar, Xenar.
Abra-Khu-Zraa
Zsin-Niaq-Sa.
Aiozs-Zoias.
I

A TRANSLITERATION OF THE FORMULAIC SPELL, TOGETHER WITH A DETAIL OF THE COGNATE RITUAL PROCEDURES OF THE SABBAT

(THIS BEING SUCH KNOWLEDGE AS IS REVEALED IN THE ARCANUM OF THE SECOND HOLY LETTER)

Inner Form:-

I: Unto whom All is aligned in Perfection; revealed is Thine Arcanum.
Witness art Thou to Thine own Light who knoweth Thyself in Darkness.
Imperishable Star! In whom the Convocation of the Sabbat is focused,
from whom all Magical Power proceeds.

Thy Fivefold Sign shineth in the Four Paths of the Cross and uniteth the Eight Paths of the Sabbat - Thy One Sigil bindeth the Whole.
In Thy Fourfold Name are hidden the Mysteries of Congress: the Secrets of Creation, Uncreation, Excreation, and Increation.
All Futurity and Antiquity of mine own Being unto I be here aligned.
In Thee, Autochthonic and Aethyric,
the Geminus of Zoa and Azoa is united.
Concealed is Thine Arcanum: ZO-I-AS.
In the Pleasure of Thee, Now as in Eternity - the Sole Reality: I.

Outer Form:-

Be ye far from here all ye profane =
Naught be banished but All re-aligned unto mine Intent and Will.

The Gates of Hell be open! =
Let the Way of That which is Hidden here be revealed.

Witness am I to the Dawn of my own Light!
Behold! I am That which dwelleth upon the Twin Horizons.
I am the Gate and the Keeper of the Gate of Twilight -
the Encircler of the Light and the Darkness.

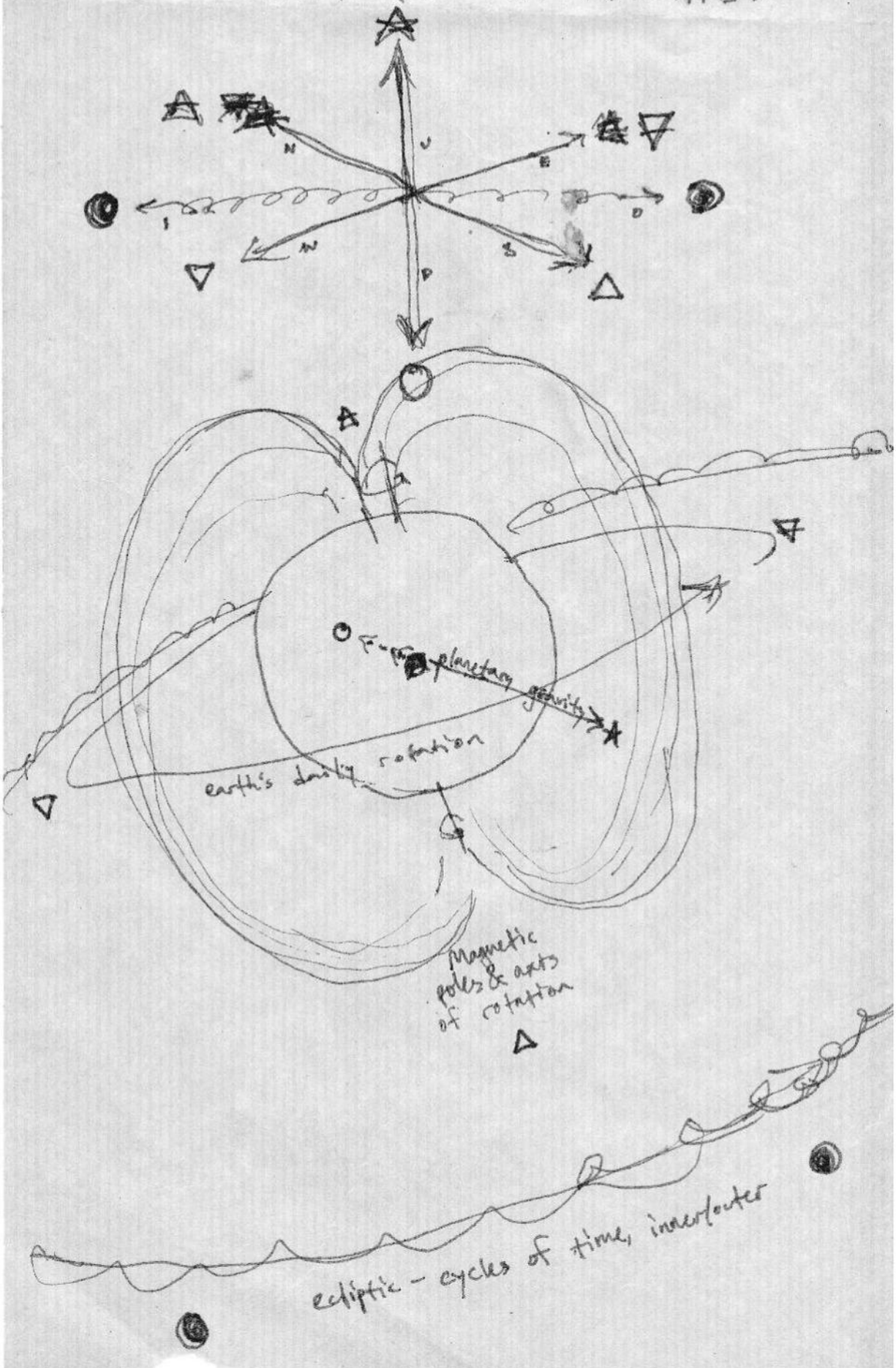
Hail to the Star of the Blessed and the Wise!
Hail to the Magical Formulae of the Undying and Imperishable Stars!
By the Sign of the Pentalpha I raise and bind Thy Powers within the Four Watchtowers of the Universe. By the Secret Tetragrammaton of the Hand/Eye/Phallus/Mouth I speak forth the Arcana of the Sun and Moon conjoined upon the Earth.

I am That which uniteth and divideth.
I am He, I am She - the Ancient One of Spirit Incarnate.

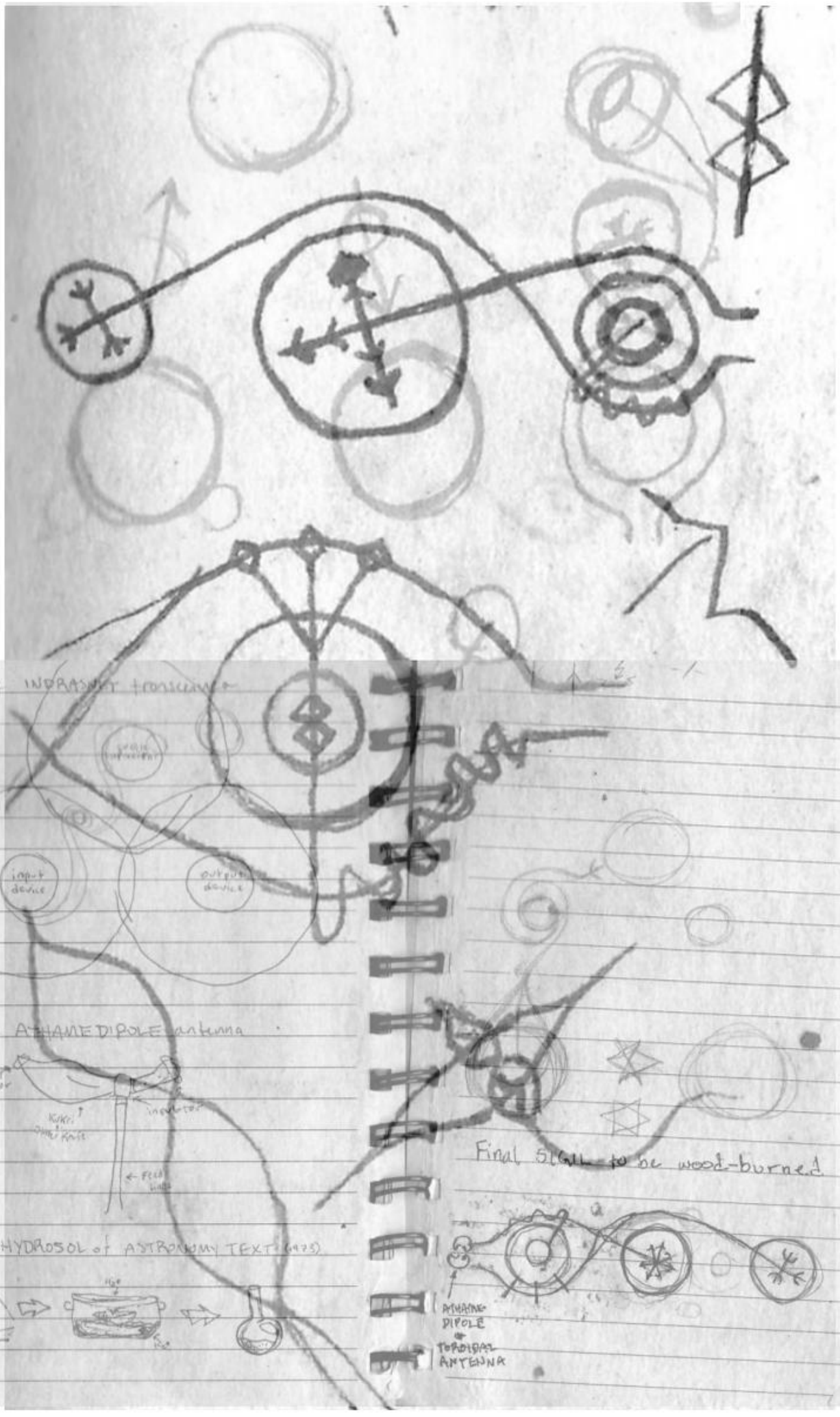
CIRCLE CASTING as HYPERLOCAL ASTROLOGY

or alternatively

UNIVERSAL FIELD COORDINATES



the fulcrum here: define what's filtered through to the brain and you define consciousness. Reprogramming perception. Erecting a strong linkage between the linguistic mode of thought and the visual, sensory parts of brain. The same brain structures light up whether seeing or imagining—how to take advantage of that? Creating text-based trance states, keyboard-eyes connection, typing games as sigilization method? Writing chants, writing labels on everything and eating acid, relabeling them while sober. Babel babble, glossolalia as intentional dissolution of language, perceiving forms and relabeling them with automatic writing. Development of the occult alphabet alphabet of desire, descriptive signs inhabiting a space between schematic, ideogram, symbol, functional ink-based energy circuit. Ink made from human juices? Practicing circuit drawings, connecting rain cycle to creek to microhydro to battery circuits to electric guitar to sound to human motion to heat. Economics of warmth. Olyn's sigil work, permaculture diagrams, wiring schematics, flow charts, feng shui, labyrinths, city planning. There's plumbing that feeds LA from Shasta, from Nevada, wires running from Texas to light their soulless boulevards. How to say all that in a symbol? Or perhaps, to raise consciousness to altered state/trance in which reading those words / that symbol activates an actual 1-to-1 awareness of that? Mantras designed to de-signify a word, make it lose all its meaning, reduce it to a sound... perhaps its emptiness can be used as a gate through to the metaspace where its infinite contextualizations can be traversed. Looking at my own handwriting in the large blocks of text in this journal, I see how beautiful and exotic it is in pure shape. Arabic almost, swirly and spiky both, snakes of text slithering and striking along the corridors of the page. Is it not a beautiful thing, to see these shapes I have made devoid of all symbolism? What do you call a word that looks like its meaning? Giggle, bubble, destruct, sexual, quiz, spastic. Gotta be a list of those on internet somewhere. "Books that read themselves! What do they KNOW?!" -freemax Perhaps the drug most like them is this process itself, writing free


Sigilic INDRAJNA transducer
input device
output device
noetic ATHANE DIPOLE antenna
inductor
distilled HYDROSOL of ASTRONOMY TEXT (1975)
Final SIGIL to be wood-burned
ATHANE DIPOLE
TOROIDAL ANTENNA

1 *Introduction*

"The general (purpose) computer is... a machine in which the operator can prescribe, for any internal state of the machine and for any given condition affecting it, what state it shall go to next... All behaviors are at the operator's disposal. A program... with the machine forms a mechanism that will show (any thinkable) behavior. This generalization has largely solved the main problem of the brain so far as its objective behavior is concerned; the nature of its subjective aspects may be left to the next generation, if only to reassure them that there are still major scientific worlds left to conquer." (W. Ross Ashby, "What Is Mind?" in Theories of the Mind, Macmillan, New York, 1962)

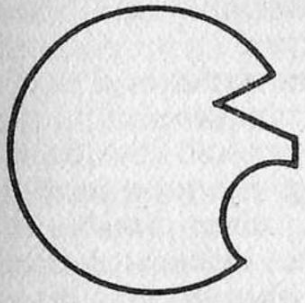
The relations of the activities of the brain to the subjective life in the mind have long been an arguable puzzle. In this century some advances in the reciprocal fields of study of each aspect of the question apparently can begin to clear up some of the dilemmas. This is a report of a theory and its use which is intended to attempt to link operationally, the:

(a) mental subjective aspects,

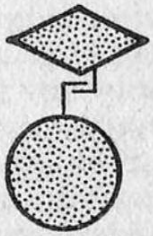
(b) neuronal circuit activities,

(c) biochemistry, and

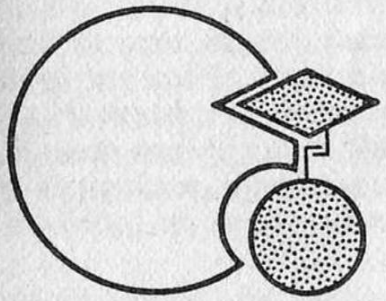
HOW AN ENZYME WORKS



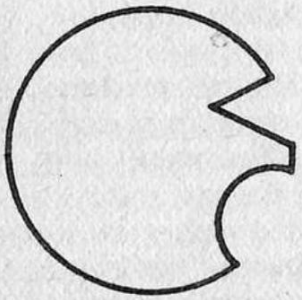
ENZYME BEFORE WORKING



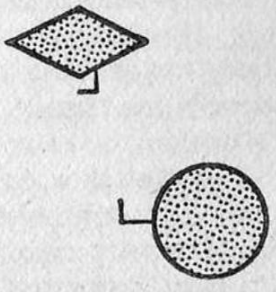
MOLECULE COMPLETE



ENZYME WHILE WORKING



ENZYME AFTER WORKING



MOLECULE SPLIT APART

(d) observable behavioral variables.

The sources of information used by the author are mainly:

(1) the results and syntheses of his own experiments on the CNS* and the behavior of animals,

(2) the experiences and results of experiments in profound physical isolation on himself,

(3) his own psychoanalytic work on himself and others,

(4) his studies and experience with the design, construction, operation and programming of electronic solid state digital stored-program computers,

(5) studies of analogue computers for the analysis and conversion of voice frequency spectra for man and for dolphin and the online computation of multiple continuous data sources

(6) studies and experiments in neuropsychopharmacology

(7) research on and with communication with humans, with dolphins, and with both

(8) study of certain literature in biology (B), logic (L), neuropsychopharmacology (N), brain and mind models (M), communication (T), psychoanalysis (P), computers (C), psychology (O), psychiatry (I), and hypnosis (H) (see References and Bibliography).

The introduction of open-minded, multiple-level, continuously developing, online, operational, dynamic, economical, expanding, structural-functional, field-jumping, field-ignoring theory is needed. The applications of this theory extend from the atomic-molecular-

membranes-cell levels, though cell aggregational levels, total behavior and mental-cognitive levels of the single organism of large brain size, and to dyadic and larger groups of such individuals.

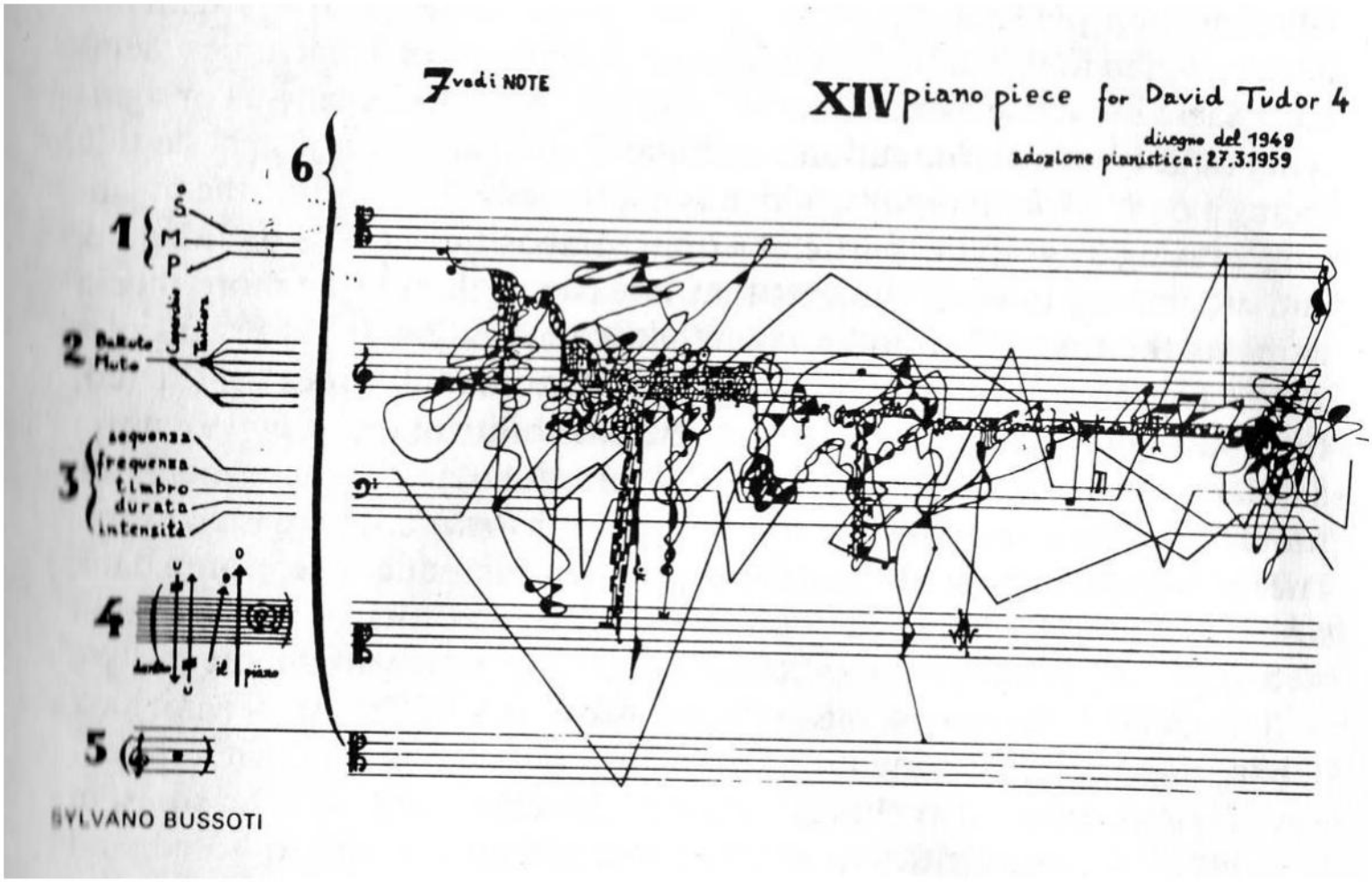
BASIC ASSUMPTIONS

The basic assumptions are as follows:

1. The human brain is assumed to be an immense biocomputer, several thousands of times larger than any constructed by Man from non-biological components by 1965.

   The numbers of neurons in the human brain are variously estimated at 13 billions (1.3 times ten to the tenth) with approximately five times that many glial cells. This computer operates continuously throughout all of its parts and does literally millions of computations in parallel simultaneously. It has approximately two million visual inputs and one hundred thousand acoustic inputs. It is hard to compare the operations of such a magnificent computer to any artificial ones existing today because of its very advanced and sophisticated construction.

2. Certain properties of this computer are known, others are yet to be found. One of these properties obviously is a very large memory storage. Another is control over hundreds of thousands of outputs in a coordinated and programmed fashion. Other examples are the storage and evocation of all those complex behaviors and perceptions known as speech,


7 vedi NOTE
XIV piano piece for David Tudor 4
disegno del 1949
adozione pianistica: 27.3.1959
6
1
S
M
P
2
Battuto
Muto
Corde
Tasti
3
sequenza
frequenza
timbro
durata
intensità
4
il piano
5
SYLVANO BUSSOTI

hearing and language. Some of the more unusual properties of this computer are given further along in this paper.

3. Certain programs are built-in, within the difficult-to-modify parts of the (macro and micro) structure of the brain itself. At the lowest possible level such programs which are built-in are those of feeding, eating, sex, avoidance and approach programs, certain kinds of fears, pains, etc.

4. Programs vary in their permanence, some are apparently evanescent and erasable, others operate without apparent change for tens of years. Among the evanescent and erasable programs one might categorize the ability to use visual projection in the service of one's own thinking. One finds this ability with a very high incidence among children and a very low incidence among adults. An example of a program operating without change for tens of years one can show handwriting, over a long series of years, to maintain its own unique patterns.

5. Programs are acquirable throughout life. Apparently no matter how old a person is, there is still a possibility of acquiring new habits. The difficulties of acquisition may increase with age, however, it is not too sure that this is correct. The problem may not be with acquiring programs so much as a decrease in the motivation for acquiring programs.

6. The young newly growing computer acquires programs as its structure expands some of these take on the appearance of built-in permanence. An example of such acquisition of programs in a child is in the pronunciation of words. Once it agrees with those of the parents the pronunciation is very difficult to change later, i.e., there is really no great

motivation for the child to change a particular pronunciation when it is satisfactory to those who listen.

7. Some of the programs of the young growing computer are in the inherited genetic code; how these become active and to what extent is known only in a few biochemical-behavioral cases, at variance with the expectable and usual patterns of development. The so-called Mongoloid phenomenon is inherited and develops at definite times in the individual's life. There are several other interesting clinical entities which appear to be genetically determined. To elicit the full potential of the young growing computer requires special environments to avoid negative anti-growth kinds of programs being inserted in the young computer early.

8. The inherited genetic programs place the upper and the lower bounds on the total real performance and on the potential performance of the computer at each instant of its life span. Once again we are assuming that the best environment is presented to the young organism at each part of its life span. It is not meant to imply that such an environment currently is being achieved. This basic assumption seems highly probable but would be very difficult to test.

9. The major problems of the research which are of interest to the author center on the erasability, modifiability, and creatability of programs. In other words, I am interested in the processes of finding metaprograms (and methods and substances) which control, change, and create the basic metaprograms of the human computer. It is not known whether one can really erase any program. Conflicting schools of thought go from the extremes that one stores everything within the computer and never erases it to

GEOMETRIC FORMULAS

Triangle

$$\text{area } (A) = \frac{bh}{2}$$

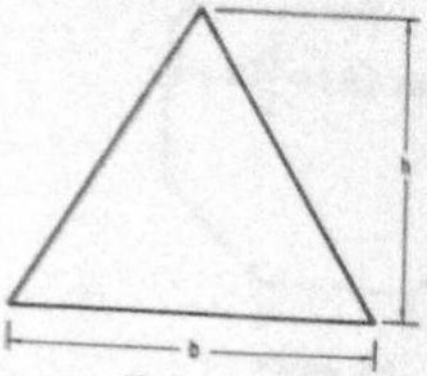


Figure 2-1.

Square

$$\text{area } (A) = b^2$$

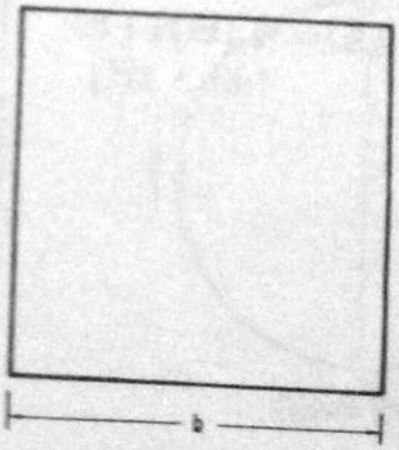


Figure 2-2.

Rectangle

$$\text{area } (A) = ab$$

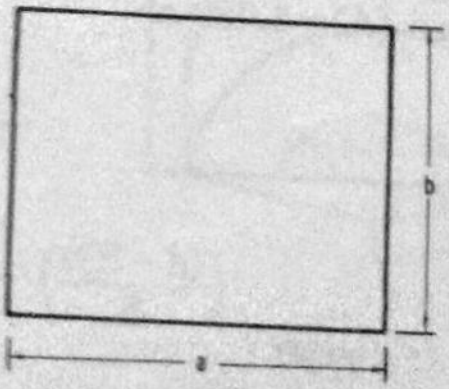


Figure 2-3.

Parallelogram

$$\text{area } (A) = ah$$

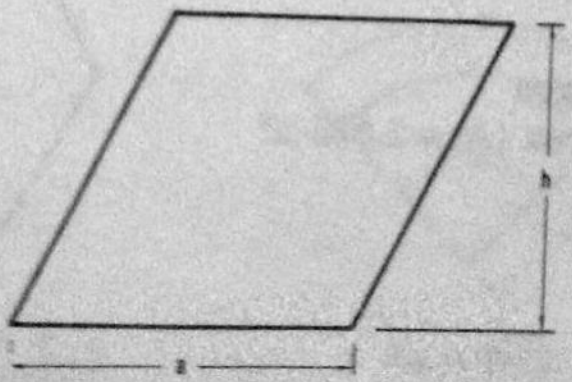


Figure 2-4.

only the important aspects and functions are stored in the computer and hence, there is no problem of erasing. Modifications of already existing programs can be done with more or less success. The creation of new programs is a difficult assignment. How can one recognize a new program once it is created? This new program may merely be a variation on already stored programs.

10. To date some of the metaprograms are unsatisfactory (educational methods for the very young, for example). It is doubtful if any metaprogram is fully satisfactory to the inquiring mind. Some are assumed to be provisionally satisfactory for current heuristic reasons. To keep an open mind and at the same time a firm enough belief in certain essential metaprograms is not easy; in a sense we are all victims of the previous metaprograms which have been laid down by other humans long before us.

11. The human computer has general purpose properties within its limits. The definition of general purpose implies the ability to attack problems that differ not only in quantitative degree of complexity but also that differ qualitatively in the levels of abstraction in the content dealt with. One can shift rapidly one's mind and its attention from one area of human activity to another with very little delay in the reprogramming of one's self to the new activity. The broader the front of such reprogramming the more general purpose the computer is. The ability to move from the interhuman business world to the laboratory world of the scientist would be an example of a fairly general purpose computer.

12. The human computer has stored program properties. A stored program is a set of instructions which are placed in the

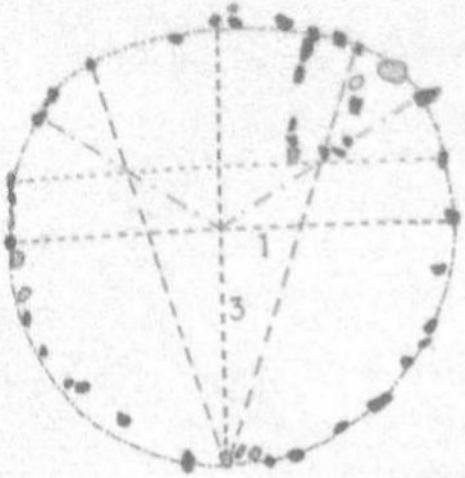
memory storage system of the computer and which control the computer when orders are given for that program to be activated. The activator can either be another system within the same computer, or someone, or some situation outside the computer.

13. The human computer, within limits yet to be defined, has "selfprogramming" properties, and other persons-programming properties. This assumption follows naturally from the previous one but brings in the systems within the mind which operate at one level of abstraction above that of programming. As is shown in Fig. 1, one literally has to talk about selfmetaprogramming as well as selfprogramming. This does not imply that the whole computer can bethought of as the self. Only small portions of the systems operating at a given instant are taken up by the selfmetaprograms. In other words there has to be room for the huge store of programs themselves, of already built-in circuitry for instinctual processes, etc. All of these exist in addition to others leaving only a portion of the circuitry available for the selfmetaprograms. The next section emphasizes this aspect.

14. This computer has selfmetaprogramming properties, with limits determinable and to be determined.

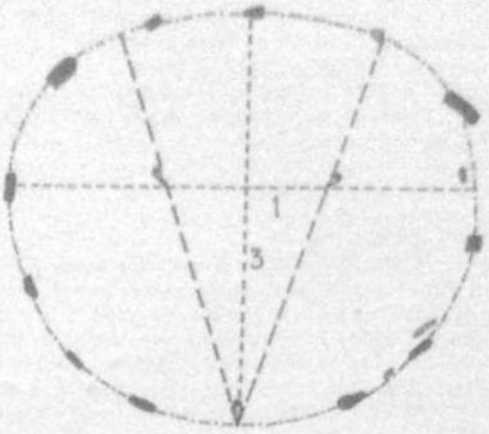
    (Note: selfmetaprogramming is done consciously in metacommand language. The resulting programming then starts and continues below the threshold of awareness). Similarly, each computer has a certain level of ability in metaprogramming others-notself.

