

CHAPTER SIX

SYMBOLS AND SPEECH

Speech is the favorite among the traits said to mark the human being. "The chain of nucleosynthetic evolution.. breaks over the derivation of language," T.A. Wertime writes. To speak and understand "marks the crucial breach in the symbiosis of primate and nature, the onset of contrivance and 'sin'." [1] Language breaks the instinctive bond between man and nature and sets man free in a maelstrom of delusions. Other species are outdistanced in the race to set up communication systems, but still their achievements limit the human claims.

Speech is systematic symbolism. Symbolism characterizes all outputs and effects of human behavior. Whether we grow crops, organize business, or sell books, what we do has symbolic origins and is conducted by and amidst symbols, and deals with symbolized things. The final form of much human output is largely symbolic, as with scientific, technical, and ordinary discourse, also with art, some myth, and a part of religion and magic. Ernst Dichter, a well-known human relations consultant, produced for the use of manufacturers and advertisers an encyclopedia devoted to the Psychological connotations of a great many industrial designs [2].

Human speech, language, the 'vox humana' does not consist of written words. The written word is merely a representation of speech in another (and more constraining) medium—a further level of symbolism, since language itself is a set of symbols for concepts which themselves correspond but poorly to external reality. Language is a code of a code; writing is a code of this code of a code [3].

I quote this out of a personal letter from the linguist Malcolm Lowery.

SILENT SYMBOLISM

Not to be excluded from symbolism are graphic codes, signs, marks on trees and stones, sacred paths and benchmarks, routes among the stars, and very many other human productions. All are sent and received as symbols. Illusions are symbols inasmuch as non-existent objects or facets of objects present themselves significantly to the brain, standing for something else.

Studies of American Sign Language, a system imparted to the deaf and employed by the deaf, sometimes by the deaf to the deaf, establish "the fact that to be a medium capable of expressing the full range of human intentions language need not be spoken. It is the human brain, not the mouth or the larynx that makes language possible. ASL is a complete language." [4] Wit, humor, poetry and song are within the capabilities of sign language.

Hence, language without speech is possible. Signals (smoke or flags), gestures (deaf mutes), whistling (*cf.* Harpo Marx), and writing (letter, romances) are alternative modes of communication. So is pantomime. This would suggest that speech is not the "cause" of language, but that language prompts speech and other means of communication.

Eric H. Lenneberg shows that at the age of 21-37 months the age of "acquisition of language," the "right hemisphere can easily adopt sole responsibility for language and language appears to involve the entire brain.. though the left hemisphere is beginning to become dominant toward the end of the period." [5] By the age of fourteen language is markedly left-lateralized, irreversibly. I conclude that the internal language code is first set up; then the physico-motor apparatus and left-brain dominance usurp language for external and public behavior.

The road is clear, then to consider whether self-speech may prompt public speech, admitting that public speech may govern self-speech to a degree. Or, more appropriately, we should assert that self-symboling prompts public symbolism.

ANATOMY

Speech occurs similarly in all humans: sound waves are made by muscles and tubes, and consist of phonemes (vowels and consonants, etc.), combining into morphemes (e. g. words), which acquire a morphology (sentences, etc.) and broader levels of syntactical patterning — the whole largely unconscious except on the superficial level of the "spelling bee."

No specific speech center occurs in the brain, a fact of large significance: there is no speech organ, no lobe, no sign of an organic mutation, no high density concentration, no neural bunch, no exclusive territory. Speech is controlled from a large cortical area extending from just in front of the visual area, across the auditory to the edge of the motor region. The area can be tested functionally in the left hemisphere for the right-handed person, and in the right for the left-handed.

The tongue and larynx have muscles and the brain accords them special motor areas. The area for the tongue is much larger than for the whole leg, one more instance of the dye-economy, or at least "indifference" of "nature," assigning to the "less important" a large housing while the more worthy tenant sleeps wherever he can. The whole central nervous system supplies the messages that are framed by the lips and tongue.

The chimpanzee enjoys no such grandeur, says Ralph Gerard, "I strongly suspect that you could not teach