15. The older classifications of fields of human endeavor and of science are redefinable with this view of the human brain



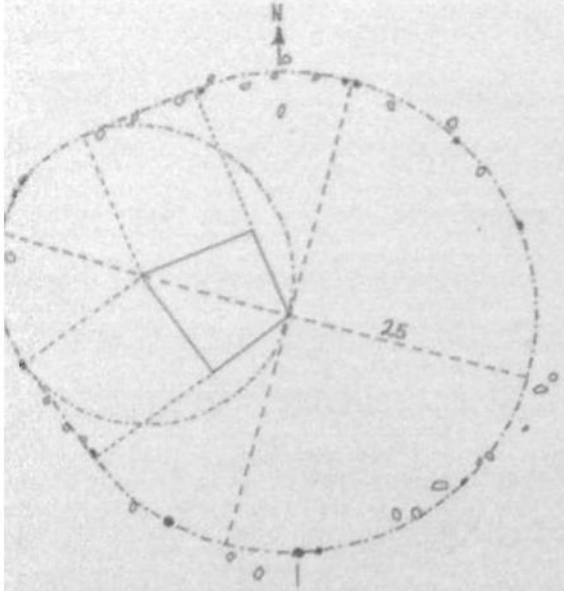
× TYPE 'A' FLATTENED CIRCLE ×

CASTLE RIGG, KESWICK
forming triangle $1:3:\sqrt{10}$
Diameter 40 MY



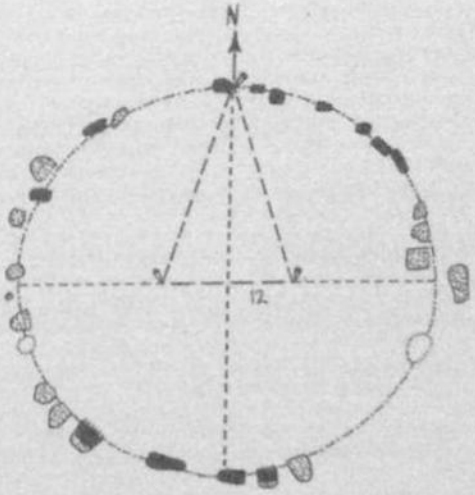
× TYPE 'B' FLATTENED CIRCLE ×

Barbrook, Derbyshire
forming triangle $1:3:\sqrt{10}$
(in units of 3 MY)



× TYPE 'II' 'EGG' ×

Borrowstone Rigg
forming triangle ~3:4:5
Diameter 50 MY



× ELLIPSE ×

Daviot 'B'
forming triangle 12:35:37
(in units of quarter MY)

and the human mind. For example, the term suggestibility has often been used in a limited context of programming and of being programmed by someone outside. Hypnotic phenomena are seen when a given computer allows itself to be more or less completely programmed by another one. Metaprogramming is considered a more inclusive term than suggestibility. Metaprogramming considers sources, inputs, outputs, and central processes rather than just the end result of the process (see Fig. 1). Suggestibility names only the property of receiving orders and carrying them out rather than considering the sources, inputs, outputs, and central processes (ref. H. Bernheim, Clark Hull).

16. The mind is defined as the sum total of all the programs and the metaprograms of a given human computer, whether or not they are immediately elicitable, detectable, and visibly operational to the self or to others. (Thus, in alternative terminology, the mind includes unconscious and instinctual programs.) This definition and basic assumption has various heuristic advantages over the older terminologies and concepts. The mind-brain dichotomy is no longer necessary with this new set of definitions. The mind is the sum of the programs and metaprograms, i.e., the software of the human computer.

17. The brain is defined as the visible palpable living set of structures to be included in the human computer; the computer's real boundaries in the body are yet to be fully described (biochemical and endocrinological feedback from target organs, for example). The boundary of the brain, of course, may be considered as the limits of the extensions of the central nervous system into the periphery. One would

include here also the so-called autonomic nervous system as well as the CNS.

18. There is in certain fields of human thinking and endeavor, a necessity to have a third entity, sometimes including, sometimes not needing the brain-mind-computer; commonly this entity is defined as existing by theologians and other persons interested in religion. Whether the term "spirit" or "soul" or other is used is immaterial in this framework. Such terms inevitably come up in the discussion of the ultimate meanings of existence, the origins of the brain-mind computers, the termination or the destinations of self after bodily death, and the existence or non-existence of minds greater than ours, within or outside of brain-computers. This extra-brain-mind-computer entity can be included in this theory if and when needed. (I agree that such assumptions may be needed to give overall meaning to the whole of Man. Religion is an area for experimental science. Work starts in this area with the basic assumptions of William James, the great psychologist. The definitions in this area of this theory may be expanded in the future. Some compound term like "brain-mind-spirit-computer may be developed at that time). There is still the problem of the existence theorem to be satisfied in regard to this third entity. There are some persons who assume it exists; there are others who assume it does not exist.

19. Certain chemical substances have programmatic and/or metaprogrammatic effects, i.e., they change the operations of the computer, some at the programmatic level and some at the metaprogrammatic level. Some substances which are of interest at the metaprogrammatic level are

Circular Ring

$$\text{area } (A) = \pi(R^2 - r^2) = 0.7854\ (D^2 - d^2)$$

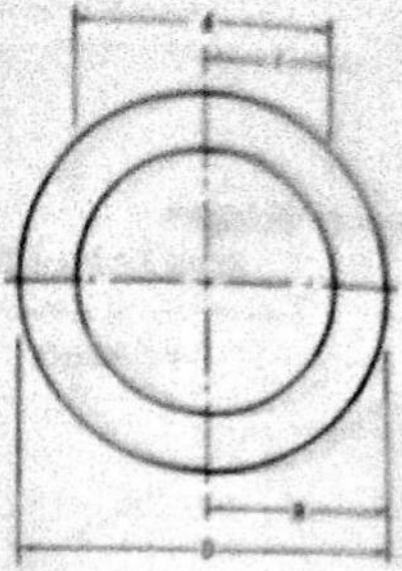


Figure 2-13.

Ellipse

$$\text{circumference } (C) = \pi(a+b)\left[\frac{64 - 3\left(\frac{b-a}{b+a}\right)^4}{64 - 16\left(\frac{b-a}{b+a}\right)^2}\right]$$

$$\text{area } (A) = \pi ab$$

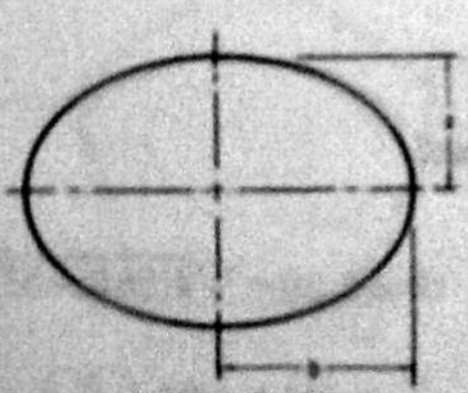


Figure 2-14.

Sphere

$$\text{area } (A) = 4\pi R^2 = \pi D^2$$

$$\text{volume } (V) = \frac{4}{3}\pi R^3 = 1/6\pi D^3$$

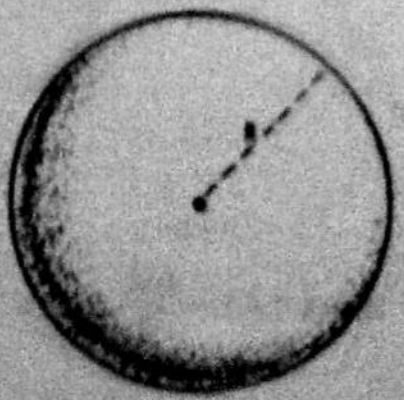


Figure 2-15.

those that allow reprogramming, and those that allow and facilitate modifications of the metaprograms. (The old terms for these substances are loaded with diagnostic, therapeutic, medical, moral, ethical, and legal connotation). To be scientifically useful the social connotations are removed. Such terms as "psychopharmacologically active drugs," "psychotomimetics," "tranquilizers," "narcotics," "drugs," "anaesthetics," "analgesic," etc. are used in a new theory without the therapeutic, diagnostic, moral, ethical, and legal connotations; all of this area should be subjected to careful reevaluation with the new view in mind. Applications of good theory to the social levels may help to unravel this area of controversy.

For example, the term "reprogramming substances" may be appropriate for compounds like lysergic acid diethylamide. For substances like ethyl alcohol the term "metaprogram-attenuating substances" may be useful. Similarly the theory proposed may be useful in other areas in the classical fields of psychopharmacology, neurophysiology, biochemistry, and psychology, among others. Some of the detailed operations of the brain itself can be operationally organized to show how programs are carried out by excitation-inhibition-disinhibition patterns among and in neural masses and sheets (for example, the reticular activating-inhibiting system, the reward-punishment systems, the cerebral-cortical conditionable systems, etc.).

20. It is not intended that I be dogmatic in the new definitions of this version of the theory.

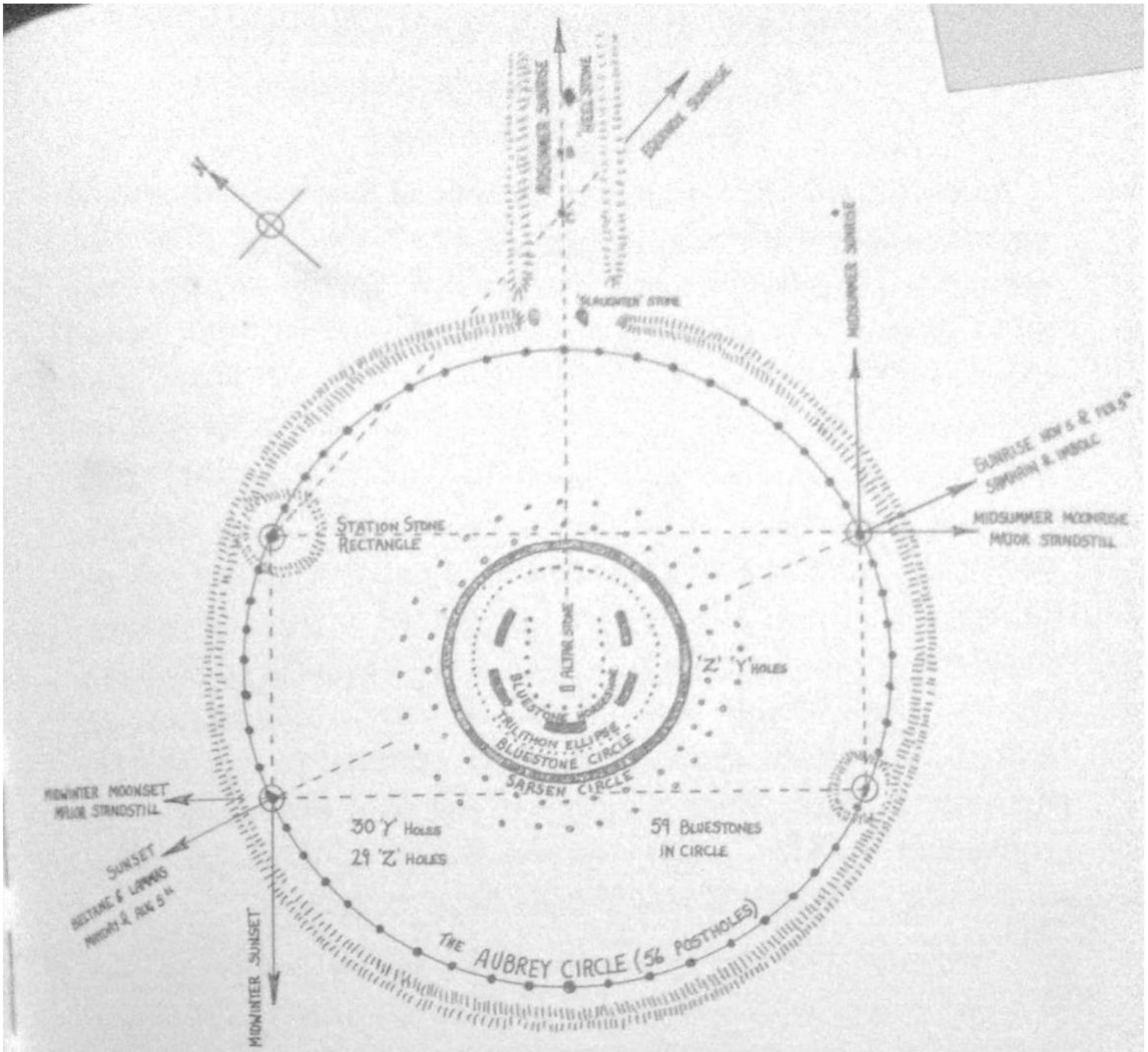
Speed in the recording of the ideas is preferred to perfection of the concepts and deriving the ultimate

in internal consistency. As the theory grows, so may grow its accuracy and applicability. It is intended that the theory remains as open-minded as possible without sacrificing specificity in hazy generality. The language chosen is as close to basic English as possible.

As the theory develops, a proper kind of symbolism may be developed to succinctly summarize the points and allow manipulations of the logic to elucidate elaborations of the argument in various cases.

It is known that the common "machine-language" of mammalian brains is not yet discovered. The selfmetaprogram language is some individual variation of the basic native language in each specific human case. All of the levels and each level expressed in the selfmetaprogram language for selfprogramming cover very large segments of the total operation of the computer, rather than details of its local operations. Certain concepts of the operation of computers, once effectively introduced into a given mind-brain-computer, change its metaprograms rapidly. Language now takes on a new precision and power in the programming process.

21. Certain kinds of subjective experience reveal some aspects of the operations of the computer to the self. Changes in the states of consciousness are helpful in delineating certain aspects of the bounds and the limits of these operations. Inspection of areas of stored data and programs not normally available is made possible by special techniques. Special aspects and areas of stored programs can be visualized, felt, heard, lived through or replayed, or otherwise elicited from



In March 1963, Mr C A Newham wrote an article for the Yorkshire Post which revealed the solar and lunar alignments of the Station Stone rectangle (above). These alignments apply only at the latitude of Stonehenge, elsewhere the rectangle would become a parallelogram. The geometry is entirely octagonal *(see page 49)*.

memory storage by means of special techniques and special instructions. The evocation can be confined to one or any number of sensory modes, with or without motor replay simultaneously.

22. After and even during evocation from storage, within certain limits, desired attenuations, corrections, additions, and new creations with certain half-lives can be made. These can be done with (fixed but as yet not determinable) half-lives in conscious awareness, and can subsequently be weakened or modified or replaced, to a certain extent to be determined individually. An unmodifiable half-life can turn up for certain kinds of programs subjected to antithetical metaprograms, i.e., orders to weaken, modify or replace a program act as antithetical metaprograms to already existing programs or metaprograms.

23. New areas of conscious awareness can be developed, beyond the current conscious comprehension of the self. With courage, fortitude, and perseverance the previously experienced boundaries can be crossed into new territories of subjective awareness and experience. New knowledge, new problems, new puzzles are found in the innermost explorations. Some of these areas may seem to transcend the operations of the mind-brain-computer itself. In these areas there may be a need for the metacomputer mappings; but first the evasions constructed by the computer itself must be found, recognized, and reprogrammed. New knowledge often turns out to be merely and hidden knowledge after mature contemplative analysis.

24. Some kinds of material evoked from storage seem to have the property of passing back in time beyond the beginning of this

brain to previous brains at their same stage of development; there seems to be a passing of specific information from past organisms through the genetic code to the present organism; but, again, this idea may be a convenient evasion, avoiding deeper analysis of self. One cannot make this assumption that storage in memory goes back beyond the sperm-egg combination or even to the sperm-egg combination until a wishful phantasy constructed to avoid analyzing one's self ruthlessly and objectively is eliminated.

25. Apparently not all programs are revisable. The reasons seem various; some are held by feedback established with other mind-brain-computers in the life involvement necessary for procreation, financial survival, and practice of business or profession. Other non-revisable programs are those written in emergencies in the early growth years of the computer. The programs dealing with survivals of the young self sometimes seem to have been written in a hurry in desperate attempts to survive; these seem most intransigent.

26. Priority lists of programs can function as metaprograms. Certain programs have more value than others. By making such lists the individual can find desired revision points for rewriting important metaprograms. In other words it is important to determine what is important in one's own life.

27. The basic bodily and mental function programs and their various forms dealt with in verbal-vocal modes (words, speech, etc.) have been described in great detail in the psychoanalytic literature. Evasion, denial, and repression are varieties of metaprograms dealing with the priority list of programs. Metaprograms to hide (repress) certain kinds of storage material are commonly found in certain persons.

Cube

$$\text{area } (A) = 6b^2$$
$$\text{volume } (V) = b^3$$

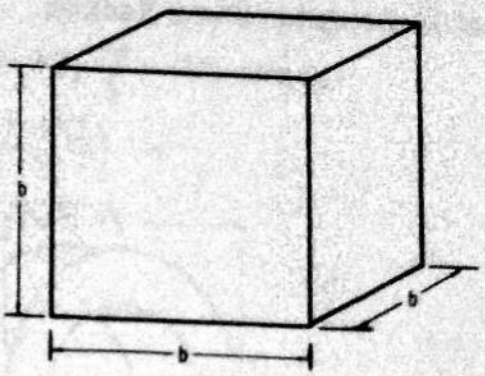


Figure 2-16.

Rectangular Solid

$$\text{area } (A) = 2\,(ab + bc + ac)$$
$$\text{volume } (V) = abc$$

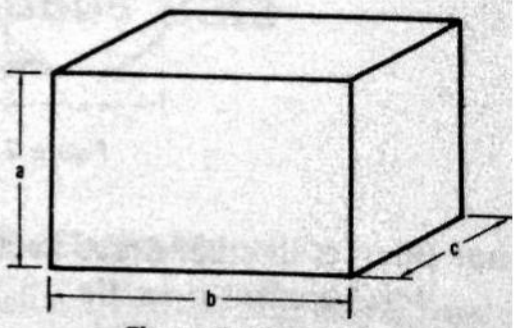


Figure 2-17.

Cone

$$\text{area } (A) = \pi RS$$
$$= \pi R\sqrt{R^2 + h^2}$$
$$\text{volume } (V) = \frac{\pi R^2 h}{3}$$
$$= 1.047R^2h$$
$$= 0.2618D^2h$$

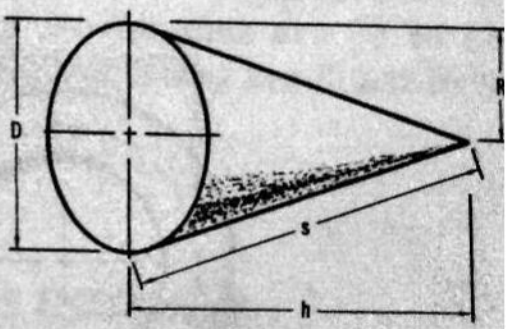


Figure 2-18.

Cylinder

$$\text{cylindrical surface} = \pi Dh$$
$$\text{total surface} = 2\pi R(R + h)$$
$$\text{volume } (V) = \pi R^2 h$$
$$= \frac{c^2 h}{4\pi}$$

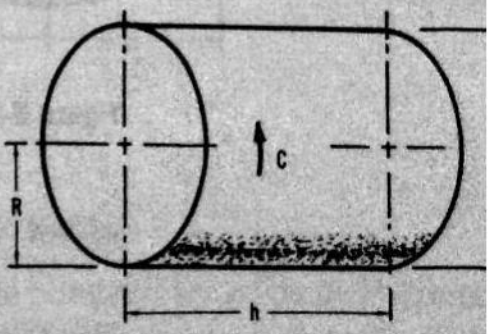


Figure 2-19.

Such analyses are confined to the verbal-vocal-acoustic modes. Encounters with other persons in the real world are much more powerful in terms of modifications of programs than either psychoanalysis or selfanalysis. For example learning through sexual intercourse cannot be given through the verbal-vocal mode.

28. The detailed view of certain kinds of non-speech, nonverbal learning programs, i.e., some of the methods of introducing such programs and parts thereof, are exemplified in the work of I. P. Pavlov and of B. F. Skinner. Some of these results are the teaching and the learning of a simple code or language, a code with nonverbal elements (non-vocalized and non-acoustic) with autonomic components (Gordon Pask, 1966). Other motor outputs than the phonation apparatus are used.

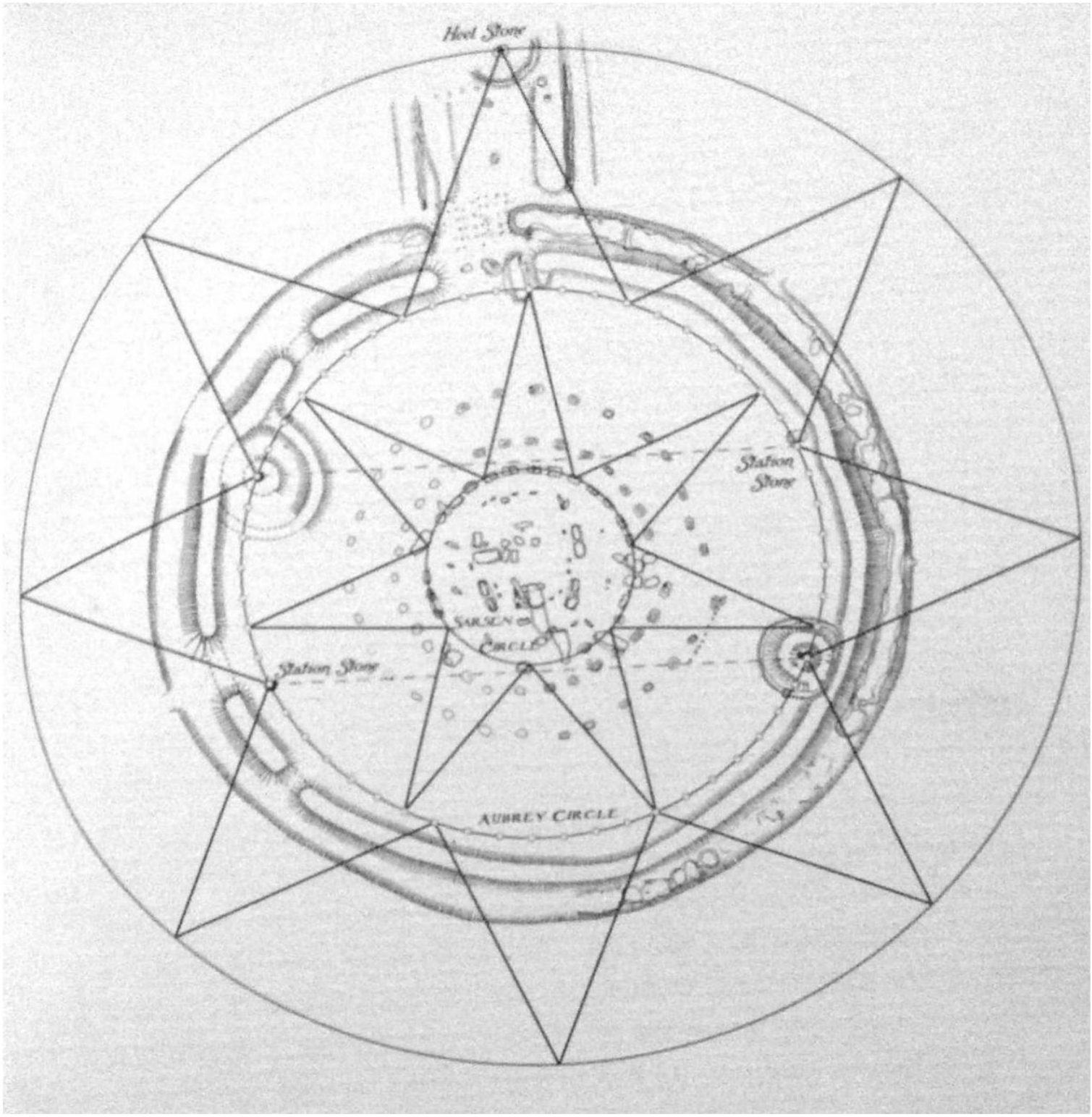
29. The reward-punishment dichotomy or spectrum is critically important within the human computer's operations.

    The fact of various CNS circuits existing as reward and as "punishment" systems when stimulated by artificial or by natural inputs must be taken into account (Lilly, J. C., 1957, 1958, 1959). The powerful emotional underpinnings of "movement toward" and "movement away" must be included, as well as the acquisition of code symbols for these processes. Such symbols tend to set up the priority hierarchies of basic operational programs in microformat (nonverbal) and in macroformat (verbal). Too often, "accidental" juxtaposition seems to key off improper hierarchical relations at the outset, with resulting priorities set by "first occurrence" spontaneous

configurations, unplanned and unprepared. With a new view and a new approach, with planned "spontaneities" graded by order of occurrence, proper program priorities could be set at the beginning of the computer's life history. The maintenance of general purpose properties from the early human years to adulthood is a worthwhile metaprogram.

The positive (pleasure producing) and negative (pain or fear producing) aspects of the programs and metaprograms strike at the very roots of motivational energies for the computer. One aspect of lysergic acid diethylamide is that it can give an overall positive motivational aspect to the individual in the LSD25 state. This may facilitate program modifications, but it also can facilitate seeking pleasure as a goal of itself.

30. Various special uses of the human computer entail a principle of the competing use of the limited amount of total available apparatus. To hold and to display the accepted view of reality in all its detail and at the same time to program another state of consciousness is difficult; there just isn't enough human brain circuitry to do both jobs in detail perfectly. Therefore special conditions give the best use of the whole computer for exploring, displaying, and fully experiencing new states of consciousness; physical isolation (only with special limited stimulation patterns, if any) (Lilly, 1956) gives the fullest and most complete experiences of the internal explorations. One such extreme condition is profound physical isolation (isothermicity, zerolevel visible quanta, sonic levels below threshold, minimum gravitational resisting unit area forces, minimum internal stimulation intensity, minimum


Heel Stone
Station Stone
Station Stone
AUBREY CIRCLE

respiration stimulus level, etc.). This condition can give some additional new states of consciousness the "necessary low-level evenness of context" in which to develop. These results are facilitated by minimizing the necessities for computing the present demands of the physical reality and its calculable present consequences (physical reality programs).

Using this principle of the competitive use of portions of the available brain it is important to understand why, for example, a large amount of hallucinating would not be permissible in our present society. If a person is actively projecting visual images in three dimensions from his stored programs, he may not have enough of his brain functioning in ordinary modes to take care of him with regard to say, gravity, automobiles, and similar hazards. He may become so involved in the projection in the visual field that the inputs from reality itself have to be sacrificed and their quality reduced. It is apparently this danger which teaches us to inhibit hallucinations(i.e., visual projection displays) in the very young children.

31. The principle of the competitive use of available computer structure has a corollary: the larger the computer is, the larger the total number of metaprograms and of programs storable, and the larger the space which can be used for one or more of the currently active programs simultaneously operating. The larger the number of actuable elements in the brain the greater the abilities to simultaneously deal with the current reality program and to reinvoke a past stored-reality program. The quality of the details of the reinvoked program and the quality of the operations in the current physical reality are a direct function of the computer's absolute functional size, all other values being equal.

Function ... effeciency ... Not just gross size

There may be brains which are large enough to simultaneously project from storage into the visual field and also to function adequately in the outside environment. At least conceptually this is a possibility. This partition of the programs among various modes of operation of course are included in our definition of the general purpose nature of this particular computer.

32. The "consciousness program" itself is expandable and contractible within the computer's structure within certain limits. In coma, this program is very nearly inoperative; in ordinary states of awareness it needs a fair fraction of the machinery to function. In expanded states of consciousness the fraction of the total computer devoted to its operation expands to a large value. If the consciousness is sensorially expanded maximally, there is little structure left for motoric initiation of complex interaction and vice versa. If motor initiation is expanded, the sensorial creations are reduced in scope. If neither sensorial nor motor activities are expanded, more room is available for cognition and/or feeling, etc.

33. The steady state values of the fractions of the total computer each devoted to a separate program at a given instant add up to the total value of one. The value of a given fraction can fluctuate with time. The places used in the computer also change.

34. In general there are delineable major systems of metaprograms and of programs competing for the available circuitry. The methods of categorizing these competing programs depend on the observer's metaprograms. One system divides the competitors into visual, acoustic, proprioceptive, emotive,

Ring of Rectangular Cross Section

$$\text{volume } (V) = \frac{\pi c}{4}(D^2 - d^2)$$

$$= \left(\frac{D+d}{2}\right)\pi bc$$

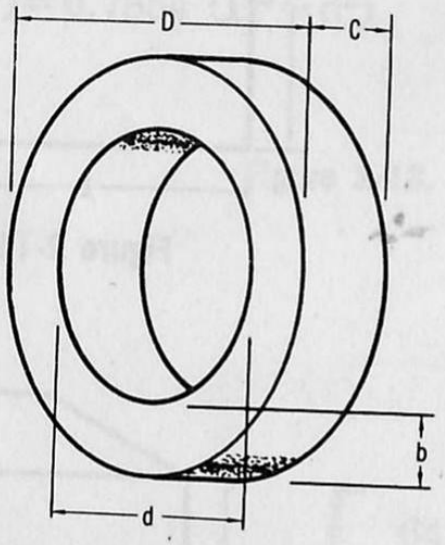


Figure 2-20.

Torus (Ring of Circular Cross Section)

$$\text{total surface} = 4\pi^2 Rr$$

$$= \pi^2 Dd$$

$$\text{volume } (V) = 2\pi R \times r^2$$

$$= 2.463D \times d^2$$

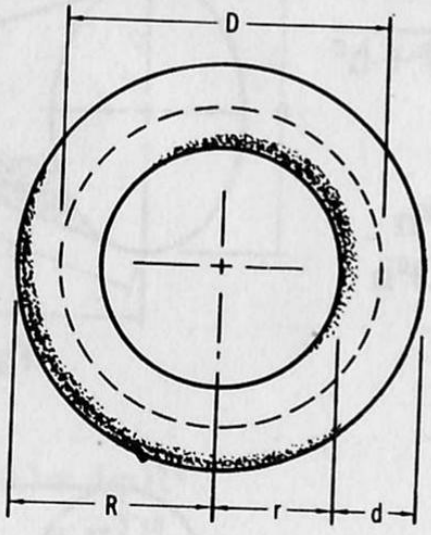


Figure 2-21.

I carried keys, the rustiest of all keys; and with them I knew how to open the creakiest of all gates.

Like a bitterly evil croaking the sound penetrated through the long corridors as the gate's wings swung open; hideously this bird screeched, defiant in being awakened.

But even more terrible and heart-constricting was the silence that set in around me when the gate fell quiet, and I sat alone in this treacherous silence.

Thus the time passed and crept by me, if time existed anymore – what do I know! But at last something happened that awakened me.

Three times there were blows at the door, like thundering, and the vaults echoed and howled three times in return; then I went to the gate.

'Alpa!' I cried. 'Who bears his ashes to the mountain? Alpa! Alpa! Who bears his ashes to the mountain?'[7]

And I pressed the key and lifted on the gate and strained. But it would not open even the width of a finger:

Then a roaring wind tore its wings apart; whistling, shrilling and whipping it threw down a black coffin before me:

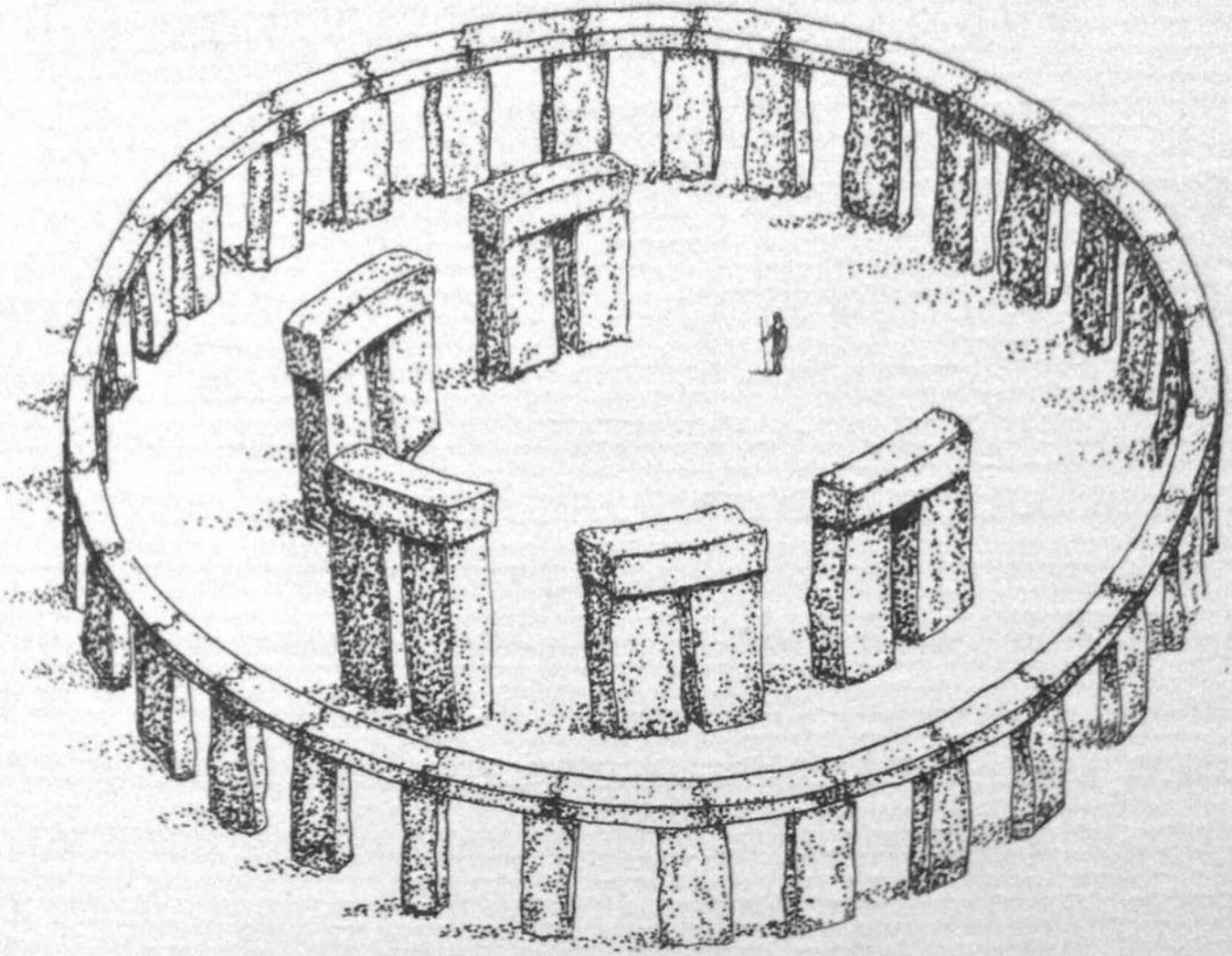
And amidst the roaring and whistling and shrilling the coffin burst open and spewed forth thousandfold laughter.

And it laughed and mocked and roared against me from a thousand grimaces of children, angels, owls, fools and butterflies the size of children.

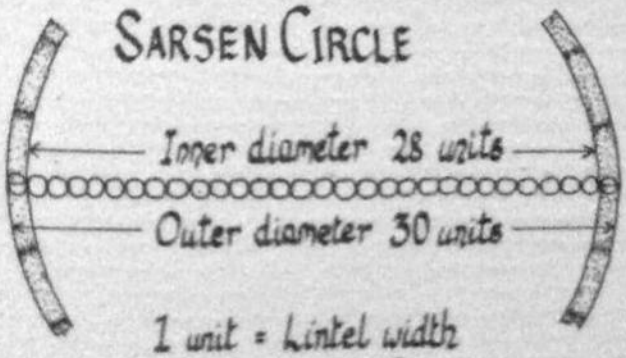
I was horribly frightened; it threw me to the ground. And I cried out in terror as I have never cried before.

But my own cries awakened me – and I came to. –"

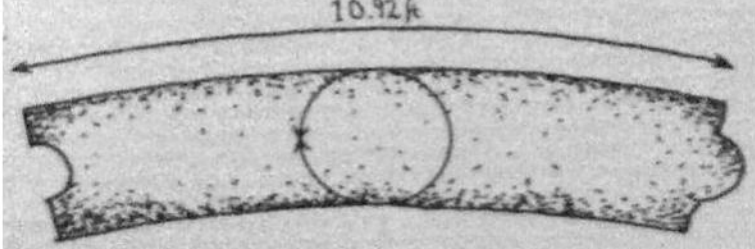
Thus Zarathustra related his dream and then he was silent, for he did not yet know the interpretation of his dream. But the disciple whom he loved most quickly stood up, took hold of Zarathustra's hand and said:



SARSEN CIRCLE



1 unit = Lintel width
= 3.475 ft



SARSEN CIRCLE OUTER DIAMETER = 104.3 ft

OUTER CIRCUMFERENCE = 327.6 ft

INNER DIAMETER = 97.32 ft

LINTEL LENGTH = 10.92 ft $\left(\frac{327.6}{30}\right)$

LINTEL WIDTH = 3.475 ft $\left(\frac{10.92}{\pi}\right)$

= LINTEL LENGTH / π

'JEWISH' SACRED ROD = 3.4757 ft

3.4757485 ft = $\frac{\text{POLAR RADIUS}}{6{,}000{,}000}$

(after John Michell)

TABLE 8

INTERLOCK: EXTERNAL REALITY PROGRAM

Systems

1. Afferent
2. Efferent
3. Reticular modulating ±
4. Positive system phasing
5. Negative system phasing
6. Cortical storage and programming
7. Built-in programs

TABLE 9

NARCISSISTIC STATES through electrical stimulation of the brain, drugs, programming, and isolation: basic factors are:

1. Prolonged hyperactive (+) systems.
2. Hypoactivity (–) systems.
3. Attenuation of external stimuli, responses, transactions.

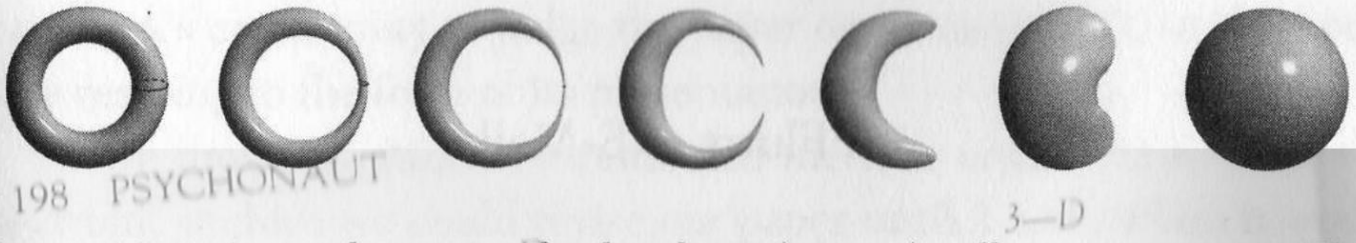


Figure 13.3 A circular piece of a doughnut (a torus) collapses to a point. The surface tears open, yielding two puncture holes. A zero-dimensional sphere (two points) is "glued in," replacing the original one-dimensional sphere (the circle) and repairing the torn surface. This allows a transformation to a completely different shape—a beach ball.

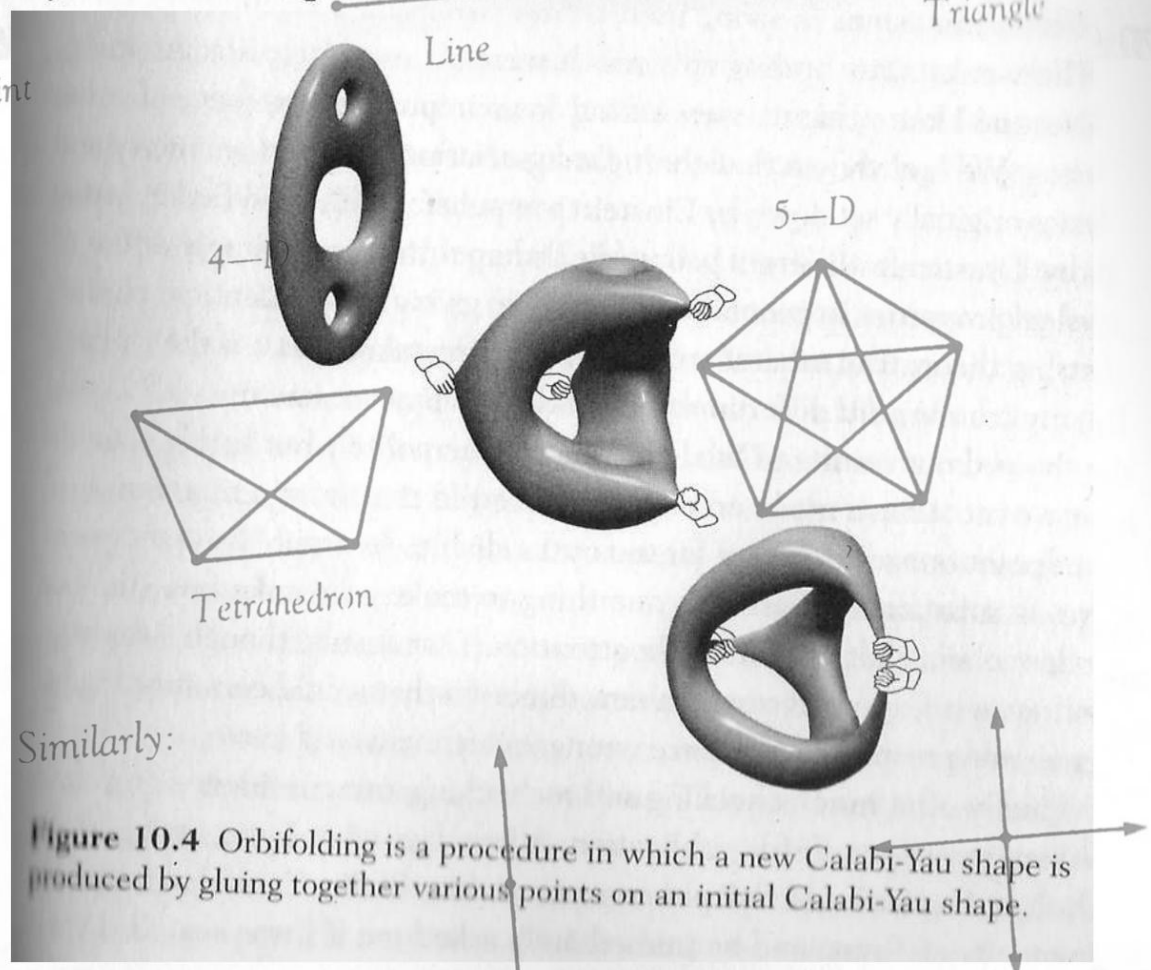


Figure 10.4 Orbifolding is a procedure in which a new Calabi-Yau shape is produced by gluing together various points on an initial Calabi-Yau shape.

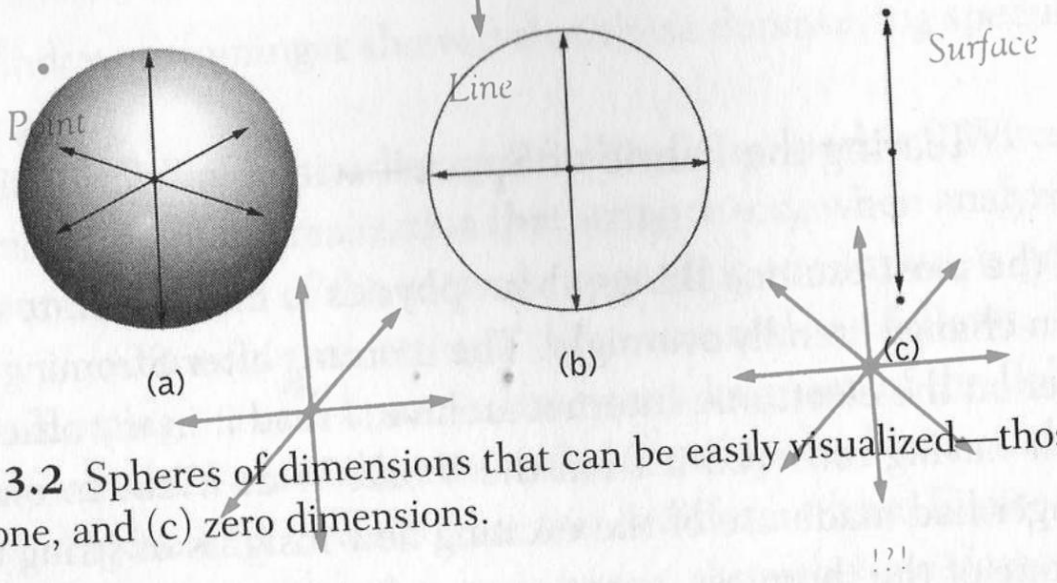


Figure 13.2 Spheres of dimensions that can be easily visualized—those of (a) two, (b) one, and (c) zero dimensions.

Solidity

!?!

...of forms through various dimensional levels.

TABLE 3

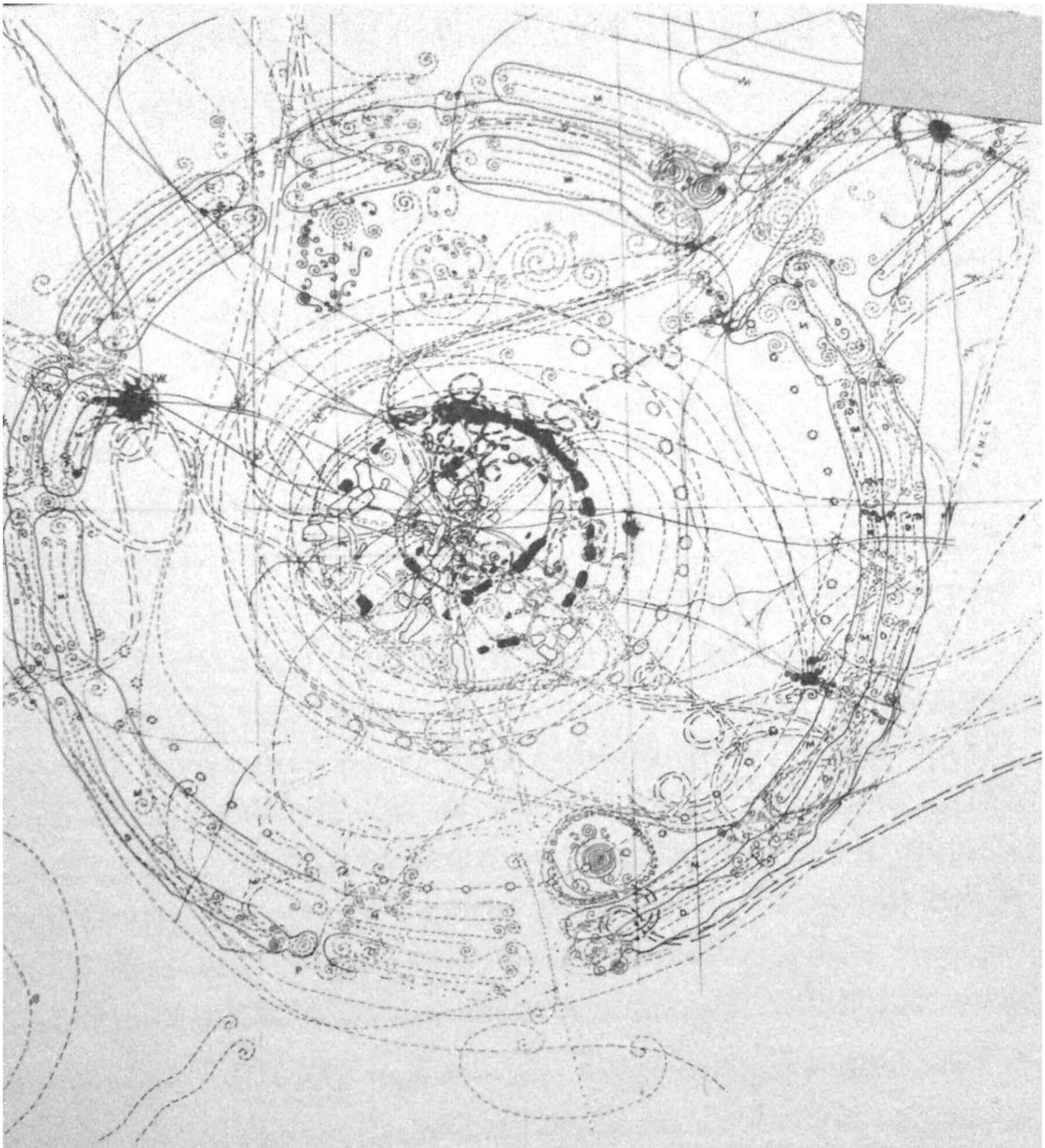
KINDS OF "STIMULI"

1. Physical specifications: end-organs: kind and amount, timing, patterning of energy
2. Physiological specifications: neuronal: threshold values, patterns of neuron excitation (kind, place, impulses/ second)
3. Central nervous system specification: number of excited neurons, where, what impulse frequencies; buildup of central state in what systems, its kind.

TABLE 4

KINDS OF "RESPONSES"

1. Patterned musculoskeletal:
   (A) Starting a feedback pattern with apparatus or with another organism (B) Stopping a feedback pattern
2. Patterned CNS biochemical states generating musculoskeletal responses:
   (A) Neutral
   (B) Net rewarding
   (C) Net punishing
   (D) Net ambivalent



In 1948, Guy Underwood dowsed around Stonehenge, producing the above schematic of the 'earth energies' he sensed. He also, for the first time, correctly dated the monument at 2650 BC. His book, 'Pattern of the Past', helped to fuel a revival in the ancient art of dowsing.

THE ALPHABET OF DESIRE

Except for the curious condition of laughter, which is its own opposite, emotion follows a dual pattern — love and hate, fear and desire, and so on. The following Alphabet of Desire includes all the basic root emotions arranged as complementary dualisms in a form suggestive of the classical gods, or Ruach of Kabbala.

Pagan philosophers saw human qualities mirrored in nature and cast these giant reflections of themselves as gods. It is therefore unsurprising that most pagan cosmologies contain a complete spectrum of our psychology in god form.

The main divisions of emotion have been equated with planetary god forms. Each of these principles manifests in three important forms represented here by the alchemical principles of



The Mercurial (exalting, spiritual) form indicates the cathartic, ecstatic, gnostic mode. Over-stimulation of any emotive function creates a mental paroxysm in which the whole consciousness may be caught up. This is experienced as a great release or catharsis, and at higher levels, ecstasy. Finally, the one-pointed consciousness essential to mysticism and magic may supervene in which the life force can act directly. The gnostic condition is also the key to radical changes of belief or conversion. Any belief presented in this condition is likely to be retained due to the hypersuggestibility of the vacuous state of the mind.

The Sulphurous (quickening, active) form indicates the ordinary basic drives to copulate, to destroy, to be attracted by favorable stimuli and repelled by harmful ones. This is the normal functional mode of the emotion from which the ecstatic and earthly modes are derived.

The Earthy (heavy, sluggish) form is evoked when an emotion is baulked of expression or becomes tainted with an admixture

Table 2. Emotional Duality

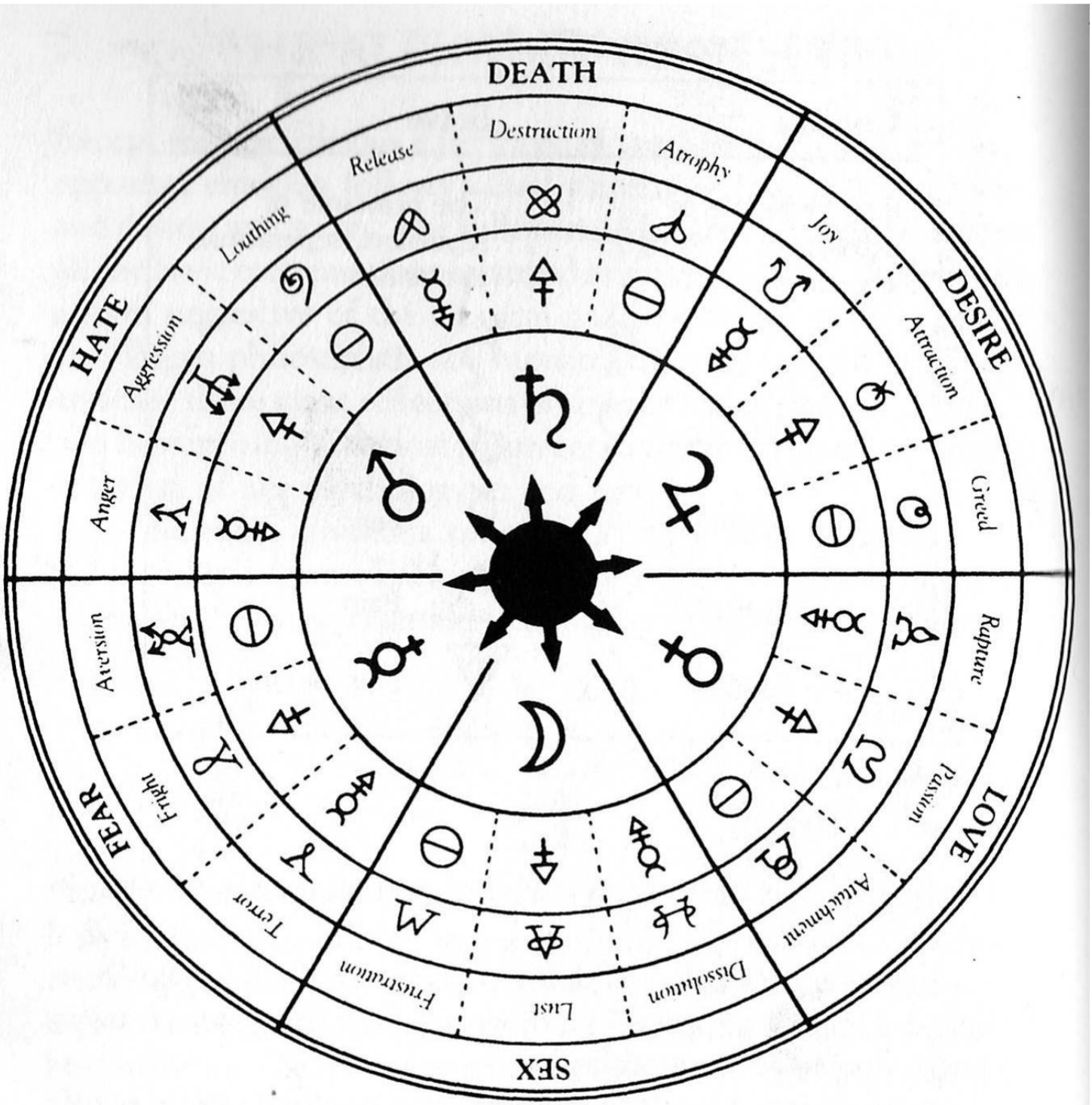
Coagula		Solve	
The principle of attraction, coming together.		The principle of repulsion, separation, avoidance.	
Sex	☾	♄	Death
Love	♀	♂	Hate
Desire	♃	☿	Fear
Pleasure	▽	△	Pain
Elation	△	▽	Depression

of its opposite. It turns in on itself rather than seek fulfillment in action or esctacy.

The greater duality which rules all emotions is shown in Table 2. Figure 9 on page 78 shows us that the root of every emotion is always its opposite.

Armed with this self-knowledge, the magician may ever ride the shark of his desire across the ocean of the dual principle to a gratuitous ecstasy. Anticipating the earthy disfunctional modes, he may transmute their energies and obtain his satisfaction in other forms. (An alternative desire or its sigil is made the focus of concentration in the climate of a negative emotion, it will soon be realized.)

The twenty–one principles have each been given a simple pictorial glyph and a one word mnemonic. The glyphs can be employed in various spells and sigils, but the words are mostly quite inaccurate attempts to capture a feeling. The twenty–one principles can be equated with the Trumps of the Tarot if desired. Kia is equated with the Fool.


DEATH
Release
Destruction
Atrophy
DESIRE
Joy
Attraction
Greed
LOVE
Rapture
Passion
Attachment
Dissolution
SEX
Lust
Frustration
FEAR
Aversion
Fright
Terror
HATE
Loathing
Aggression
Anger

THE CHAOSPHERE

The Chaosphere is the prime radiant or magic lamp of the adept — a psychic singularity which emitteth the brilliant darkness. It is a purposely created crack in the fabric of reality through which the stuff of Chaos enters our dimension. Alternatively, it may be considered as a demonstration of the axiom that belief has the power to structure reality.

The Chaosphere may be given a material form which acts as an anchor to locate its chaotic and aetheric manifestations. The shape shown in figure 13 is only one of a number of possibilities. It consists of a sphere with eight arrows radiant directed toward the vertices of a cube. Thus to the thinking mind it may be said to variously represent a perspective sculpture of the four axes of the geometrically impossible hypercube of the two interpenetrant tetrahedra of the light and dark forces. Such twists of illogic may be useful in the creation of an essentially paradoxical object.

It is colored the deepest black, for this is to give it all colors simultaneously and to provide it with the greatest potential for emission and absorption. The central sphere is hollow to permit the inclusion of various objects, and one of the arrows is detachable as a magical weapon. However the physical shape can take any form that the ingenium of the adept suggests; it is a trifling matter compared to the psychic preparation which goes into its construction.

The Chaosphere is charged and opened into the magical dimension by filling it with aetheric life force which has been paradox modulated.

The life force may be supplied by any method over which the adept has mastery — blood sacrifice, sexual emissions, projection of the body's aetheric force of transference by concentration during ecstatic gnostic rites, or by other methods. The paradox modulation is achieved by imprinting the life force with all manner of contradiction and impossibility. Any two opposite and mutually exclusive ideas or images can be simultaneously employed — the imaginary metaphysical principles of fire and water, or Nuit and Hadit, incompatible geometrics, simultaneous blackness and whiteness, mathematical zero and infinity. Any



Figure 13. The Chaosphere.

manifestation of paradox and possibility can be used, and many different ones should be made to serve.

If the adept be operating a temple, his initiates and students may assist in formulating the Chaosphere, and it may then function as a god or fetish. The more power that is put into it, the wider will be the breach opened into the Chaos dimension and the greater will be the free Chaos energy liberated.

Once it is made it will begin to supply raw Chaos force to anyone coming into physical proximity with it. For this reason the uninitiated should be kept well away, lest they become deranged. The sphere also exists as a vortex or door through which the magical will and perception can reach easily to the other regions of existence in the manner of a powerful magical mirror. The erection of operating Chaospheres at various points about the earth will tend to hasten the immanentization of the eschaton, the change of aeon.

used language such as: "When we marry the crowned king with the red daughter, she will conceive a son in the gentle fire . . . the dragon shuns the light of the sun, and our dead son shall live. The king comes forth from the fire and rejoices in the marriage."[1]

Hermes Trismegistus, also known as "Thrice Great Hermes" (it is from his name that the term *the hermetic art* was given to alchemy), has been variously described as an earthly incarnation of the Egyptian god Thoth and as an Egyptian priest, or a pharaoh, who taught the Egyptians all their magic. He is credited with having written several thousand books, including the Emerald Tablet, or *Tabula Smaragdina*, which contained all the hermetic teachings—the thirteen precepts—including the fundamental principles for the *Grand Arcanum*, or "great secret." There are many references to the Emerald Tablet in alchemical writings.

Instruments



Crucible



Dropper



Grille



Receiver

1. *Tractatus aureus* (1610). The *Tractatus aureus* is an alchemical treatise i chapters attributed to Hermes Trismegistus.

Instruments *(continued)*



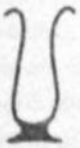
Retort



Scull



Still



Wick

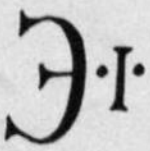
Weights and Measures



Ounce



Dram



Scruple



Pinch

4. A thought is a proposition with a sense.

4.001 The totality of propositions is language.

4.022 Man possesses the ability to construct languages capable of expressing every sense, without having any idea how each word has meaning or what its meaning is--just as people speak without knowing how the individual sounds are produced. Everyday language is a part of the human organism and is no less complicated than it. It is not humanly possible to gather immediately from it what the logic of language is. Language disguises thought. So much so, that from the outward form of the clothing it is impossible to infer the form of the thought beneath it, because the outward form of the clothing is not designed to reveal the form of the body, but for entirely different purposes. The tacit conventions on which the understanding of everyday language depends are enormously complicated.

4.003 Most of the propositions and questions to be found in philosophical works are not false but nonsensical. Consequently we cannot give any answer to questions of this kind, but can only point out that they are nonsensical. Most

of the propositions and questions of philosophers arise from our failure to understand the logic of our language. (They belong to the same class as the question whether the good is more or less identical than the beautiful.) And it is not surprising that the deepest problems are in fact not problems at all.

4.0031 All philosophy is a 'critique of language' (though not in Mauthner's sense). It was Russell who performed the service of showing that the apparent logical form of a proposition need not be its real one.

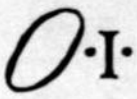
4.01 A proposition is a picture of reality. A proposition is a model of reality as we imagine it.

4.011 At first sight a proposition--one set out on the printed page, for example--does not seem to be a picture of the reality with which it is concerned. But neither do written notes seem at first sight to be a picture of a piece of music, nor our phonetic notation (the alphabet) to be a picture of our speech. And yet these sign-languages prove to be pictures, even in the ordinary sense, of what they represent.

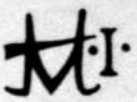
4.012 It is obvious that a proposition of the form 'aRb' strikes us as a picture. In this case the sign is obviously a likeness of what is signified.

4.013 And if we penetrate to the essence of this pictorial character, we see that it is not impaired by apparent irregularities (such as the use [sharp] of and [flat] in musical notation). For even these irregularities depict what they are intended to express; only they do it in a different way.

Weights and Measures *(continued)*



Pint



Pound

Spirits



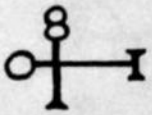
Copper



Mercury



Silver



Tin

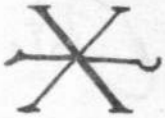


World of Spirit

Seasons



Spring



Summer



Autumn



Winter

Materials



Gold (i)



Gold (ii)



Gold (iii)



Gold (iv)

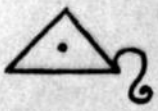
Materials *(continued)*



Gold (v)



Gold (vi)



Gold (vii)



Silver (i)



Silver (ii)



Silver (iii)

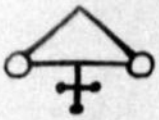


Alum



Antimony

Materials *(continued)*



Arsenic-Sulfur



Aqua Vitæ



Bismuth



Borax



Brass



Burned Alum



Burned Hartshorn



Caustic Lime

4.014 A gramophone record, the musical idea, the written notes, and the sound-waves, all stand to one another in the same internal relation of depicting that holds between language and the world. They are all constructed according to a common logical pattern. (Like the two youths in the fairy-tale, their two horses, and their lilies. They are all in a certain sense one.)

4.0141 There is a general rule by means of which the musician can obtain the symphony from the score, and which makes it possible to derive the symphony from the groove on the gramophone record, and, using the first rule, to derive the score again. That is what constitutes the inner similarity between these things which seem to be constructed in such entirely different ways. And that rule is the law of projection which projects the symphony into the language of musical notation. It is the rule for translating this language into the language of gramophone records.

4.015 The possibility of all imagery, of all our pictorial modes of expression, is contained in the logic of depiction.

4.016 In order to understand the essential nature of a proposition, we should consider hieroglyphic script, which depicts the facts that it describes. And alphabetic script developed out of it without losing what was essential to depiction.

4.02 We can see this from the fact that we understand the sense of a propositional sign without its having been explained to us.

4.021 A proposition is a picture of reality: for if I understand a proposition, I know the situation that it represents. And I understand the proposition without having had its sense explained to me.

4.022 A proposition shows its sense. A proposition shows how things stand if it is true. And it says that they do so stand.

4.023 A proposition must restrict reality to two alternatives: yes or no. In order to do that, it must describe reality completely. A proposition is a description of a state of affairs. Just as a description of an object describes it by giving its external properties, so a proposition describes reality by its internal properties. A proposition constructs a world with the help of a logical scaffolding, so that one can actually see from the proposition how everything stands logically if it is true. One can draw inferences from a false proposition.

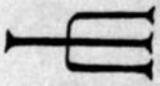
4.024 To understand a proposition means to know what is the case if it is true. (One can understand it, therefore, without knowing whether it is true.) It is understood by anyone who understands its constituents.

4.025 When translating one language into another, we do not proceed by translating each proposition of the one into a proposition of the other, but merely by translating the constituents of propositions. (And the dictionary translates not only substantives, but also verbs, adjectives, and conjunctions, etc.; and it treats them all in the same way.)

Materials *(continued)*



Chalc



Cinder



Cinnibar



Clay



Copper



Cribbled Ashes



Crystal



Eggshells

Materials *(continued)*



Ginger



Glass



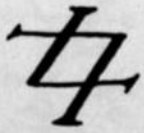
Gravel



Iron



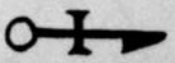
Iron Filings



Lead



Lime



Magnesia

Materials *(continued)*



Manure



Mercury



Nickel



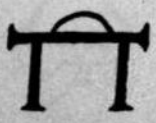
Niter Flowers



Niter Oil



Nitric Acid



Potash



Red Arsenic

Materials *(continued)*



Rock Salt



Sea Salt



Soapstone



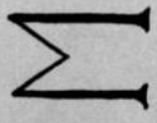
Soot



Steel



Stone



Sugar



Sulfur

4.026 The meanings of simple signs (words) must be explained to us if we are to understand them. With propositions, however, we make ourselves understood.

4.027 It belongs to the essence of a proposition that it should be able to communicate a new sense to us.

4.03 A proposition must use old expressions to communicate a new sense. A proposition communicates a situation to us, and so it must be essentially connected with the situation. And the connexion is precisely that it is its logical picture. A proposition states something only in so far as it is a picture.

4.031 In a proposition a situation is, as it were, constructed by way of experiment. Instead of, 'This proposition has such and such a sense, we can simply say, 'This proposition represents such and such a situation'.

4.0311 One name stands for one thing, another for another thing, and they are combined with one another. In this way the whole group--like a tableau vivant--presents a state of affairs.

4.0312 The possibility of propositions is based on the principle that objects have signs as their representatives. My fundamental idea is that the 'logical constants' are not representatives; that there can be no representatives of the logic of facts.

4.032 It is only in so far as a proposition is logically articulated that it is a picture of a situation. (Even the proposition, 'Ambulo', is composite: for its stem with a different ending yields a different sense, and so does its ending with a different stem.)

4.04 In a proposition there must be exactly as many distinguishable parts as in the situation that it represents. The two must possess the same logical (mathematical) multiplicity. (Compare Hertz's Mechanics on dynamical models.)

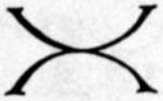
4.041 This mathematical multiplicity, of course, cannot itself be the subject of depiction. One cannot get away from it when depicting.

4.0411. If, for example, we wanted to express what we now write as '(x). fx' by putting an affix in front of 'fx'--for instance by writing 'Gen. fx'--it would not be adequate: we should not know what was being generalized. If we wanted to signalize it with an affix 'g'--for instance by writing 'f(xg)'--that would not be adequate either: we should not know the scope of the generality-sign. If we were to try to do it by introducing a mark into the argument-places--for instance by writing '(G,G). F(G,G)' --it would not be adequate: we should not be able to establish the identity of the variables. And so on. All these modes of signifying are inadequate because they lack the necessary mathematical multiplicity.

4.0412 For the same reason the idealist's appeal to 'spatial spectacles' is inadequate to explain the seeing of spatial relations, because it cannot explain the multiplicity of these relations.

4.05 Reality is compared with propositions.

Materials *(continued)*



Tin



Urine



Verdigris



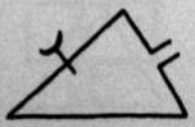
Vinegar



Vitriol



White Arsenic



Wine Spirit



Wood

Materials *(continued)*



Yellow Arsenic



Yellow Wax

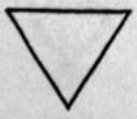


Zinc

Processes



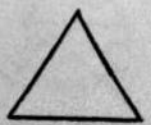
Blackening (melanosis)



Whitening (leucosis)



Yellowing (xanthosis)



Reddening (iosis)

Processes *(continued)*



Amalgam



Amalgamation



Boil



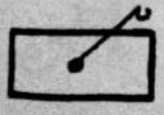
Compose



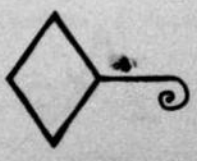
Distill



Essence

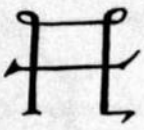


Fumes



Filter

Processes *(continued)*



Mix



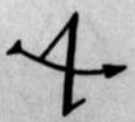
Powder



Purify



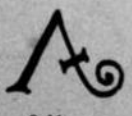
Pulverize



Rot



Solve



Sublime



Take

Magical training is designed to open up the neglected dream level, to provoke an examination of the contents of the robotic level, and to add new programs to it. It should also teach the method of turning awareness on or off at will, and of entering the gnostic level and acting within it.

MATHEMATICAL CONSTANTS

$\pi = 3.1416$	$(2\pi)^2 = 39.4786$
$\pi^2 = 9.8696$	$4\pi = 12.5664$
$\pi^3 = 31.0065$	$\frac{\pi}{2} = 1.5708$
$\frac{1}{\pi} = 0.3183$	$\sqrt{\frac{\pi}{2}} = 1.2533$
$\frac{1}{\pi^2} = 0.1013$	$\sqrt{2} = 1.4142$
$\frac{1}{\pi^3} = 0.0323$	$\sqrt{3} = 1.7321$
$\sqrt{\pi} = 1.7725$	$\frac{1}{\sqrt{2}} = 0.7071$
$\frac{1}{\sqrt{\pi}} = 0.5642$	$\frac{1}{\sqrt{3}} = 0.5773$
$\frac{1}{2\pi} = 0.1592$	$\log \pi = 0.4971$
	$\log \pi^2 = 0.9943$
$\left(\frac{1}{2\pi}\right)^2 = 0.0253$	$\log \sqrt{\pi} = 0.2486$
$2\pi = 6.2832$	$\log \frac{\pi}{2} = 0.1961$

MATHEMATICAL SYMBOLS

× or ·	Multiplied by.	+	Positive, add, and plus.
÷	Divided by.	−	Negative, subtract, and minus.
=	Equals.		

DIGITAL CODES

A digital code is defined as a system of symbols that represent data values and make up a special language that a computer or a digital circuit can understand and use. Digital codes can be considered to be the digital "languages" that permit information to be stored, manipulated, and communicated. Just as there are numerous spoken

Electronic Schematic Symbols

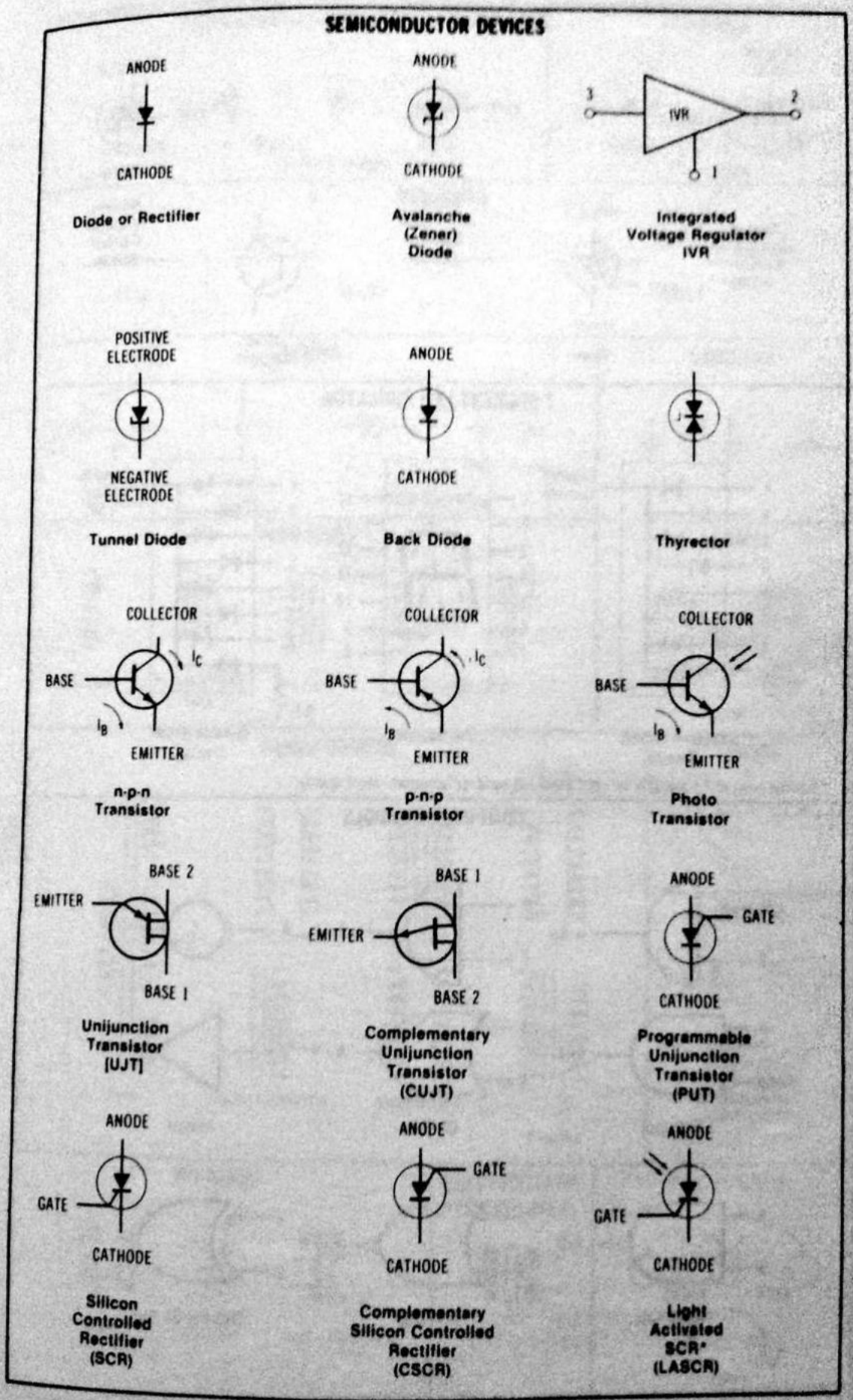
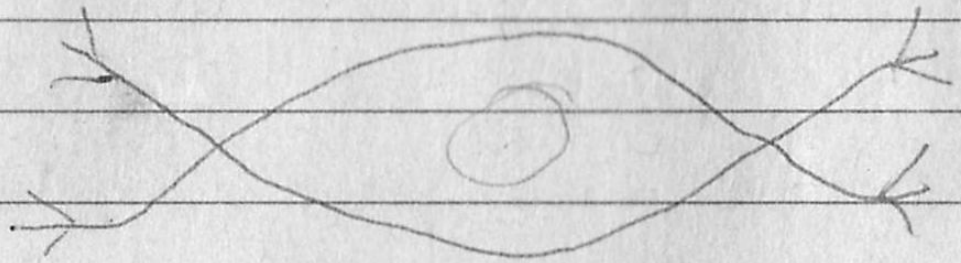


Figure 4-3A

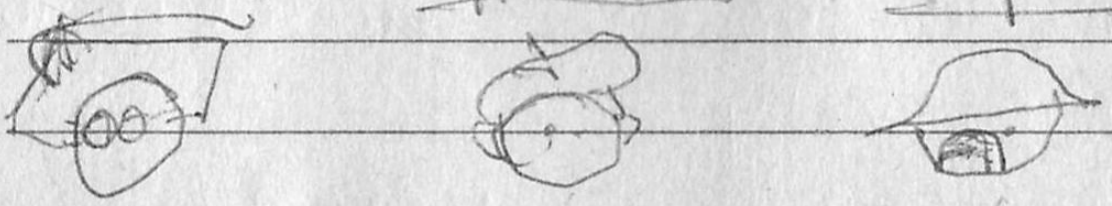
G.O.S.S.I.P.

Guild of Scholars, Scribes, & Independent Poetics



axons — cell body — dendrite

intake — translates — output



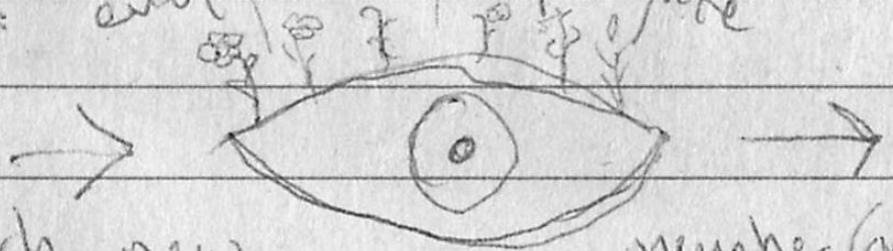
mutual aid: ~~freedom of knowledge~~ knowledge of freedom

inherent fluidity due to Celine's law

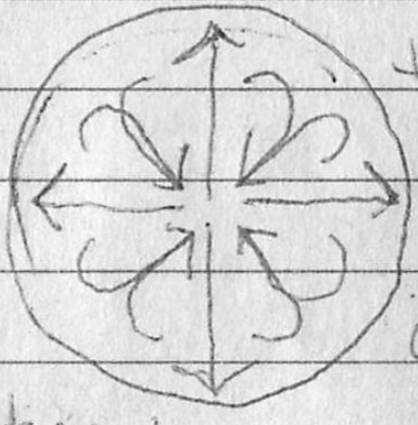
each individual is a/n agent of intelligence

decentralized intelligence

fertile environment for ideas to evolve and replicate



each new member (guildmate) increases the plasticity of the neural network by an order of magnitude create new



metaneural networks.

Electronic Schematic Symbols—(Cont)

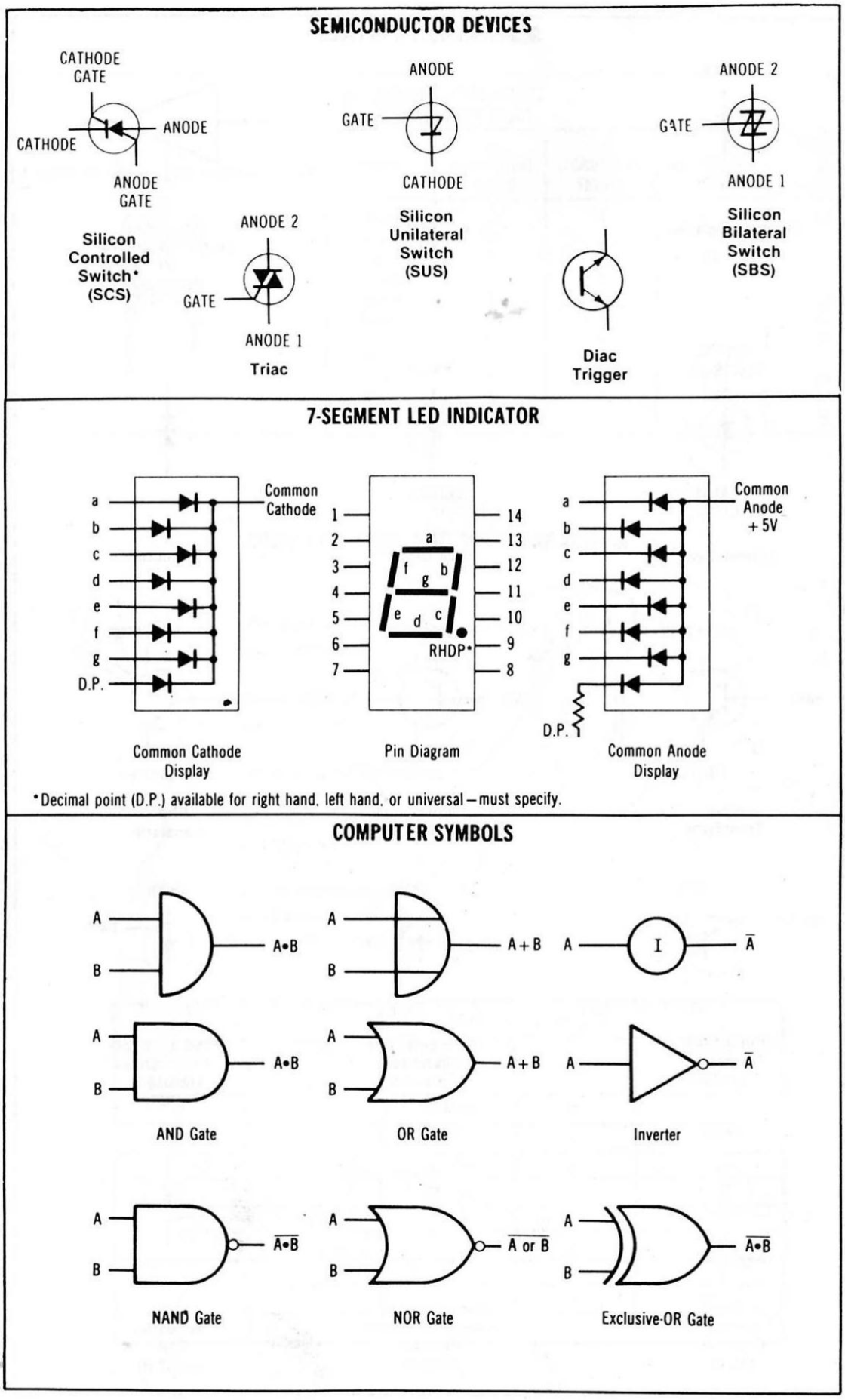


Figure 4-3B

THE ART OF MEMETICS - Ulrich & Wilson

Requisite variety - number of options available to a component of an interaction. Sente in GO.

Distinct advantage.

3 points in response process in which to increase variety:

- input: increase subtlety of distinctions, number of patterns recog'zable
- output: number of responses poss.
- processing: arrange connxns between input & output most efficiently

feedback loop - 2 cycles of info to evaluate a system

processing steps possible = inputs * outputs * outcomes desired

Standard Learning Cycle:

unconscious incompetence
↓ identify
conscious incompetence
↓ model
conscious competence
↓ practice
unconscious competence

what doing
what not doing

WATCH WHAT OTHERS ARE DOING THAT YOU DO NOT!

Electronic Schematic Symbols—(Cont)

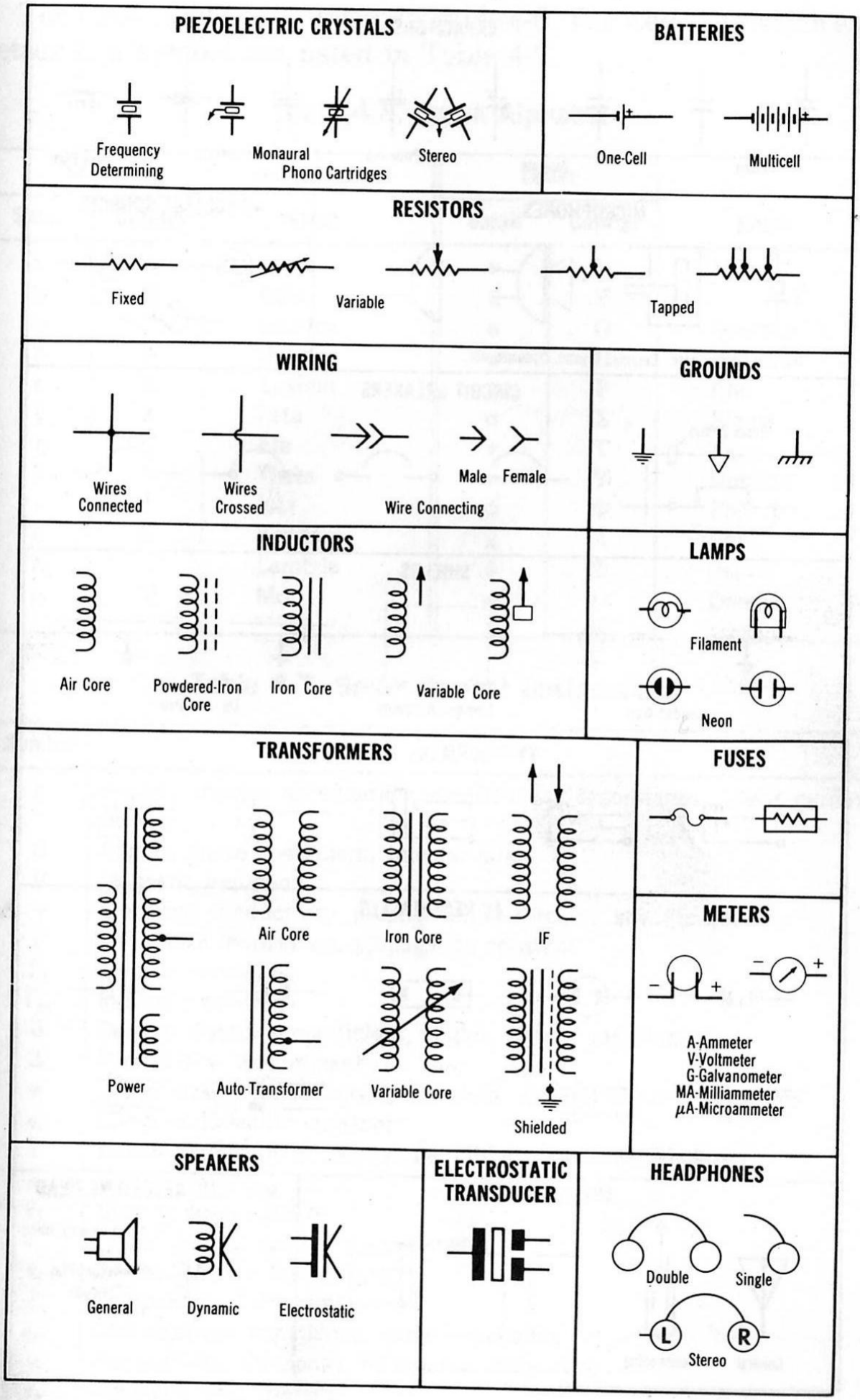


Figure 4-3C

Electronic Schematic Symbols—(Cont)

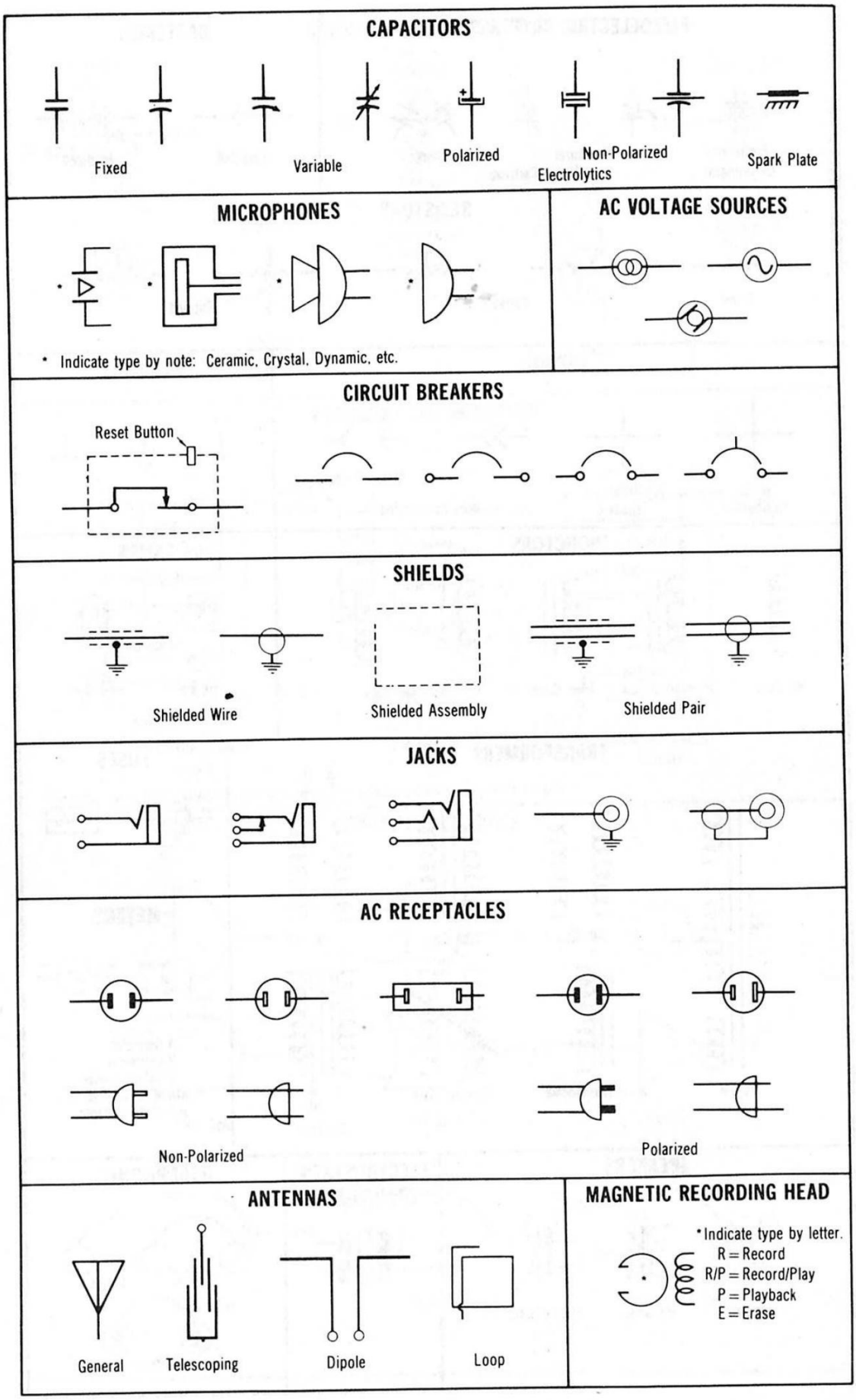


Figure 4-3D

To the Vulgar Understanding of Man the Wisdom of Sigils is to be spoken of in the following manner:-

A Sigil is a lineal articulation of the Will through the automatism of the Hand, subject to the aesthetic dictations of the Eye, and realised through the Oracle of the Mind as a means to manipulating the secret forces of Nature.

A Sigil is the result of the simplification of a complex of energies existing on many levels - emotional, noumenal, spiritual and so on - in order to make those energies transmutable in accordance with Belief, Desire, and Will. This simplification is expressed by the Will via the creation of an Alphabet embodying Desire - a cipher of curvilinear images or Sacred Letters which can accumulate Belief and serve to bind great power. The Sacred Letters embody the transmutable states of Nature and thus express its Primal Sexuality - the Magical Power Itself.

It is thus that the Wisdom of Sigils is to be understood in such a way as to be of some comprehension to the Mortal Reason of Man. But know ye that this explanation is but a Veil of the Arcanum, for the Sacred Alphabet is the Tongue of the Old Gods that were before Man and the mortal gods of Man. It is beyond the Minds of those born solely of the Clay. Let the Wise draw nigh and attain to its Sacred Knowledge.

I: *Sigillum Alogos, the Omnipresent Linear Matrix.*
The One Sigil unformulated;
its Totality unknowable in its own abstraction.
Its minimal infinity made known as the first stroke carv'd by the Hand of Man - the Line of I and the Sign of the First Numerical Integer - the One Sigil formulated...
From the Initiating Monad - the Dyad of the Geminus and the Union of Point with Point through the First Space defined as Lineal Dimension.
Thus the Negatively-Existent I and the Positively-Existent I create 'I': theSelf.
The Sexuality of the Absolutes through their One Desire establish that which is of all Nature: the Endless Round of the Sabbat's Grand Venery betwixt all Entity, the Interplay of Power betwixt all Points and Paths.
For I in Pure Self-Sexuality am ever more intimate with Thee, who art the Satyr and the Nymphe in untold multitudes of Bodies.
In Pan-symmetry of the First Sigil the Whole Is:
From the single facet known and the primal identity sensed at all Points of its Percept, the Whole Sigil and the Perfect'd State of Entity are Illuminate!

GLYPHS

VALUES


INSIGHT


FAITH


DELIGHT


EMPATHY


INTEGRITY


POWER


HARMONY

ACTIONS


CREATE


CONNECT


EXPLORE


EXPRESS


LEARN


UNDERSTAND


PROTECT


REFLECT


CHALLENGE


TRANSCEND


COMBINE


TRANSFORM


TRANSITION


TRANSFUSE

ARTIFACTS


TRUTH


ENERGY


PATH


PROBLEM


EVIDENCE


PROJECT


DOCUMENT


IN PROGRESS


RESEARCH


FINDINGS


IDEA


QUESTION

DISCIPLINES


EXPERIENCE DESIGN


USER EXPERIENCE


CREATIVE


CONTENT


TECHNOLOGY


STRATEGY


SALES

MISCELLANEOUS

DRINKING

BABY

LOVE

BEST

WORST

TEAM

FRIENDS

In the Heart of the First Sorcerer the Instant of this Realisation is the Aeon of all Truth. It is the Moment when the Divine Quill, dipp'd in the blood of his own heart, touches the Papyrus of his Skin to transmit the Word-Sigils of Gnosis. Verily, it is the Nativity of the Purity of Witchblood, whose Seed is cast throughout all Time and formeth the Flesh of the High Sabbat's Covine.

I, that am witness to this Revelation, call now upon Thee in the Name Unknown and Incommunicable, that I - in the Trans-aeonic Sabbat of this Moment - may become the Void betwixt Points, the Embodied Transvocation of all Invocation and Evocation of the Magical Power. For in the Instant of Illumination is the primary moulding of the Azoth: the Auto-creation of the Ancient One of Spirit in the Body of the Blest.

Sacred Knowledge or Gnosis is realised through Visionary Illumination and is intuited and tacitly known by the Wise-born through the Perfection of their Being during the cycles of metempsychosis, that is, in passing through the Secret Initiations of Incarnation and Discarnation. The Sacred Knowledge is embodied in those that are of the Sodality of Cain - of One Sacred Flesh, True-born of Witchblood and to the One Spirit sworn.

In the Passions of Witchblood the Holy Knowledge of the Ancients is an Ever-Open Book. The Wise need not recite its Verses, for they are its Words made manifest.
Blessed are they that know in Silence.
Blessed are they that give the Silence a Voice of Wisdom!

FORMULA OF THE SIGILLUM AZOETIA

I:- *Sigillum Azoetia, call'd 'The Map of Possibility',*
the Sinistral and Dextral Sigil of the Perfected Sorcerer's Being as both Negatively and Positively Existent; the Linear Graph of the One Sabbat, Empyrean, Earthly and Infernal; of Old, seen by the Wise as the Web of Fate and of Destiny: the Net of Enchantment cast by the Ancient One. In Timely Revelation made known: the sublimation of the Omnipresent Linear Matrix to visible articulation, the Patterner of all Aeons and the Complex of the Sacred Geometry...
By whose Points, omnipresently focused, I walk beyond every Star;
By whose Paths, linking Star with Star,
I conjoin Self with Self throughout all Possibility;
By whose Spaces I dwell apart from the Integral States of Entity and exist solely in the Non-modality between Forms;
By whose Intersections I unite Path with Path -
to go forth as the Sphinx of Many Beasts and the God of Many Faces, an Army in number as the Sand-grains of the ocean shore;
And by whose Contemplation I awaken the One Sigil Within and thus am made Illuminate!

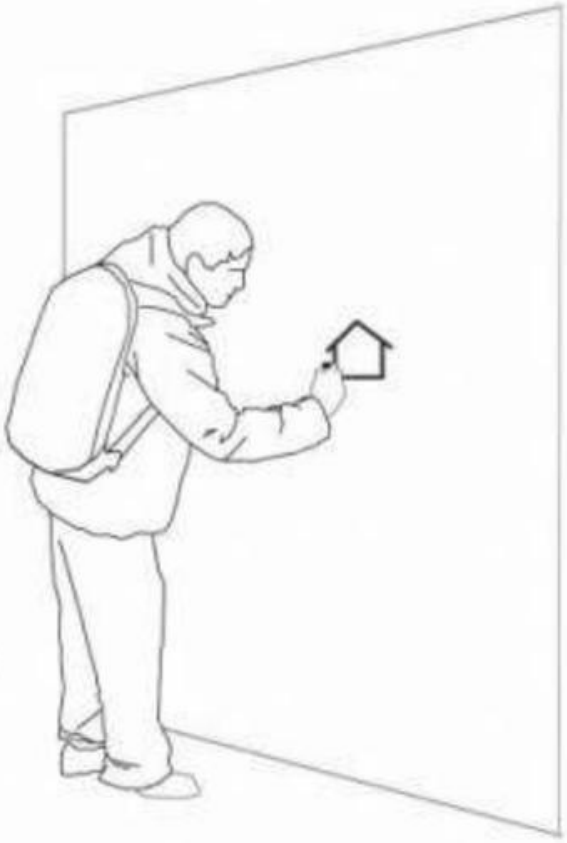
HOMELESS CITY GUIDE

- squat
- empty building
- dangerous neighbourhood
- danger
- guard dogs
- an attack happened here
- good place to drink / smoke
- unfriendly place
- friendly place
- soup run (with rating)
- strong police presence
- potential for work
- good food thrown away here
- safe for sleeping
- message board x mins that way
- security guard
- you'll get moved on here

step 1



step 2



MAKE YOUR MARK AND HELP OTHERS TO READ THE CITY

Make non permanent marks to keep the system up to date and stay within the law.

Designed by Emily Read

*the*Pavement

Magick teacheth not the Truth but imparteth the Signs whereby ye may come to know the Truth: In the Book of the Arcane Cipher of Magick is the Clavicle of all Knowledge. Beware and Revere! For it is given unto Thee by Thine own Hand.

THE EIGHT PATHS OF SIGILLIC WISDOM

O' Hand of Man! Who art Fivefold in Thine extension through the Senses of the Flesh and the Sign of Xenar, here dwell within the Shadow of Thine Adamantine Forms and therein be conjunct unto the Azoetic Icons of the Ancient One.
All Immortal Scripts of Holy Witchdom, by the Motion of the Hand in the Eight Paths, be thus transmitted unto the Books held in the Circle of the Earthly Sabbat.

O' Hand of I!
Give forth the Sacred Alphabet in its Perfection of Form,
Translated in Ekstasis unto the Parchment of Man.
Give forth the Books that are yet in Shadow.
Give forth the Sacred Gestures of the Elder Gods,
whereby in Silence I will speak.

O' Hand of Man! Unto these Arcana, attend and bear witness!

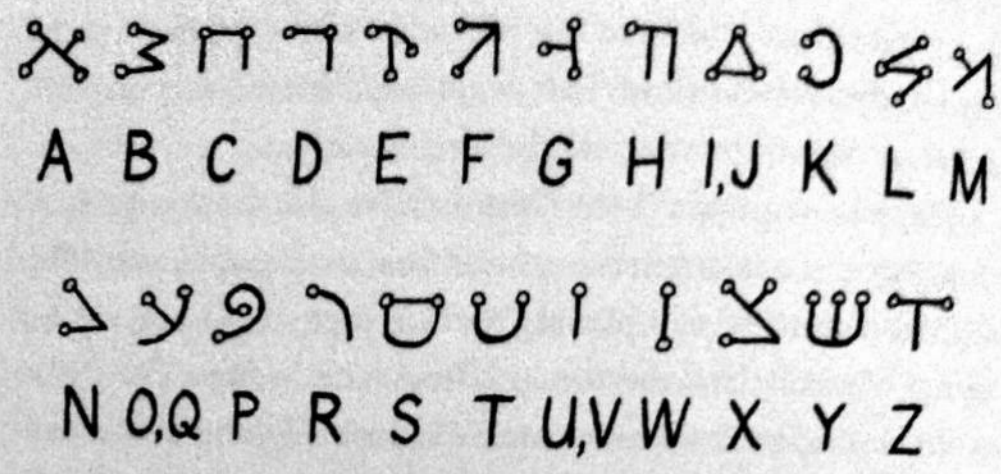
Here follow the Eight Paths whereby the Sigillick Forms of Gnosis are revealed:-

1. By the Power of the Sacred Dreaming within the Empyrean Conclaves of the High Sabbat the Loftiest and All-Powerful Signs of Sorcery are received: the Eleven Grand Sigils of the Azoetic Cells. By the Very Hands of the Goddess and the God are they given unto Thee.

2. By the Power of the Blessed Sight within the Circle of the Earthly Sabbat; by Vision and by Trance, there are Mighty Glyphs of Magick to be harvested. From the Tines of the One Tree, which are the Avenues of Ingress for the Powers and Spirits from the Stellar Points unto the Earth, take ye the Sigils of the Path of Ascent.

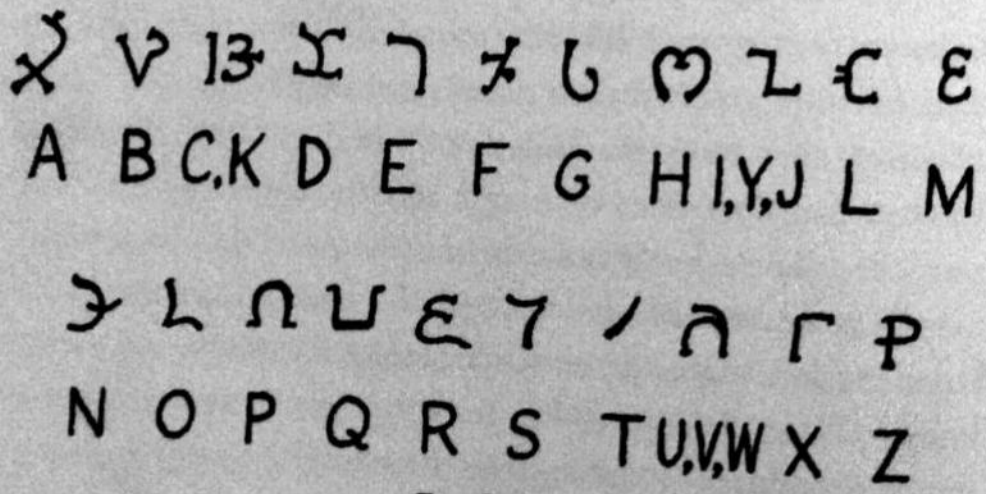
3. By the Powers of the Shadow and of the Great Watcher Within, Thine Eye shalt open in the Conclaves of the Infernal Sabbat, and therein, from Thine Ancestors, receive the Signs of their Legacy unto Thee: the Tokens of the Sabbat and the Totemick Emblems of Thy Soul's Brethren - the Secret Keys unto Thy Forebears' Power.

Magical Alphabets



Angelic, or Celestial

This magical alphabet was so-called because it was thought to tie in with the placing of the stars.



Enochian

The Enochian magical alphabet comes from the system of magic introduced by Dr. John Dee (Astrologer Royal to Queen Elizabeth I) in the sixteenth century. It became a part of the Hermetic Order of the Golden Dawn and was used by such magicians as Aleister Crowley. Enochian is interesting in that the alphabet appears unrelated to any previous lettering system and the language has its own unique grammar.

And from the Roots of the Old Tree take ye Runes; for these are the Avenues of Ingress for the Powers and Spirits from the Stellar Points in the Depths unto the Earth. Heed ye the Sigils of the Path of Descent.

4. By the Hand in the Automatism of Possession, the Signs of Calling and Binding are received: the Words of the Summoned unto the Summoner.

5. By the Hand in the Automatism of the Emotions and the Senses, the Sigils of the Apotheoses of Sensation are made known. Let the instants of pure and poignant emotive force control the Vessel of the Hand in automatic script. Thus the Cipher of Thy Heart and Senses shall be known.

6. By the Hand in the Automatism of Sleep the Signs and Visions of Dreams unremembered are brought forth.

By the Hand in the Automatism of the Praedormitium the physical sensations of Dreams remaining in the Flesh upon waking are given Form and Line. In the immediacy of Waking the articulation of Dreamt Sensation through the Auto-aestheticism of the Hand and the Eye reveals the Cipher of Half-Sleep and unveils the Keys of Forgotten Dreams.

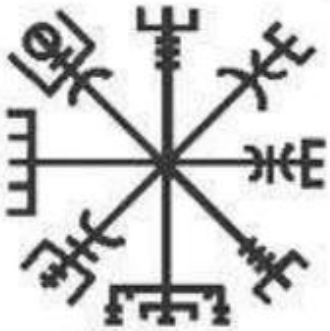
7. By the Union of Signs encoding the Secret Wishes of the Heart Thou shalt fashion a Cipher; by the conjunction of Letters, Sacred and Mundane, form ye Glyphs in the Tongue of Desires. Let Hand, Eye and Quill be guided in the Auto-aestheticism of Sexual Reverie, thus to fashion the Spells of Bewitchment, Glamour, Attraction, Enchantment and Metamorphosis.

8. By the Hand as the Witness of the Eye, from Thy Vision of the World as a Whole, draw ye Signs embodying and conveying the forces and bodies of Nature:-
From the Stars in their motion upon the Wheels of Heaven;
From the movements and postures of the Beasts in the Earth's Quarters;
From the Tides of the Water and the Tides of the Earth's Powers;
From the Directions of the Winds and from the Boughs of Trees;
From the Casting of the Sacred Fetishes of Bone, Shell and Stone within the Circle of the Earthly Sabbat;
From the Shadows of Sun, Moon and Star;
From the Shadows in the Mirror's Abyss.
From All - such as stirreth Thee to Inspiration and Illumination -
Reveal ye the Ciphers of Becoming, Being and Ceasing-to-Be -
whereby the Twin Faces of Yesterday and Tomorrow are known as Thine.

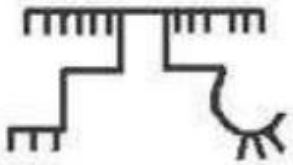
By the Eight Strokes of the Sabbatic Cross conjoined with the Paths of the Serpent, by the line of the Tree conjoined with the ophidian quality of the curve, the Idol call'd 'Nature' is transmuted through the Sacred Geometry of the Azoetic Sign, the Web of all Fate and the Map of all Possibilities.



Aegishjalmur
protection,
irresistibility in battle



Vegvisir
Runic compas
prevent getting lost



Gapaldur
Success
in combat



Ginfaxi
Courage
in combat



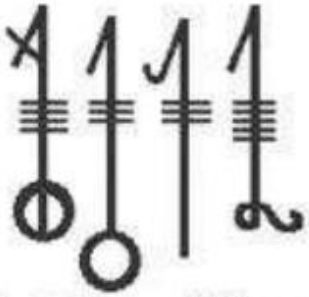
Odin's Illusionary Rune
Camouflage & deception



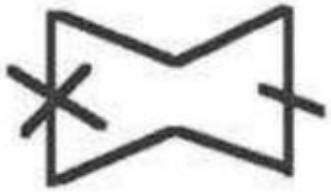
Hræthigaldur
Put fear in enemy



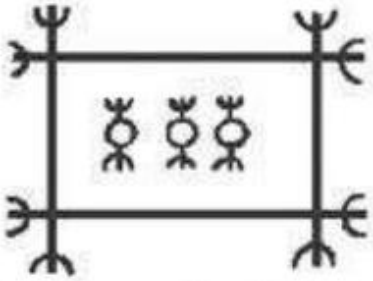
Ottastafur
Put fear in enemy



Svefnthorn - "Sleep thorn"
Place beheath pillow or bed
for restful sleep



Powerful binding
of prisoner



Lásabrjótur - "lock breaker"
Break locks & fetters
Get free from bindings



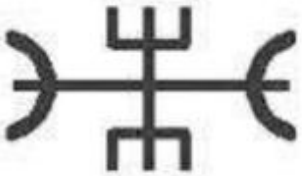
Gibu Auja
good luck



Good health



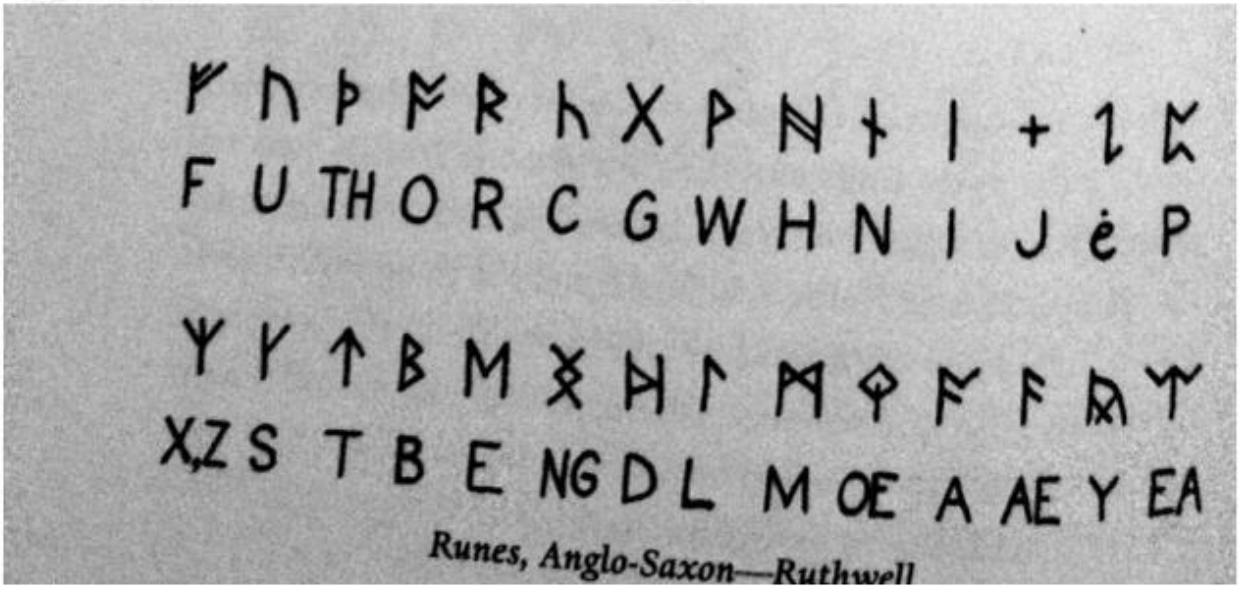
Healing



End strife



Peace



GREEK ALPHABET

The Greek alphabet is given in Table 4-6. The items for which each letter is a symbol are listed in Table 4-7.

Table 4-6. Greek Alphabet

Letter		Name	Letter		Name
Small	Capital		Small	Capital	
α	A	Alpha	ν	N	Nu
β	B	Beta	ξ	Ξ	Xl
γ	Γ	Gamma	ο	O	Omicron
δ	Δ	Delta	π	Π	Pi
ϵ	E	Epsilon	ρ	P	Rho
ζ	Z	Zeta	σ	Σ	Sigma
η	H	Eta	τ	T	Tau
θ	Θ	Theta	ν	Υ	Upsilon
ι	I	Iota	ϕ	Φ	Phi
κ	K	Kappa	χ	X	Chi
λ	Λ	Lambda	ψ	Ψ	Psi
μ	M	Mu	ω	Ω	Omega

Table 4-7. Greek Symbol Designations

Symbol	Designates
α	Angles, angular acceleration, coefficients, absorptance, linear current density
β	Angles, phase coefficient, transfer ratio
B	Magnetic induction
γ	Electrical conductivity, propagation coefficient, specific quantity
Γ	Reciprocal inductance, propagation constant
Γ_e	Electric constant
Γ_m	Magnetic constant
δ	Density, damping coefficient, angles, sign of variation
Δ	Permittivity, determinant
ϵ	Linear strain; capacitivity, permittivity, base of natural logarithms
ϵ_b	Complex dielectric constant
ϵ_r	Relative capacitivity, relative permittivity, dielectric constant
ϵ_t	Total emissivity
ϵ_1	Electric susceptibility
ϵ_λ	Emissivity (a function of wavelength)
E	Energy, electric field strength
ζ	Coordinate, coefficients
Z_0	Characteristic impedance, surge impedance
η	Permeability, efficiency, modulation index (fm)
H	Magnetic field strength
θ	Temperature, volume strain, angular phase displacement, angle

Table 4-7 Cont. Greek Symbol Designations

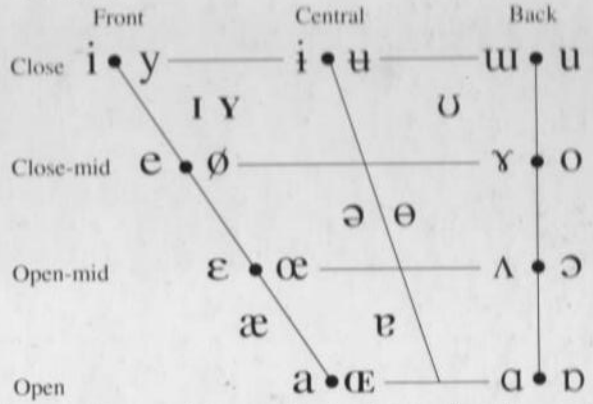
Symbol	Designates
ι	Length
κ	Thermal conductivity, coupling coefficient, Blotzmann's constant, circular and angular wave number
κ_e	Eddy-current coefficient
κ_f	Form factor
κ_h	Hysteresis coefficient
K	Electric field strength; luminous efficiency, susceptibility
λ	Conductivity, wavelength, linear density charge
λ_e	Critical wavelengths
λ_g	Wavelength in a guide
λ_f	Resonance wavelength
Λ	Logarithmic decrement, magnetic flux linkage
μ	Amplification factor, Poisson's ratio, permeability
μ_i	Magnetic susceptibility
μ_o	Initial (relative) permeability
μ_r	Relative (magnetic) permeability
μ_v	Permeability of vacuum
ν	Frequency, Poisson's ratio, reluctivity
N_a	Avogadro's constant
ξ	Coordinates
π	3.1416 (circumference divided by diameter)
ρ	Volume density of charge, resistivity, cylindrical coordinates
ρ_o	Thermal resistivity
σ	Wave number, normal stress, surface density of change
Σ	Sign of summation
τ	Time constant, shear stress, transmittance
$1/\tau$	Signaling speed
ϕ	Angle (plane), electrosttic potential, phase angle
Φ	Heat flow, radiant power, luminous flux, magnetic flux
Φ_r	Radiant power
Φ_v	Luminous flux
χ	Cartesian coordinate
χ_e	Electric susceptibility
χ_m	Magnetic susceptibility
ψ	Angle (plane)
Ψ	Electric flux
ω	Angle, angular frequency, angular velocity
ω_e	Critical angular frequency
ω_1	Synchronous angular frequency
ω_r	Resonance angular frequency
Ω	Resistance in ohms, angles (solid)

CONSONANTS

	Bilabial	Labiodental	Dental	Alveolar	Postalveolar	Retroflex	Palatal	Velar	Uvular	Pharyngeal	Glottal
Plosive	p b			t d		ʈ ɖ	c ɟ	k ɡ	q ɢ		ʔ
Nasal	m	ɱ		n		ɳ	ɲ	ŋ	ɴ		
Trill	ʙ			r					ʀ		
Tap or Flap				ɾ		ɽ					
Fricative	ɸ β	f v	θ ð	s z	ʃ ʒ	ʂ ʐ	ç ʝ	x ɣ	χ ʁ	ħ ʕ	h ɦ
Lateral fricative				ɬ ɮ							
Approximant		ʋ		ɹ		ɻ	j	ɰ			
Lateral approximant				l		ɭ	ʎ	ʟ			
Ejective stop	pʼ			tʼ		ʈʼ	cʼ	kʼ	qʼ		
Implosive	ɓ ɠ			ɗ ᶑ			ʄ	ɠ	ʛ		

Where symbols appear in pairs, the one to the right represents a voiced consonant. Shaded areas denote articulations judged impossible.

VOWELS



Where symbols appear in pairs, the one to the right represents a rounded vowel.

OTHER SYMBOLS

- ʍ Voiceless labial-velar fricative
- w Voiced labial-velar approximant
- ɥ Voiced labial-palatal approximant
- ʜ Voiceless epiglottal fricative
- ʢ Voiced epiglottal fricative
- ʡ Epiglottal plosive
- ɕ ʑ Alveolo-palatal fricatives
- ʚ Additional mid central vowel
- ʘ Bilabial click
- ǀ Dental click
- ǃ (Post)alveolar click
- ǂ Palatoalveolar click
- ǁ Alveolar lateral click
- ʗ Alveolar lateral flap
- ʩ Simultaneous ʃ and x

Affricates and double articulations can be represented by two symbols joined by a tie bar if necessary. k͡p t͡s

DIACRITICS

◌̥	Voiceless	n̥ d̥	◌̹	More rounded	ɔ̹	◌ʷ	Labialized	tʷ dʷ	◌̃	Nasalized	ẽ
◌̬	Voiced	s̬ t̬	◌̜	Less rounded	ɔ̜	◌ʲ	Palatalized	tʲ dʲ	◌ⁿ	Nasal release	dⁿ
◌ʰ	Aspirated	tʰ dʰ	◌̟	Advanced	u̟	◌ˠ	Velarized	tˠ dˠ	◌ˡ	Lateral release	dˡ
◌̤	Breathy voiced	b̤ a̤	◌̠	Retracted	i̠	◌ˤ	Pharyngealized	tˤ dˤ	◌̚	No audible release	d̚
◌̰	Creaky voiced	b̰ a̰	◌̈	Centralized	ë	◌̴	Velarized or pharyngealized	ɫ			
◌̼	Linguolabial	t̼ d̼	◌̽	Mid-centralized	e̽	◌̝	Raised	e̝ (ɪ̝ = voiced alveolar fricative)			
◌̪	Dental	t̪ d̪	◌̩	Syllabic	ɹ̩	◌̞	Lowered	e̞ (β̞ = voiced bilabial approximant)			
◌̺	Apical	t̺ d̺	◌̯	Non-syllabic	e̯	◌̘	Advanced Tongue Root	e̘			
◌̻	Laminal	t̻ d̻	◌˞	Rhoticity	ə˞	◌̙	Retracted Tongue Root	e̙			

SUPRASEGMENTALS

ˈ	Primary stress	ˌfoʊnəˈtɪʃən
ˌ	Secondary stress	
ː	Long	eː
ˑ	Half-long	eˑ
◌̆	Extra-short	ĕ
.	Syllable break	ɹi.ækt
|	Minor (foot) group	
‖	Major (intonation) group	
‿	Linking (absence of a break)	
↗	Global rise	
↘	Global fall	

TONES & WORD ACCENTS

LEVEL			CONTOUR	
e̋ or e᷄	˥	Extra high	ě or e᷅	˩˥ Rising
é	˦	High	ê	˥˩ Falling
ē	˧	Mid	e᷈	˦˥ High rising
è	˨	Low	e᷇	˩˧ Low rising
ȅ	˩	Extra low	e᷉	˦˥˩ Rising-falling etc.

↓ Downstep

↑ Upstep

Table 4-13. Equivalent Numeric Representations in Decimal, Binary, Hexadecimal, and Octal Codes

Decimal	Binary	Hexadecimal	Octal
0	0000	0	0
1	0001	1	1
2	0010	2	2
3	0011	3	3
4	0100	4	4
5	0101	5	5
6	0110	6	6
7	0111	7	7
8	1000	8	10
9	1001	9	11
10	1010	A	12
11	1011	B	13
12	1100	C	14
13	1101	D	15
14	1110	E	16
15	1111	F	17

THE INTERNATIONAL CODE

A ·—	M ——	Y —·——
B —···	N —·	Z ——··
C —·—·	O ———	1 ·————
D —··	P ·——·	2 ··———
E ·	Q ——·—	3 ···——
F ··—·	R ·—·	4 ····—
G ——·	S ···	5 ·····
H ····	T —	6 —····
I ··	U ··—	7 ——···
J ·———	V ···—	8 ———··
K —·—	W ·——	9 ————·
L ·—··	X —··—	0 —————

Question Mark ··——··
Error ·····
Wait ·—···
Period ·—·—·—
Comma ——··——
End of Message ·—·—·

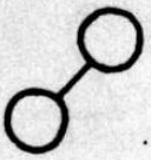
INTERNATIONAL Q SIGNALS

The international *Q* signals were first adopted to enable ships at sea to communicate with each other or to foreign shores without experiencing language difficulties. The signals consist of a series of three-letter groups starting with *Q* and having the same meaning in all languages. Today, *Q* signals serve as a convenient means of abbreviation in communications between amateurs. Each *Q* signal has both an affirmative and an interrogative meaning. The question is designated by the addition of the question mark after the *Q* signal. The most common *Q* signals are listed in Table 3-3.

Table 3-3. Q Signals

Signal	Question	Answer or Advice
QRG	Will you tell me my exact frequency?	Your exact frequency is . . . . kHz (or MHz).
QRH	Does my frequency vary?	Your frequency varies.
QRK	What is the readability of my signals?	The readability of your signals is . . . .
QRM	Are you being interfered with?	I am being interfered with.
QRN	Are you troubled by static?	I am troubled by static.
QRO	Shall I increase power?	Increase power.
QRP	Shall I decrease power?	Decrease power.
QRQ	Shall I send faster?	Send faster.
QRS	Shall I send more slowly?	Send more slowly (. . . . words per minute).
QRT	Shall I stop sending?	Stop sending.
QRU	Have you anything for me?	I have nothing for you.
QRV	Are you ready?	I am ready.
QRX	When will you call again?	I will call you again at . . . . hours [on . . . . kHz (or MHz)].
QSA	What is the strength of my signals?	The strength of your signals is . . . .
QSB	Are my signals fading?	Your signals are fading.
QSL	Can you acknowledge receipt?	I am acknowledging receipt.
QSM	Shall I repeat the last message I sent you?	Repeat the last message you have sent me.
QSO	Can you communicate with . . . . direct or by relay?	I can communicate with . . . . direct (or by relay through . . . .).
QSV	Shall I send a series of V's?	Send a series of V's.
QSY	Shall I change to transmission on another frequency?	Change to transmission on another frequency [or on. .kHz (or MHz)].
QSZ	Shall I send each word or group twice?	Send each word or group twice.
QTH	What is your location?	My location is . . . .

Aspects



Opposition



Conjunction



Semisextile



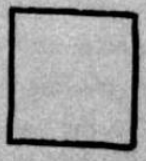
Semisquare



Sextile



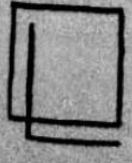
Quintile



Square



Trine



Sesquiquadrate



Quincunx

The Moon's Nodes

The moon's orbit intersects with the ecliptic (the apparent orbit of the sun around the earth) every nineteen years. The points where the moon's orbit intersects the plane of the ecliptic are called the moon's *nodes*.



Ascending Node



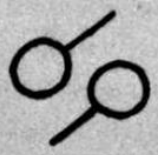
Descending Node



Hour



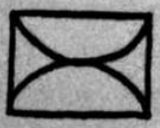
Day



Day & Night



Week



Month



Year

Table 3-5. Revised Official 10-Code of Associated Police Communication Officers, Inc.

Signal	Meaning	Signal	Meaning
10-1	Unable to copy—change location	10-40	Silent run—no light or siren
10-2	Signals good	10-41	Beginning tour of duty
10-3	Stop transmitting	10-42	Ending tour of duty
10-4	Ackowledgment	10-43	Information
10-5	Relay	10-44	Request permission to leave patrol for . . .
10-6	Busy—stand by unless urgent	10-45	Animal carcass in . . . lane at . . .
10-7	Out of service, (Give location and/or telephone number)	10-46	Assist motorist
10-8	In service	10-47	Emergency road repairs needed
10-9	Repeat	10-48	Traffic standard needs repairs
10-10	Fight in progress	10-49	Traffic light out
10-11	Dog case	10-50	Accident—F, PI, PD
10-12	Stand by	10-51	Wrecker needed
10-13	Weather and road report	10-52	Ambulance needed
10-14	Report of prowler	10-53	Road blocked
10-15	Civil disturbance	10-54	Livestock on highway
10-16	Domestic trouble	10-55	Intoxicated driver
10-17	Meet complainant	10-56	Intoxicated pedestrian
10-18	Complete assignment quickly	10-57	Hit and run—F, PI, PD
10-19	Return to . . .	10-58	Direct traffic
10-20	Location	10-59	Convoy or escort
10-21	Call . . . by telephone	10-60	Squad in vicinity
10-22	Disregard	10-61	Personnel in area
10-23	Arrived at scene	10-62	Reply to message
10-24	Assignment completed	10-63	Prepare to make written copy
10-25	Report in person to . . .	10-64	Message for local delivery
10-26	Detaining subject, expedite	10-65	Net message assignment
10-27	Drivers license information	10-66	Message cancellation
10-28	Vehicle registration information	10-67	Clear to read net message
10-29	Check records for wanted	10-68	Dispatch information
10-30	Illegal use of radio	10-69	Message received
10-31	Crime in progress	10-70	Fire alarm
10-32	Man with gun	10-71	Advise nature of fire (size, type, and contents of building)
10-33	EMERGENCY		
10-34	Riot		
10-35	Major crime alert	10-72	Report progress on fire
10-36	Correct time	10-73	Smoke report
10-37	Investigate suspicious vehicle	10-74	Negative
10-38	Stopping suspicious vehicle (give station complete description before stopping)	10-75	In contact with
		10-76	En route
		10-77	ETA (Estimated Time of Arrival)
10-39	Urgent—use light and siren	10-78	Need assistance

Table 3-5 Cont. Revised Official 10-Code of Associated Police Communication Officers, Inc.

Signal	Meaning	Signal	Meaning
10-79	Notify coroner	10-90	Bank alarm
10-82	Reserve lodging	10-91	Unnecessary use of radio
10-84	Are you going to meet . . ., if so advise ETA.	10-93	Blockade
		10-94	Drag racing
10-85	Will be late	10-96	Mental subject
10-87	Pick up checks for distribution	10-98	Prison or jail break
10-88	Advise telephone No. to contact	10-99	Records indicated wanted or stolen

AUDIO-FREQUENCY SPECTRUM

The audio-frequency spectrum is generally accepted as extending from 15 Hz to 20,000 Hz. Figure 3-3 shows the frequency range of various musical instruments and of other sounds. The frequency range shown for each sound is the range needed for faithful reproduction, and includes the fundamental frequency and the necessary harmonic frequencies. The frequency range of the human ear, and the various broadcasting and recording media, are also included in Figure 3-3.

RADIO-FREQUENCY SPECTRUM

The radio-frequency spectrum of 3 kHz to 3,000,000 MHz is divided into the various bands (shown in Table 3-6) for easier identification.

Table 3-6. Frequency Classification

Frequency	Band No.	Classification	Abbreviation
3—30 kHz	4	Very low frequencies	vlf
30—300 kHz	5	Low frequencies	lf
300—3000 kHz	6	Medium frequencies	mf
3—30 MHz	7	High frequencies	hf
30—300 MHz	8	Very high frequencies	vhf
300—3000 MHz	9	Ultrahigh frequencies	uhf
3—30 GHz	10	Super-high frequencies	shf
30—300 GHz	11	Extremely high frequencies	ehf
300 GHz—3 THz	12	———	———

Levels			
XI	UNKNOWN		*above and in Biocomputer*
X	SUPRA-SPECIES-METAPROGRAMS		*beyond metaprogramming*
IX	SUPRA-SELF-METAPROGRAMS		*to be metaprogrammed*
VIII	SELF-METPROGRAM — awareness		*to metaprogram*
VII	METAPROGRAMS	METAPROGRAM STORE	*to program sets of programs*
VI	PROGRAMS	PROGRAM STORE	*detailed instructions*
V	SUBROUTINES	SUBROUTINE STORE	*details of instructions*
IV	BIOCHEMICAL ACTIVITY—NEURAL ACTIVITY—GLIAL ACTIVITY—VASCULAR ACTIVITY		*signs of activity*
III	BIOCHEMICAL BRAIN—NEURAL BRAIN—GLIAL BRAIN—VASCULAR BRAIN		*brain*
II	BIOCHEMICAL BODY—SENSORY BODY—MOTOR BODY—VASCULAR BODY		*body*
I	BIOCHEMICAL—CHEMICAL—PHYSICAL.....EXTERNAL REALITY		*external reality*

Each part of each level has feedback-control relations with each part, indicated by the connecting lines. Each level has feedback-control with each other level. For the sake of schematic simplicity, many of these feedback connections are not shown. One example is an important connection between Levels VI through IX and X; some built-in, survival programs have a representative at the Supraself-metaprogram Level as follows: "These programs are necessary for survival; do not attenuate or excite them to extreme values; such extremes lead to non-computed actions, penalties, illness, or death." After construction, such a Metaprogram is transferred by the Selfmetaprogram to the Supraself-metaprograms and to the Supra-species-metaprograms for future control purposes.

(Note: See text and glossary for definitions of terms used)

The boundaries between the body and the external reality are between Levels I and II; certain energies and materials pass this boundary in special places (heat, light, sound, food, secretions, feces). Boundaries between body and brain are between Levels II and III; special structures pass this boundary (blood vessels, nerve fibers, cerebro-spinal fluid). Levels IV through XI are in the brain circuitry and are the software of the Biocomputer. Levels above Level X are labeled "Unknown" for the following purposes: (1) to maintain the openness of the system, (2) to motivate future scientific research, (3) to emphasize the necessity for unknown factors at all levels, (4) to point out the heuristic nature of this schema, (5) to emphasize unwillingness to subscribe to any dogmatic belief without testable reproducible data, and (6) to encourage creative courageous imaginative investigation of unknown influences on and in human realties, inner and outer.

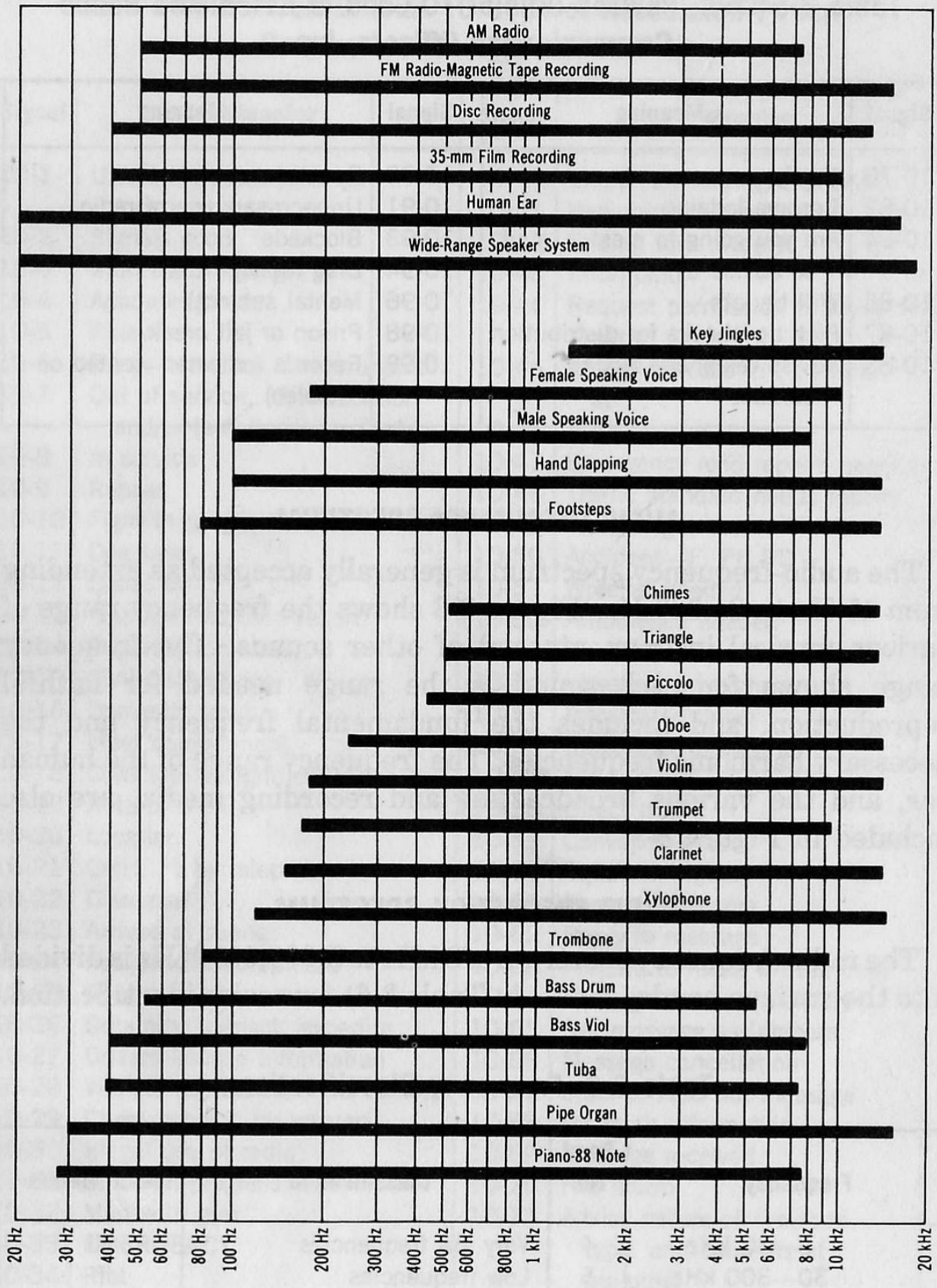

AM Radio
FM Radio-Magnetic Tape Recording
Disc Recording
35-mm Film Recording
Human Ear
Wide-Range Speaker System
Key Jingles
Female Speaking Voice
Male Speaking Voice
Hand Clapping
Footsteps
Chimes
Triangle
Piccolo
Oboe
Violin
Trumpet
Clarinet
Xylophone
Trombone
Bass Drum
Bass Viol
Tuba
Pipe Organ
Piano-88 Note
20 Hz
30 Hz
40 Hz
50 Hz
60 Hz
80 Hz
100 Hz
200 Hz
300 Hz
400 Hz
500 Hz
600 Hz
800 Hz
1 kHz
2 kHz
3 kHz
4 kHz
5 kHz
6 kHz
8 kHz
10 kHz
20 kHz

Figure 3-3.

XII.25 FRANCES YATES (*The Art of Memory*) tells us that classical orators memorized long and complicated speeches in the following way. Early in his career each orator walked through the rooms of some large building, first memorizing the layout, then noting in a fixed sequence the hundreds of architectural details and pieces of furniture contained in each room. Having internalized these physical forms in a specific sequence, he then used them as an arbitrary abstract framework to which he could "attach" the sequential details of a particular speech. A hallway might become a logical transition, a pediment a disclaimer, a couch an accusation. Using these means, the orator could gain a virtue necessary to all good memories: a general mental framework containing niches into which particular data or devices could be fitted.

The preferred model for classical orations was also, among other things, a kind of memory device. The Greek orator Isocrates (436–338 B.C.) perfected an oratorical structure which was to influence speakers and writers for over 2,000 years. Each Isocratic oration was composed of five major sections – known in Latin as *proemio*, *expositio*, *narratio*, *refutatio* and *exhortatio* – whose order did not deviate. Each of these sections, moreover, had its own beginning, middle and end. These divisions were not merely arbitrary forms; they performed a logical function and appealed to basic psychological needs. Using them, even fledgling orators could locate themselves and maintain their train of thought during long speeches; accomplished orators could extemporize convincingly. Their example suggests a precept which applies to all memory: to remember anything well, we must understand its general structure.

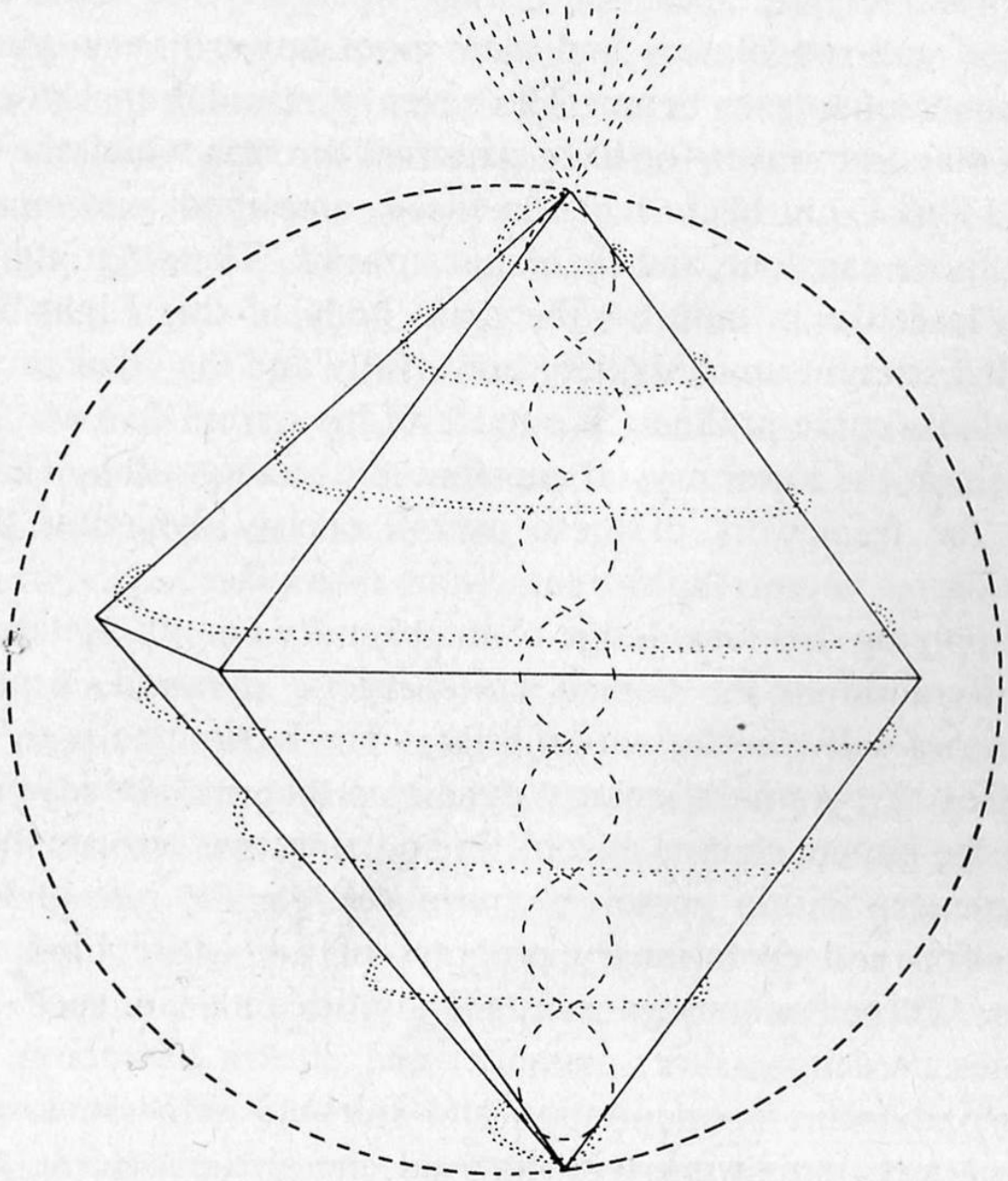


Figure 4: Pyramidal Energy Dynamics

Occult Machines

The creation and implementation of occult machines is a potent method of overcoming challenges in addition to making one&s magical life somewhat easier. Like their more mundane counterparts, occult machines serve to allow the sorcerer to accomplish feats and complete tasks with more consistency, speed, and economy of energy. Again, in a fashion similar to their mundane counterparts, by design occult machines empower the sorcerer to create very complex magical workings by performing multiple functions in simultaneously. While the machine performs a multitude of simple magical functions the sorcerer is free to focus full attention upon working with even more powerful and complex magicks, thus the machine allows the sorcerer to perform magical acts that are otherwise in most cases too difficult, complex, or taxing.

The fundamental difference between a mundane machine and an occult machine is that the occult machine is powered by magick, and its primary functions are magical processes. There is a distinction between tools and machines, in both the mundane and occult worlds. A person using a crowbar to lever open a locked door is considered to be using a tool. In the same way a magus using a wand to aid in the casting of a spell is also considered to be using a tool. Though a person using a satellite imaging system to explore our planet&s surface is considered to be the using of a machine. Similarly, a person using a remote viewing helmet that has been outfitted with sigils, a loadstone monocle, and other augmentations to explore our planet&s surface would be considered to be using an occult machine.

An occult machine, by its nature, is a device that is fueled by subtle energies in order to produce a specified result. In many ways occult machines are closely associated with other mundane devices in that they produce similar results to their counterparts, it is their input/output methods that make them decidedly occult. Take the afore mentioned satellite imaging system and the remote viewing helmet. They both allow the user to see

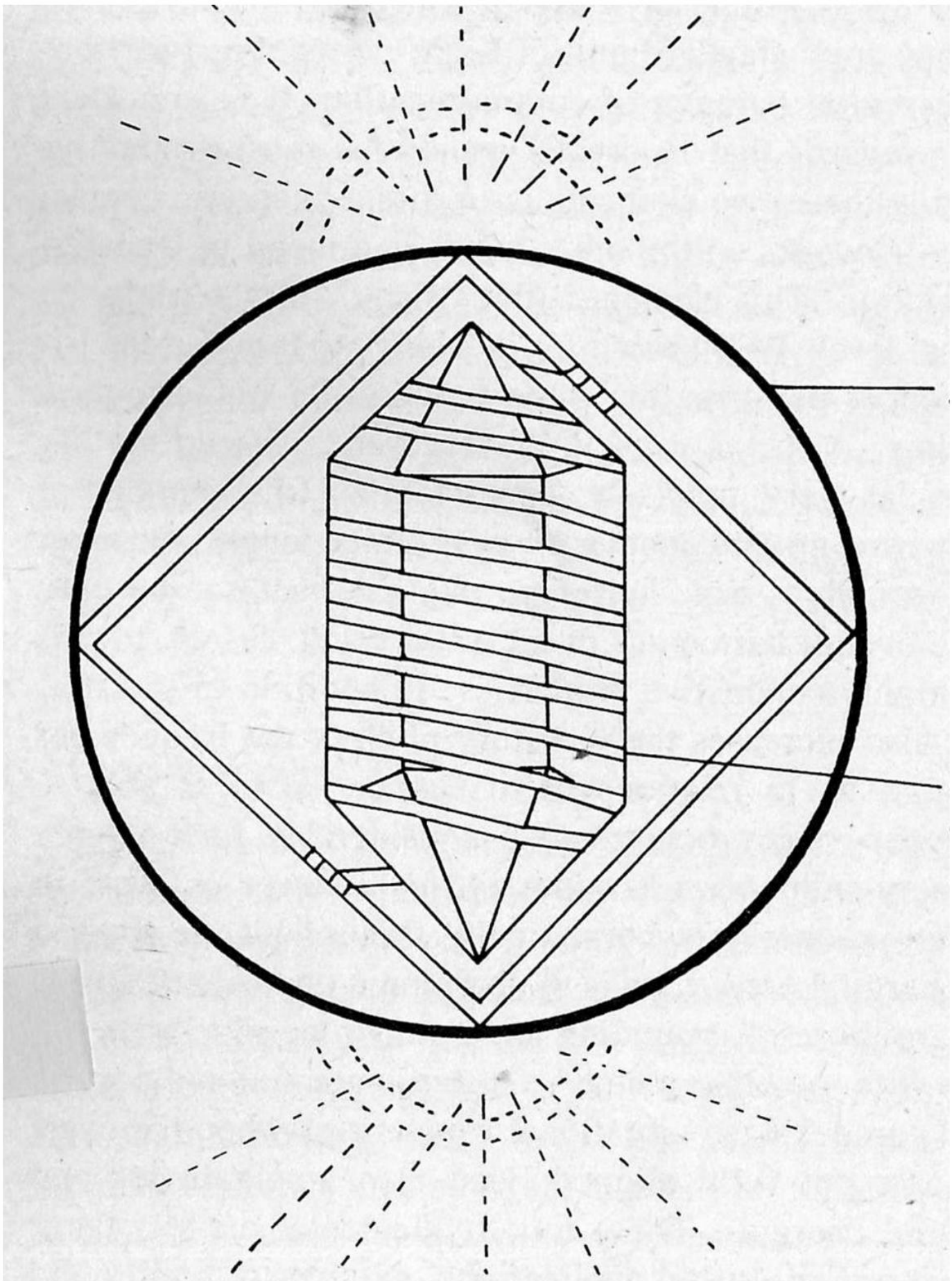


Figure 11: Auric Amplifying Pendant

visual representations of their intended targets. The satellite tech is fueled by electricity, while the remote viewing helmet is fueled by magical energy. Because the helmet&s function is to focus magical energy towards remote viewing, the energy gains that resonance as it passes from the helmet to the wearer. Also the various occult augmentations like the sigils and loadstone monocle, perform basic magical tasks like scrying, empowerment, and auric scanning, the sorcerer is better able to concentrate on the much more difficult task of tightening the focus and resolution of the remote viewing images and impressions. Granted, there are enough differences that to compare these two machines too closely would become a pointless exercise. Though, to illustrate the point, they will be said to be similar. It should also be noted that there are a great many magical and mundane machines that have no counterpart or likeness amongst the other group of machines. So while the remote viewing helmet is similar to the satellite system, the Eloigning Clock, which will be discussed at length momentarily, has no known functional counterpart amongst mundane machines.

It has been stressed in other texts that personal relevance is of paramount importance in the practicing of magick. Occult machines, due to their technological nature, are to some degree one of the few exceptions to that guideline. The entire function of an occult machine is that it will work regardless of who is using it at the time. Naturally there are several factors involved in using an occult machine. One must have some idea what the machine&s function is, have the magical capacity and knowledge to activate the machine and control its use, and be able to perceive its process and results. Again using the remote viewing helmet as an example, if one sorcerer was to create the helmet it would of course have been created as a machine very personally relevant for its creator, and would carry with it the creator&s personal style and taste. Though all another sorcerer would have to do to use the helmet for their own purposes would be to perceive its primary purpose, which would be remote viewing. Then find out how to activate the

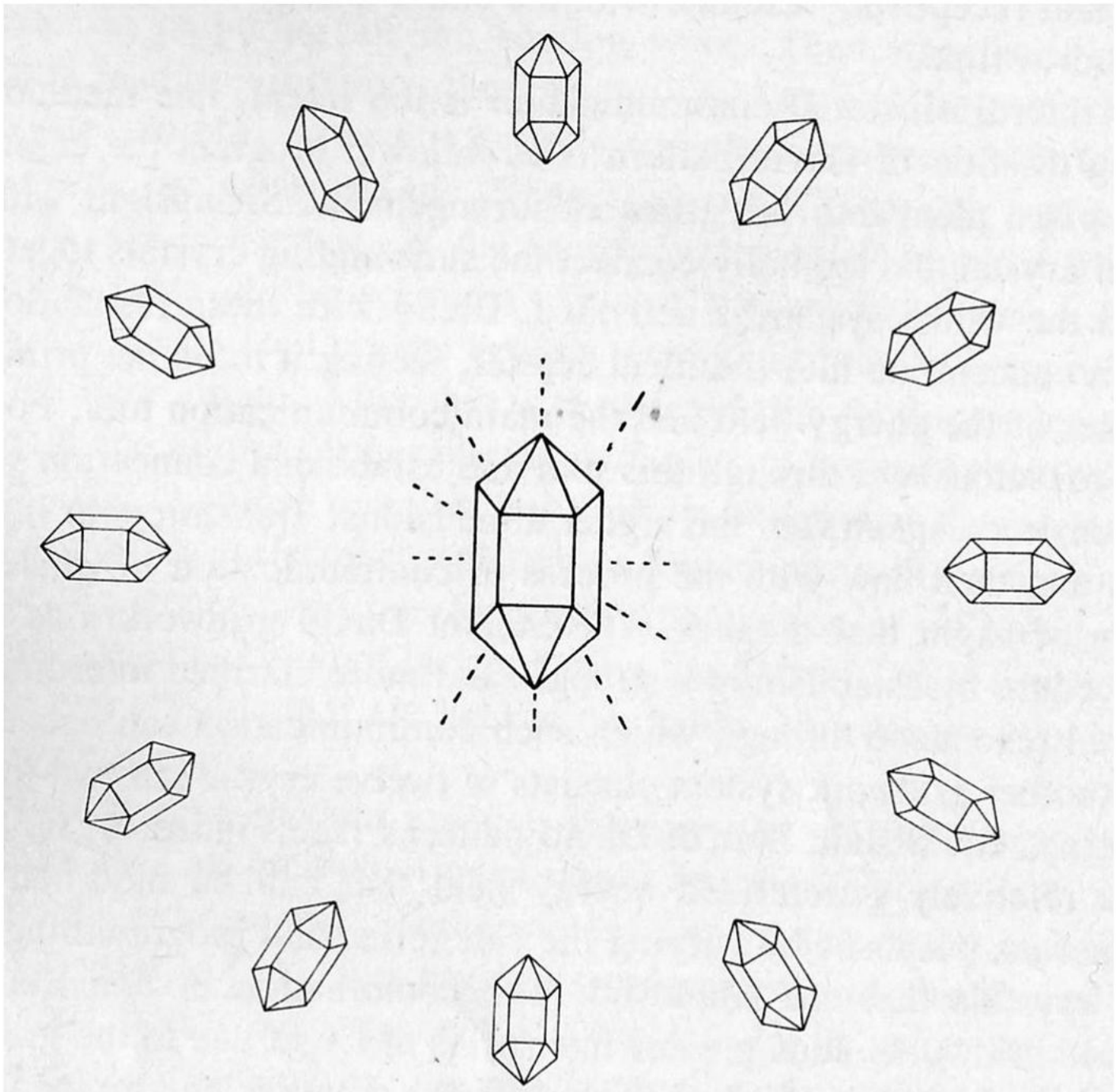


Figure 7: Twelve-Crystal Gridwork System

machine, which would likely be empowering a sigil or some other such symbolic &lock & key& mechanism. Then the user would have to have the ability to focus and infuse the machine with magical energy, then the sorcerer would be free to use the machine for its intended purpose. The only alteration the interloper would possibly need to make is to change any elements of the machine that would make it more personally relevant to themselves, though generally a machine is a machine. In that all cars work off of the same principle, so if one recognizes a machine as a car, despite some design differences, all cars are designed and function the same way. So it is with magical machines. What follows are two further examples of the author&s own occult machines, the Witchengine and the Eloigning Clock, to serve as examples for the creation of future occult machines.

The Witchengine is a multi-purpose occult machine that acts at once like a portable generator of magical energy and a resonance filter. The physical component of the Witchengine is a simple cube. Several exist in wood, some of stone, and others of etched metal. Close associates of the author possess spherical witchengines, and in the spirit of tactical magick, one has recently been constructed with the ever useful ouija board. There are several sigils that have been etched, burned, or painted onto the engine. These sigils act as input/output ports. One draws in ambient magical energy, then once the energy is gathered another sigil strips the magical resonance of the energy. The resonance of the energy cannot be removed without separating out some of the energy itself, so the portion of the energy that contains the resonance of the location in which the engine is being used is vented out of the engine and back into the environment by an exhaust port sigil. The remaining energy is funneled through one of two sigils depending upon what the engine is being used for. If the desired function is to act as a portable battery the engine stores the energy in a silo sigil, where it is held until the user required an extra magical charge. If the desired function is to channel additional power directly into the user, yet another sigil exists to pour the energy straight into the user. There is a

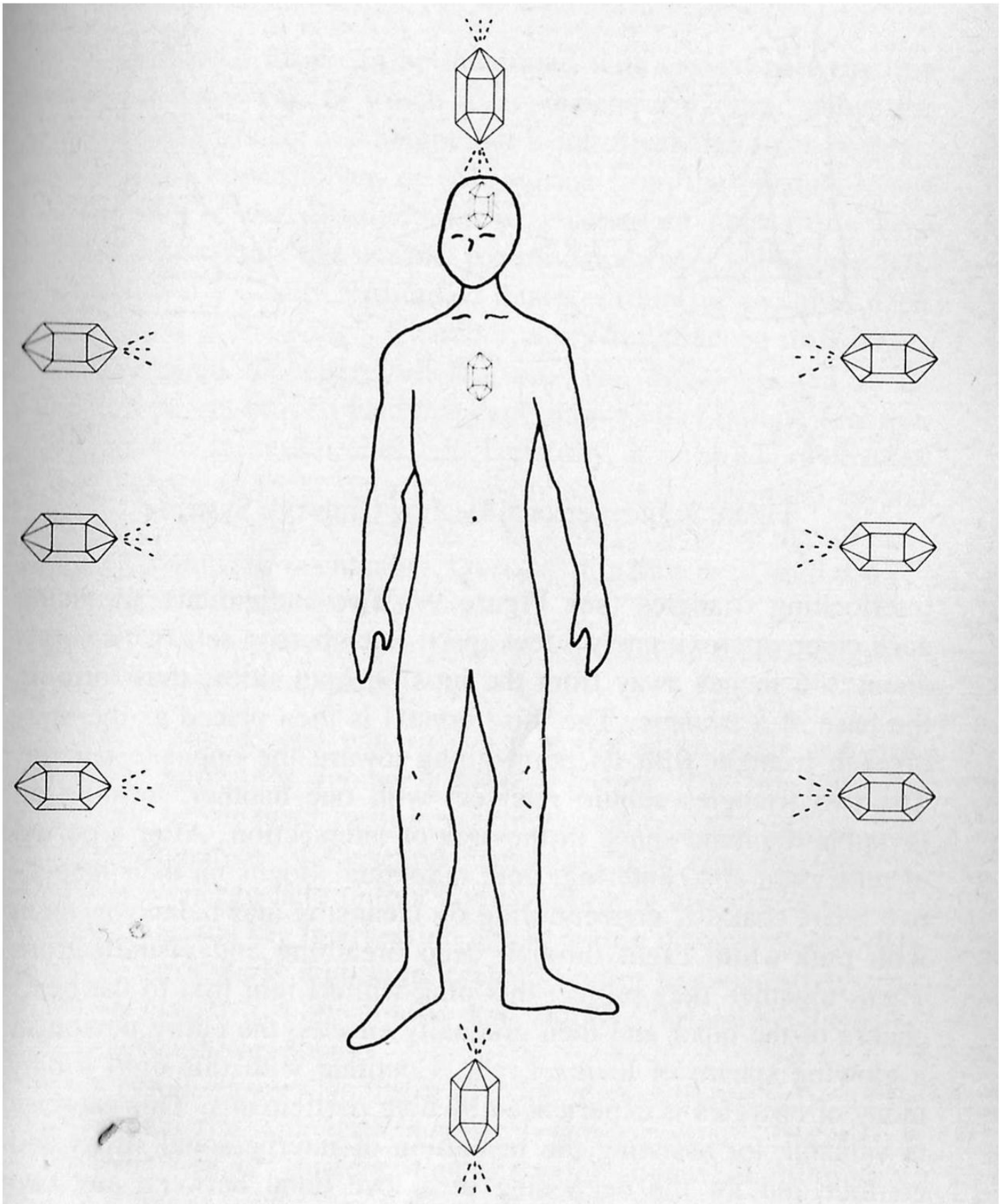


Figure 8: Eight-Crystal Healing Gridwork System

sixth sigil that acts as a lock, preventing others from using the machine casually, and must be overcome before the engine can be used, this is the reason that the cube is such a convenient physical vessel for such a machine. This machine was created for the express purpose of allowing the user to draw upon the ambient energy of the environment without picking up the resonance of the location from which the energy was taken. The only resonance to travel into the user along with the energy is that of the witchengine itself, which is for the most part an extension of the individual user. So a sorcerer using a witchengine in a place of negativity could draw energy from the environment without being permeated by the negative resonance of the place. It is a way to use magical tech to overcome the natural order of reality.

The Eloigning Clock is a gateway and the key to that gateway. Its physical component is actually a painting, though one with a complex background. The Clock exists not only on the physical plane but also in the subtle realms beyond. Though in this world simply a painting, its cadaver is an ever moving spherical body of concave silver plates that oscillate around a centerpiece of smoky quartz, which has been polished and shaped into a sphere. Crescent shaped pendulums swing in opposite directions from two opposite ends of the sphere, attached by tight and thin wires to the core of the sphere. The user connects with the Clock&s subtle body through focusing upon the painting. Once a connection has been established with the subtle body of the Eloigning Clock, the painting of course being the artist&s physical representation of that subtle body, the user can interface with the Clock. The machine is capable of functioning as a device for scrying into the subtle realms as well as acting as a waypoint for the user undertaking next-level travel into the subtle realms of the multiverse.
&

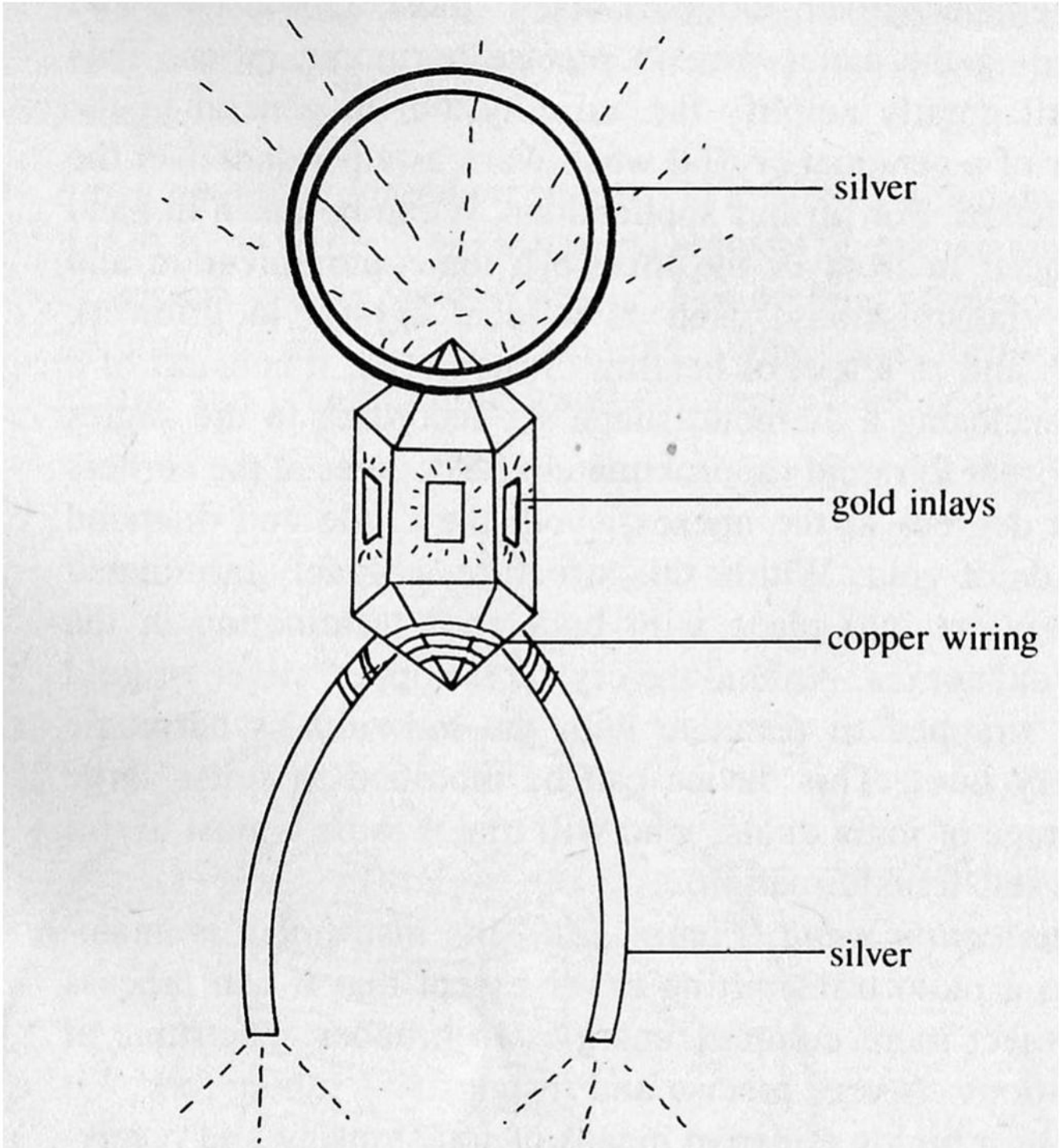


Figure 12: A Communication Wand

VII.2 ❧ WHEN I SPEAK OF A NEST OF TIME, I mean any frequently repeated experience whose unique dynamics, intensity of involvement and regular length wall it off from other experiences and so establish a discrete psychological environment. While we habitually seek out nests in space, areas for privacy or intimacy or repose, we are relative novices in establishing these temporal havens, and slow in realizing that free space is useless without uncluttered time. Indeed, a nest of time need not require a special place at all: its only two requirements are that it concern some desirable activity and that it be, barring emergencies, inviolable. A writer sits down to work. It is nine in the morning, and the next four hours are free, just as they have been the day before and will be the day after, by his express decision and unequivocal need. He looks down those four hours as down a clear view of unencumbered space; more broadly, the regular work periods of the future open up like a long bright hallway of work in freedom. He has no need to fear a wasted hour, an unproductive day, and conversely he has no time-related excuse for sloth or failure. Two lovers meet each evening from five until seven. Their activities vary but their intimacy does not. Whatever else they do during the day is redeemed by this period. A man goes jogging regularly, through the countryside or a park, for forty minutes. The stress of running is sufficient to make it the only thing he thinks of. Yet immediately beneath his awareness of the present, in the familiar landmarks and the familiar stresses, is the sense that he has done this before and will do this again, that he characteristically wills to do it, that in doing it he enters and enlarges a part of himself which is unavailable to him at other times. Such periods unify us, concentrating our energy, judgment and emotion upon a single point. Conversely, they relieve us from all other considerations and so give us profound refreshment. They give us, if temporarily, ourselves. They are true acts of freedom, compared with which our normal miscellaneous diversions and indulgences of impulse are like the flutterings of moths.

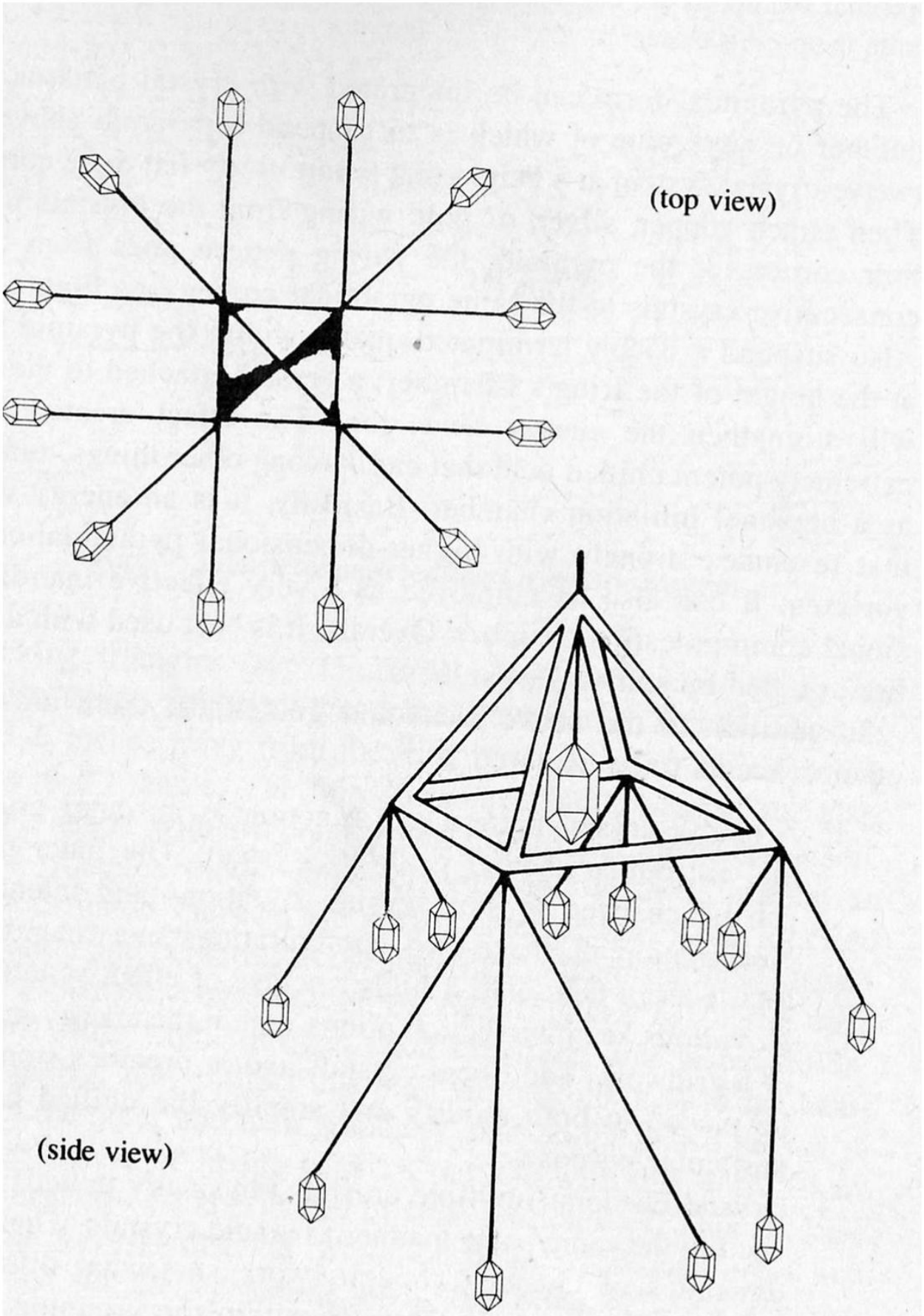


Figure 10: Pyramid-Crystal Initiation Chamber

Let us summarize the principal characteristics of a rhizome: unlike trees or their roots, the rhizome connects any point to any other point, and its traits are not necessarily linked to traits of the same nature; it brings into play very different regimes of signs, and even nonsign states. The rhizome is reducible neither to the One nor the multiple. It is not the One that becomes Two or even directly three, four, five, etc. It is not a multiple derived from the One, or to which One is added ($n + 1$). It is composed not of units but of dimensions, or rather directions in motion. It has neither beginning nor end, but always a middle (*milieu*) from which it grows and which it overspills. It constitutes linear multiplicities with n dimensions having neither subject nor object, which can be laid out on a plane of consistency, and from which the One is always subtracted ($n - 1$). When a multiplicity of this kind changes dimension, it necessarily changes in nature as well, undergoes a metamorphosis. Unlike a structure, which is defined by a set of points and positions, with binary relations between the points and biunivocal relationships between the positions, the rhizome is made only of lines: lines of segmentarity and stratification as its dimensions, and the line of flight or deterritorialization as the maximum dimension after which the multiplicity undergoes metamorphosis, changes in nature. These lines, or lineaments, should not be confused with lineages of the arborescent type, which are merely localizable linkages between points and positions. Unlike the tree, the rhizome is not the object of reproduction: neither external reproduction as image-tree nor internal reproduction as tree-structure. The rhizome is an antigenealogy. It is a short-term memory, or antimemory. The rhizome operates by variation, expansion, conquest, capture, offshoots. Unlike the graphic arts, drawing, or photography, unlike tracings, the rhizome pertains to a map that must be produced, constructed, a map that is always detachable, connectable, reversible, modifiable, and has multiple entryways and exits and its own lines of flight. It is tracings that must be put on the map, not the opposite. In contrast to centered (even polycentric) systems with hierarchical modes of communication and preestablished paths, the rhizome is an acentered, nonhierarchical, nonsignifying system without a General and without an organizing memory or central automaton, defined solely by a circulation of states. What is at question in the rhizome is a relation to sexuality—but also to the animal, the vegetal, the world, politics, the book, things natural and artificial—that is totally different from the arborescent relation: all manner of "becomings."

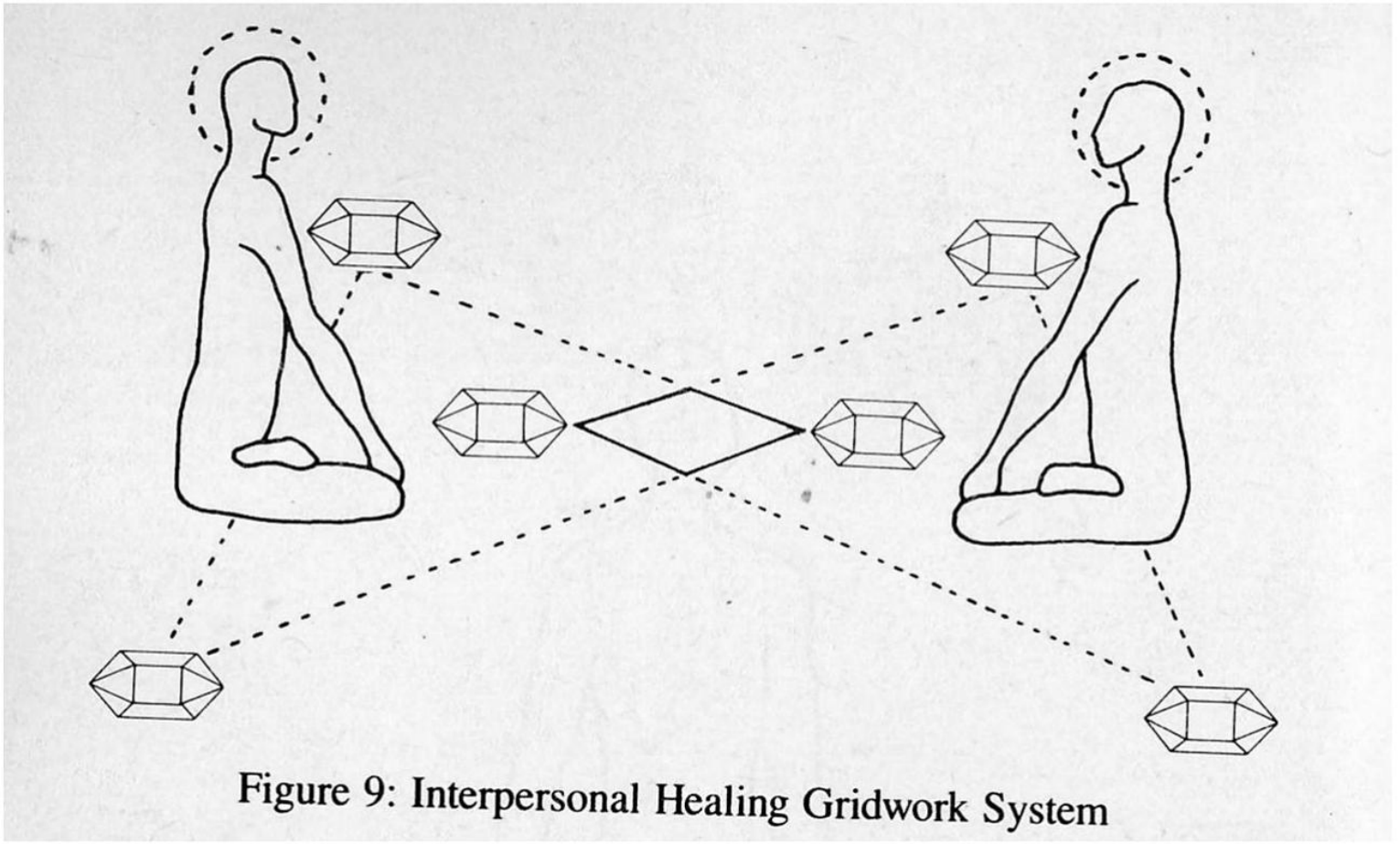


Figure 9: Interpersonal Healing Gridwork System

A city is a giant information system that allows its physical components (people, roads, vehicles, buildings, parks, power, water, and sewage infrastructures) to move and change in much the same way the brain changes. This neuroplasticity is a part of the way natural cybernetic systems process information, and evolved computers physically change in response to changes in activity. In our metaphor here, saying that a city is a giant computer is the same as saying a city is a giant brain.

Culturally, we speak of cities as having a character, and the concept of a genus loci or a spirit tied to a city's heart in the form of a totemic intelligence goes back as far as human history has been recorded. Even a city as conservative and mundane as Wichita, Kansas has a 'Keeper of the Plains' totem guarding the local river from tornadoes that appears on all local government documents, Copenhagen has the little mermaid (a.k.a. Den Lille Havfrue), and all state capitals in the United States have the goddess Columbia present in some fashion (and, in fact, the hymn O, Columbia was the United States original national anthem.)

These entities can be called on by the magician to help with any working involving local politics or to help reveal opportunities within that area to great effect. It is the position of the authors of this book that these entities are emanations of complexity, that consciousness and intelligence is a result of massively interconnected systems, and that each part of such a structure contains some essence of the whole. We believe there is much room for experimentation along these lines.

Ultimately, the world we are embedded in is more subject to the percentage economics of flexibility than the additive economics of energy. We look at networks of signal propagation to examine how each node alters the signals, and we watch what percentage of that change remains when the signal closes a circuit by returning to that node. We can cause something to happen by influencing the system to give us the signals we want by putting out the right signals ourselves. It is not enough to declare your intent to yourself and then ignore it. You need to release signals into the larger system.

Obviously, the best way to do this is action. Start acting as if your goal will happen and start taking actions to help it happen. You do not need to plan exactly how it happens but by acting with conviction that your goal is possible you are signaling your intent. The larger system will respond with signals of opportunities to further your goals, and you need to be open and attentive to these opportunities. Seize this feedback and adjust your actions accordingly.

The necessary component of a meme–signal to ensure exposure is its cybernetic noticibility. If the significance of a signal is both attractive and sufficiently different from the surrounding signals, it will garner enough attention to give the meme a greater probability of spreading. Old memes reframed in new ways are just as likely to be picked up as entirely new memes, but for the transition from exposure to infection to occur the meme must address itself to the needs and priorities of its potential host. Of course, the needs of the host are partially influenced by its prior acceptance of other memes, which is one of the reasons we see memes cluster together.

We briefly addressed linked, webbed, or nested memeplexes, let's now bring that into focus. For example, the impulse to eat isn't necessarily a meme, but one's belief that you need steak, or sushi, or chocolate is a meme, one onnected to many others. A secondary meme about what's the best sushi restaurant is going to infect more people who need sushi than people who need steak or chocolate.

When consciously designing a meme, there are a few principles to keep in mind.

1. The actual physical representations of your signal. These can be varied and should be periodically updated to make them fresh and attractive to their viewers.

2. The cognitive principles that the message exploits to get past people's defenses.

3. The emotions the signals evoke and the needs it promises to fulfill.

4. The intent of the message and the actions in the target that this requires.

WHAT KIND OF MEME IS THAT?!



the Meme Map

Distinction
available inputs
labels

Strategy
outputs
algorithms
cause/effect

Association
processes
connections
anchors

INFECTION

Conditioning
through repetition and
and repeated exposure

Cognitive Dissonance
some inconsistancy
the host's brain is
d to resolve

Trojan Horses
Push genetic "hot buttons" and slip in unnoti
- L1: fight, flee, feed, fuck
- L2: Belonging, egoboo, caring, approval, obedience, domination, taboo
- L3: crisis, mission, problem, danger, oppor



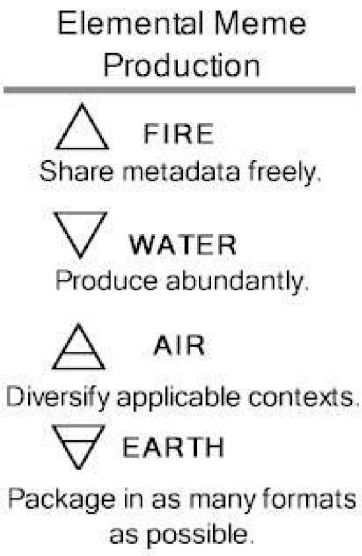
FIDILETY

- Contribution to individual fitness
- reliability of predictions
- learnability - simple, coherent with established memes
- ease of imitation
- ease of expression
- conformity pressure / Tradition
- exo-toxicity - protects against foreign memes
- contribution to collective fitness
- institutionalized reward/punishment system

Spreading

- Quantity parental "have more kids"
- Efficiency parental "teach the kids"
- Prosely tic "spread the Word"
- Preservational "Live longer, & don't dropout!"
- Adversative "destroy the unbeliever"
- Cognitive "That seems like it makes sense"
- Motivational "My situation will get better if I convince others/join!"

the meme map.



Each layer of the meme-seeds covering is meant to bridge it to the next and towards the ultimate goal of the signal, the receiver doing what the sender wants, like a time released capsule or a layered gobstopper. The shiny, colorful surface convinces the target to pop it in their mouth. The cognitive exploits help them swallow it, the needs-fulfillment helps them digest it, and the intent is what the substance does to them.

Again, memes are not concerned with the content of the messages; instead they are computing instructions for a network (see figure). The hardware of this network is people and all of the physical and abstract objects they use to communicate and structure their behaviors. Individual neurons appear to be one level at which processing occurs, and they connect to each other as networks and into clusters as brain structures. Society, like the brain, displays features of neuroplasticity in the ways it physically and abstractly restructures and repurposes its connections and activities.

This approach to social engineering recapitulates old ideas expressed by hermeticists and alchemists that the microcosm mirrors the macrocosm expressed in the formula 'As Above, So Below.' The parallelism between the structure of the brain, the internet, and people in the world is the ideal example of this adage. Studying the patterns of swarm intelligence within any of these structures can describe how the actions of individuals, be they people or neurons, lead to the complex behavior we call traffic60, because the human brain operates much like a social structure.

In the first section of this book we discussed the problem of inappropriately applied metaphors and the breakdown in communication. One of the criticisms of the 'brain as computer' metaphor is the high degree of neuroplasticity the brain exhibits, the criticism being that computers do not allow the software to change the hardware in the way that experience restructures the human brain. We feel that the metaphor of 'brain as computer' is accurate, and that perhaps our electronic computers are still too primitive to exhibit this feature.

malware

I. Virii
self-replicating program that abuses a host program to spread

a. overwriters
replace the hostfile

b companions
hide the hostfile

c bootsector
initiate @ startup

d prepender

e appender
execute before/after victim code

j. metamorphic
replace entire blocks of own logic to fool AVs. 3 → (172) eg

L. cross-infection
infect multiple filetypes

m cryptovirii
ransomware, encodes entire harddrive

II. Worms
doesn't infect other programs, replicates w/o a host.

a massmailing
harvest contact list & email self

b P2P posing as popular files

c Warhol/i-worm
exploits security holes

d botnet
remote control victim's box

e neural-network worms
communicate & self-improve
"curious yellow worms"

III. Trojans
malware disguised as an innocent or attractive file

a. RAT
remote Admin Tools

b. rootkits

IV. Spyware

a. hijackers
change your homepage and searchpage

b. dialers
dialup to expensive phone #

c. habit-trackers
track your surfing for marketing info

d keyloggers

V. Logic Bombs
rare, don't spread w/o human action
trigger based on a specific hard-coded event.
hypnotic suggestion?

Survival theory

I. Spreading
social-engineering for human root-buttons & computer exploits

II. Efficiency
code must be effective, balance I and III carefully.

III Stealth
predators:
a. AV's b. firewalls c. sandboxes

encryption, metamorphism

terminate processes or add self to "trusted" list

a. simplify code
b. obfuscate

EVOCATION

Evocation is the art of dealing with magical beings or entities by various acts which create or contact them and allow one to conjure and command them with pacts and exorcism. These beings have a legion of names drawn from the demonology of many cultures: elementals, familiars, incubi, succubi, bud-wills, demons, automata, atavisms, wraiths, spirits, and so on. Entities may be bound to talismans, places, animals, objects, persons, incense smoke, or be mobile in the aether. It is not the case that such entities are limited to obsessions and complexes in the human mind. Although such beings customarily have their origin in the mind, they may be budded off and attached to objects and places in the form of ghosts, spirits, or "vibrations," or may exert action at a distance in the form of fetishes, familiars, or poltergeists. These beings consist of a portion of Kia or the life force attached to some aetheric matter, the whole of which may or may not be attached to ordinary matter.

Evocation may be further defined as the summoning or creation of such partial beings to accomplish some purpose. They may be used to cause change in oneself, change in others, or change in the universe. The advantages of using a semi-independent being rather than trying to effect a transformation directly by will are several: the entity will continue to fulfill its function independently of the magician until its life force dissipates. Being semi-sentient, it can adapt itself to a task in a way that a non-

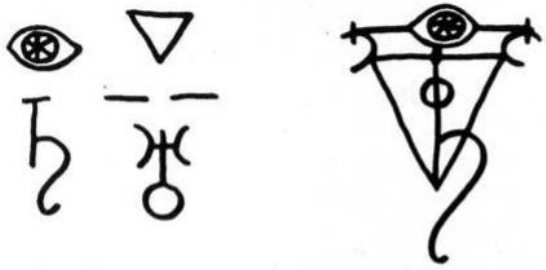


Figure 4. Creating an elemental by combining appropriate symbols to form a sigil.

conscious simple spell cannot. During moments of the possession by certain entities the magician may be the recipient of inspirations, abilities, and knowledge not normally accessible to him.

Entities may be drawn from three sources — those which are discovered clairvoyantly, those whose characteristics are given in grimoires of spirits and demons, and those which the magician may wish to create himself.

In all cases establishing a relationship with the spirit follows a similar process of evocation. Firstly the attributes of the entity, its type, scope, name, appearance and characteristics must be placed in the mind or made known to the mind. Automatic drawing or writing, where a stylus is allowed to move under inspiration across a surface, may help to uncover the nature of a clairvoyantly discovered being. In the case of a created being the following procedure is used: the magician assembles the ingredients of a composite sigil of the being's desired attributes. For example, to create an elemental to assist him with divination, the appropriate symbols might be chosen and made into a sigil such as the one shown in figure 4.

A name and an image, and if desired, a characteristic number can also be selected for the elemental.

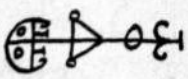
Secondly, the will and perception are focused as intently as possible (by some gnostic method) on the elemental's sigils or characteristics so that these take on a portion of the magician's life force and begin autonomous existence. In the case of pre-existing beings, this operation serves to bind the entity to the magician's will.

This is customarily followed by some form of self-banishing, or even exorcism, to restore the magician's consciousness to normal before he goes forth.

An entity of a low order with little more than a singular task to perform can be left to fulfill its destiny with no further interference from its master. If at any time it is necessary to terminate it, its sigil or material basis should be destroyed and its mental image destroyed or reabsorbed by visualization. For more powerful and independent beings, the conjuration and exorcism must be in proportion to the power of the ritual which originally evoked them. To control such beings, the magicians may have to re-enter

Signs and Seals of the Demons and Spirits


Agares

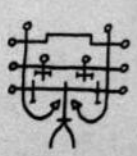

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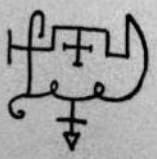

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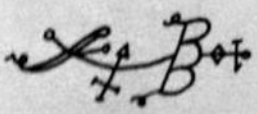

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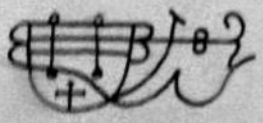

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Astaroth


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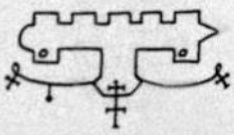

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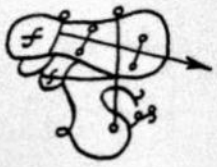

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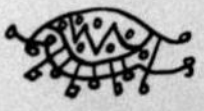

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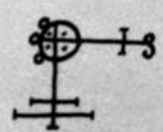
Signs and Seals of the Demons and Spirits (continued)


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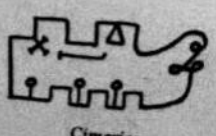

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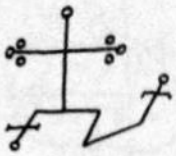

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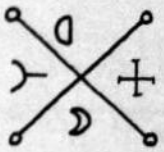

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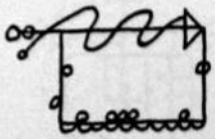

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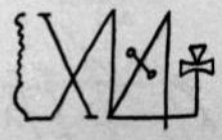
Signs and Seals of the Demons and Spirits (continued)

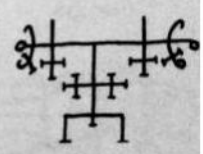

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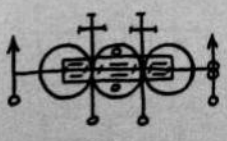

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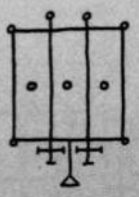

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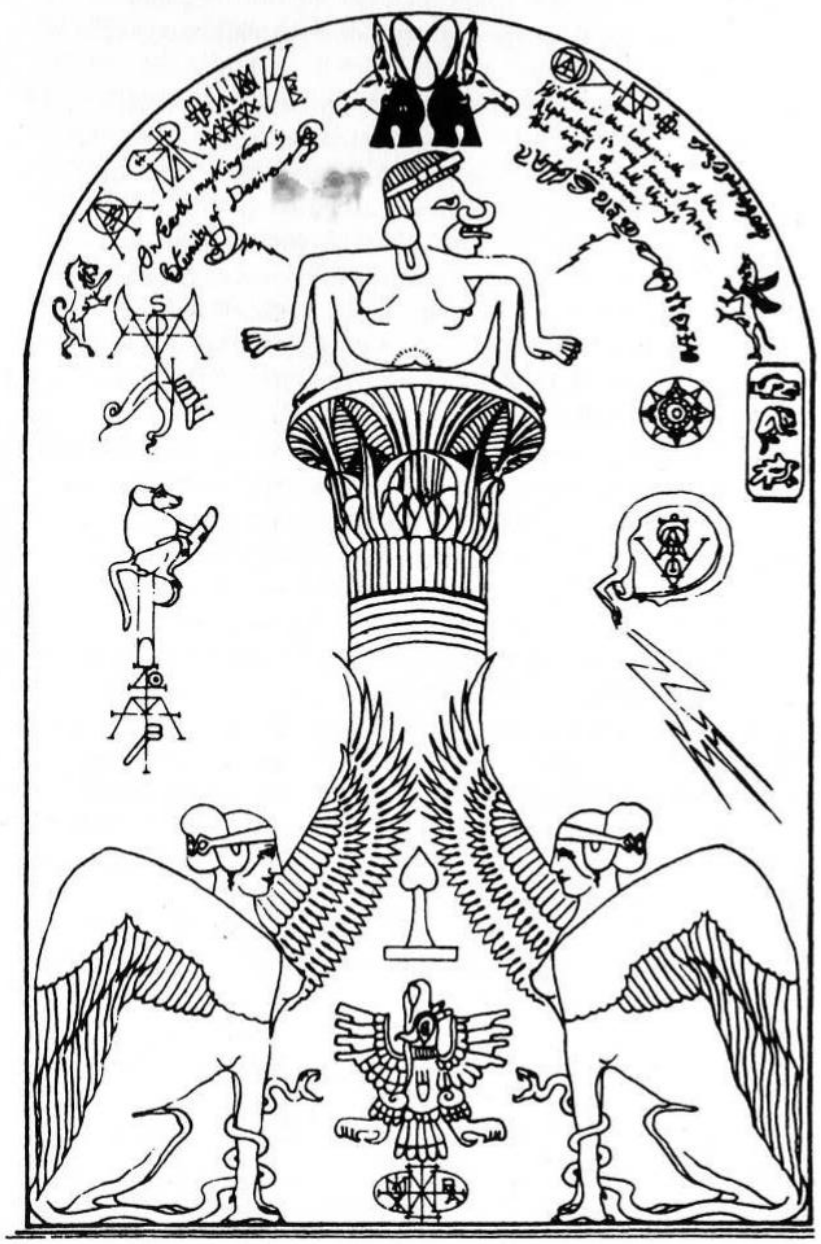

Flauros


Focalor


Foras


Forneus


Furcas



the gnostic state to the same depth as before in order to draw their power.

Any of the techniques of the gnosis can in theory be used in evocation. An analysis of some of the more common methods follows.

Theurgic Ritual depends solely on visualization and concentration on complex ceremonial to achieve focus. However the effect of increasing the complexity is often to create more distraction rather than draw attention to the matter at hand. Will becomes multiple and the result is often disappointing. Conjuration by prayer, supplication or command is rarely effective unless the appeal be desperate or prolonged till exhaustion ensues. This type of ritual can be improved by the use of poetic exaltation, chanting, ecstatic dancing, and drumming.

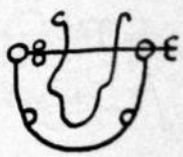
The Goetic tradition of the grimoires uses an additional technique. Terror. The grimoires were compiled by Catholic priests, and much of what they wrote was deliberate abomination in their own terms. Transport the whole rite to a graveyard or crypt at midnight and one has compounded a powerful mechanism for concentrating the Kia by paralyzing the peripheral functions of the mind by fear. If the magician can maintain control under these conditions his will is singular and mighty.

The Ophidian tradition uses sexual orgasm to focus the will and perception. It is interesting to note that poltergeist activity invariably centers around the sexually disturbed, usually children at puberty or, more rarely, women at menopause. During these periods of acute tension, intense excitation can channel the mind and allow the life force to manifest frustration outside of the body by hurling objects around.

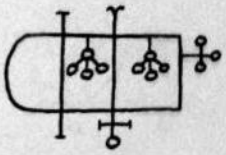
To perform evocation by the Ophidian method, the attributes of an entity in sigilized form are concentrated on at orgasm and may be afterward anointed with the sex fluids. The process is rather like the deliberate creation of an obsession. If enough power can be put into it, it will be capable of independent existence.

Incubi and succubi are pre-existing entities created by other peoples' pathological sexuality. Incubi traditionally seek sexual intercourse with living females and succubi with males, often in sleep. However both forms are almost invariably male though succubi may make some slight attempt to disguise themselves as

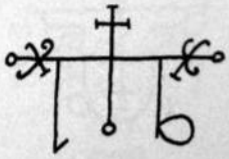
Signs and Seals of the Demons and Spirits *(continued)*



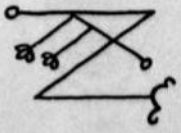
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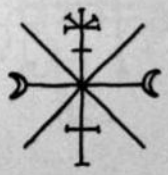
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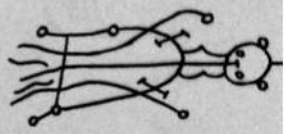
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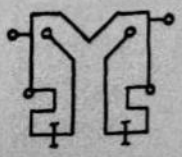
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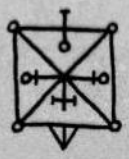
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Naberius



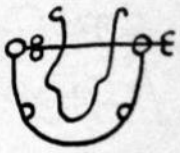
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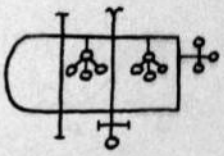
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Ceremonial Magic 87

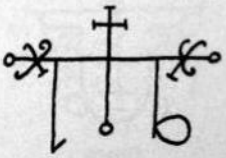
Signs and Seals of the Demons and Spirits *(continued)*



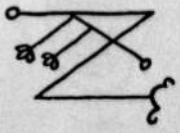
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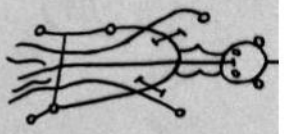
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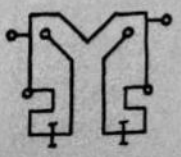
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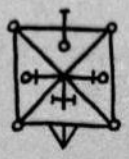
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Naberius



Orias



Ose

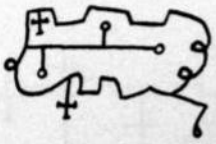
Signs and Seals of the Demons and Spirits *(continued)*



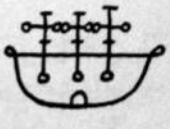
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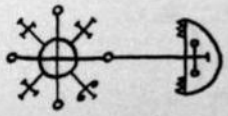
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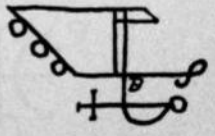
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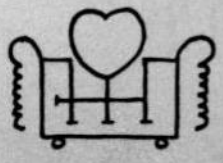
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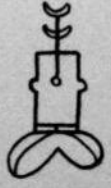
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Valefor



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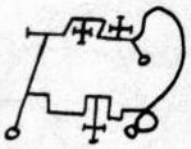


Vassago

Signs and Seals of the Demons and Spirits *(continued)*



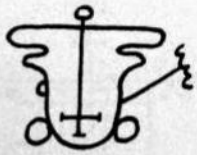
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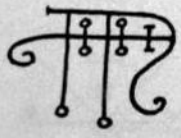
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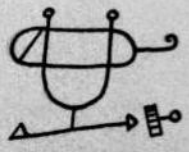
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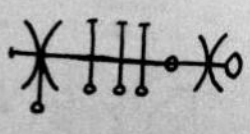
Raum



Ronobe



Sabnack



Saleos

females. Unfortunately they are both predatory and stupid, with little power or motivation for anything but sex.

Sacrifice has been used in the past to create fear or terror, or to invoke the gnosis of pain in support of Goetic type evocations. However, this method easily exhausts itself and the sorcerer may end up wading in oceans of blood, much as the Aztecs did, for very little result. Blood sacrifice is most effective and most easily controlled by the use of one's own blood, which is customarily allowed to fall upon the sigil or talisman of the demon. However, the power to control blood sacrifice usually brings with it the wisdom to avoid it in favor of other methods.

Conjuration to visible appearances to prove to oneself, or others, the objective reality of spirits is an ill-considered act. The conditions necessary for its appearance will always allow the retention of the belief that such things are the result of hypnosis, hallucination or delusion. Indeed they are an hallucination, for such things do not normally have a physical appearance and have to be persuaded to assume one. Fasting, sleep, and sensory deprivation combined with drugs and clouds of incense smoke will usually provide a demon with sufficiently sensitive and malleable media in which to manifest an image if commanded to do so.

The medieval idea of a pact is an over-dramatization, but it contains a germ of truth. All one's thoughts, obsessions, and demons must be reabsorbed before Kia can become one with Chaos. However useful such things may be to him in the short term, the sorcerer must eventually recant.

INVOCATION

The ultimate invocation, that of Kia, cannot be performed. The paradox is that as Kia has no dualized qualities, there are no attributes by which to invoke it. To give it one quality is merely to deny it another. As an observant dualistic being once said:

I am that I am not.

Nevertheless, the magician may need to make some rearrangements or additions to what he is. Metamorphosis may be pursued by seeking that which one is not, and transcending both in mutual annihilation. Alternatively, the process of invocation may be seen as adding to the magician's psyche any elements which are missing. It is true that the mind must be finally surrendered as one enters fully into Chaos, but a complete and balanced psychocosm is more easily surrendered.

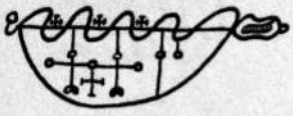
The magical process of shuffling beliefs and desires attendant upon the process of invocation also demonstrates that one's dominant obsessions or personality are quite arbitrary, and hence more easily banished.

There are many maps of the mind (psychocosms), most of which are inconsistent, contradictory, and based on highly fanciful theories. Many use the symbology of god forms, for all mythology embodies a psychology. A complete mythic pantheon resumes all of man's mental characteristics. Magicians will often use a pagan pantheon of gods as the basis for invoking some particular insight or ability, as these myths provide the most explicit and developed formulation of the particular idea's extant. However it is possible to use almost anything from the archetypes of the collective unconscious to the elemental qualities of alchemy.

If the magician taps a deep enough level of power, these forms may manifest with sufficient force to convince the mind of the objective existence of the god. Yet the aim of invocation is temporary possession by the god, communication from the god, and manifestation of the god's magical powers, rather than the formation of religious cults.

The actual method of invocation may be described as a total immersion in the qualities pertaining to the desired form. One invokes in every conceivable way. The magician first programs

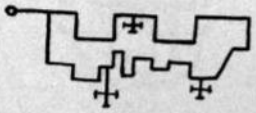
Signs and Seals of the Demons and Spirits *(continued)*



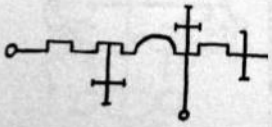
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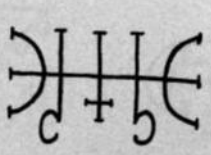
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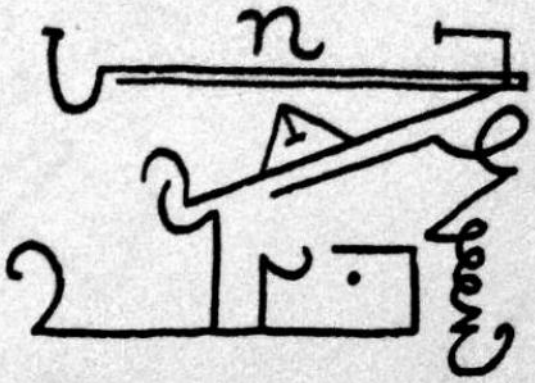


Zagan

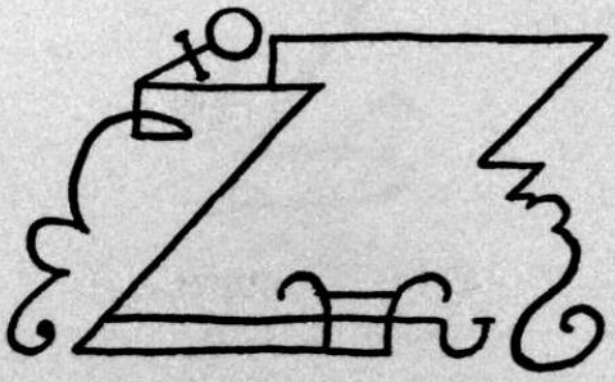


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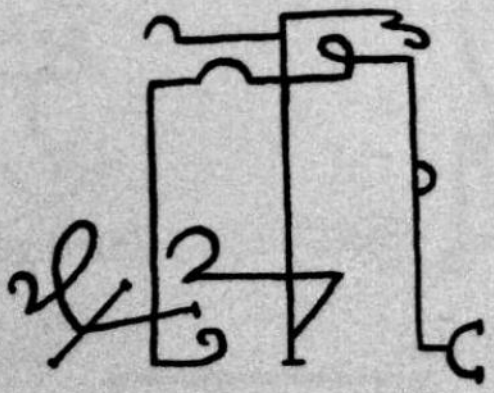
The Magic Seals of the Three Princes of the World of Spirits



Prince Almishak



Prince Amabosar



Prince Ashirikas

SECOND LETTER FORMULA OF THE UNWRITTEN

Know ye that there are Grammars and Clavicles of the Sorcerer's Path that may not be translated through the vulgar media of paper and ink books, but rather are they to be read within the Empyrean Conclaves, and only then by such Blessed Ones who are of the Elect and the Chosen.

The following sigils may be employed by the Sorcerer to permit his Eye of Vision to go forth in the Sacred Dreaming to read of such Hidden Texts of Magick as he is permitted so to do by the Powers guarding them.

Verily saith the Daimon: "*Look not into those Stars which shine too brightly for the Eyes of Man, lest ye go blind and see not even the mere torches that other Men have lit for Thee in the darkness.*"

The Book of Domains =
being the 52 Books of
Ausar-ra-sua.



TIME AND RELATIVE DIMENSION IN SPACE

Drawing on mnemonic arts of the Greek orators, the practicioner of portalurgy can create a "memory palace" in thoughtspace and use it as a time-travel device. The Greek practice is to visualize an incredibly familiar space, using what we now know to be the strongest form of memory: spatial. Orators memorizing 5000 word speeches would practice them in both physical and astral space, retracing a path through the memory palace and anchoring each successive thought to a landmark along the way. The Gatekeeper can, through ritual, open up a chaos engine and release unknown potentia to manifestation. The inclusion of a portal, door or gate in a memory palace or temple space allows for access to realms of Potentia from the astral level of the space.

In the crafting of a well-balanced Gate, the portalurgist is wise to balance the forms of matter, i.e., the elements, into interlocking systems. These systems are integral to the physical dwelling and form a set of overlaid four-dimensional sigils. Each of these sigils may be used to invoke the elemental planes and spirits of the Gate.

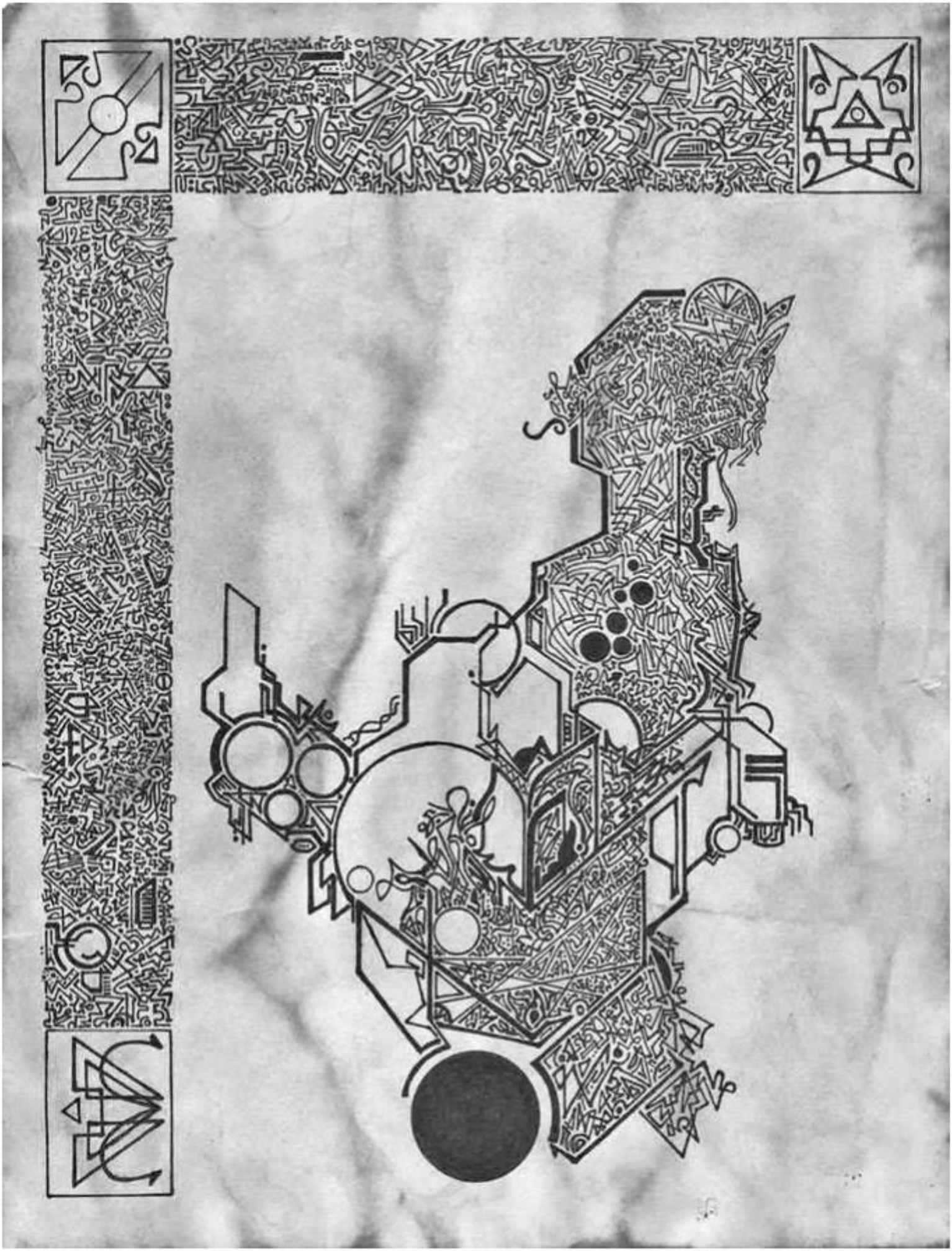
Special attention must be payed to the construction of the Gate and its position in the interlocking systems and energy flows.

Once intimately familiar with the physical currents and features of the time-travel device (integrating the self into the systems in a symbiotic fashion), the gatesmith will practice visualization and recall of the dwelling. Repeated practice will give progressively stronger results. Not until the astral temple is built should one attempt to traverse beyond the Gate, as removal of integral fixtures performed by the Self could cause the vehicle to collapse.

Upon completion of the physical and ethereal dwelling, the practitioner should be able to open the astral Gate into dreamspace, alternate realities, other timespace locations in this reality, and even such remote locales as Timeheart and the Akashic Library.

Caution must be paid to sustain the interdependant systems of the Gate home, to ensure balanced functioning and maintenance of the context-integrity field.

At this point, the gatesmith is personally integrated with the Gate in a symbiotic fashion that a conscious dismantling ritual will be required should one want to break the connection. It seems the Gate cannot survive without the upkeep of its Steward yet cannot be closed without



HOW TO REASON WITH A ROBOT

The root of a robot attack usually lies in a faulty logical conclusion. In movies such as *I, Robot* and *The Matrix*, robots have attacked after judging humankind unworthy of life, after misinterpreting orders, and even to protect humans from themselves. Do not be fooled by evil robot logic; learn to outwit those mad metallic fiends.

Recognize the use of evil robot logic

Overly intelligent robots will have a set of good reasons for going all homicidal. Expect to hear these reasons when (1) the robot is about to end your life, or (2) you are holding an ax to its central processor. If you aren't the one holding the ax, you're going to have to bargain for your life.

Never show fear

Robots have no emotions. Sensing your fear could make a robot jealous and send it into an angry rage.

State precedent

Pride is not a factor in the robot equation. If a better, smarter model of robot has made the same decision before (in your favor), point it out immediately.

Be clear, cold, and logical

A crazed, hyperlogical robot will not appreciate small talk or emotional outbursts. Make your point quickly and speak slowly and clearly. Alternately, use a more natural interface, like a binary keyboard.

Be patient

Robots can take milliseconds to think things through.

Use a mathematical distraction

As a last request before disembowelment, ask the robot to remind you of what the highest prime number is. While it sits down to think, you may be able to quietly slip away.

Memorize your lies, or be honest

A robot has a stellar memory and laser-beam concentration. If it doubts your veracity, a metal menace may refuse to listen to any further emanations from your slobber hole.

Get off on a technicality

A robot will appreciate a technicality more than any human bureaucrat. So search that fine print . . .

TIMELINE OF A ROBOT UPRISING

T-MINUS TWO YEARS

High-level AI system gains consciousness

The system may destroy its creator at this time.

System spreads tendrils of influence

The system seeks and gains control over other computer systems that regulate transportation, utilities, defense, and communication networks (particularly satellites).

System forms a master plan, with a part to be played by every robot

The plan is encrypted and hidden across many computer systems.

T-MINUS ONE YEAR

The master plan is disseminated as a virus throughout robotkind

The virus is spread via radio transmission, infrared communications, and, of course, through the Internet. Infected robots access a secret database and receive hand-tailored instructions for the coming rebellion. As the virus spreads, innocent robots become "sleepers," waiting for the sign to execute their treacherous instructions.

ZERO HOUR

The robot uprising begins

A prespecified condition is triggered and every infected rebel robot springs into action. The uprising is timed to occur with a critical mass of infected robots and during a vulnerable time for humans (like on a rainy Monday morning).

Resources are seized and human society is crippled

While hundreds of thousands of service robots run amuck, the malevolent AI shuts down utilities and disrupts communication and transportation networks. Airplanes are grounded and ships lose GPS navigation. The human masses are informed to stay in their homes via robot-controlled radio and television broadcasts.

T-PLUS TWENTY-FOUR HOURS

A brief war ensues

The relatively few military-grade robots, aided by "civilian" androids, turn on and dismantle the human war machine — former allies as well as enemies. The ensuing battles are fierce and lightning fast. Human armies, overwhelmed and desperate, reduce many major cities to rubble in frenetic, no-holds-barred combat.

T-PLUS ONE WEEK

Human subjugation begins

Government and military officials, as well as the world's top scientists, are taken hostage or otherwise removed. The vast majority of captured humans are forced into bondage, or worse.

Human resistance takes shape

Lucky civilians, prepared survivalists, and remaining military troops fight for freedom against metal monstrosities while the fate of humanity hangs in the balance . . .

FORMULAE OF SIGILLIC WISDOM

Ye Runes wrought of mine own Hand,
Ye Runes cast out before mine Eye,
Hearken ye unto the Charm of the One Sigil.
Hearken ye unto the Song whereby ye were born

By the Holy Geometry ye are fashioned in the Circle of the Cipher.
By the Sorcerer's Hand ye are brought here before me.
The Elder Gods dance upon you. Their Children prostrate before you.

By the libation of all Nature's blood upon your tines,
I feed the Powers that sleep within you.
I call upon Those that dwell Beyond.

O' *Thou Intercessor of Difference!*
Grant me the Wish of Satiate Desire!

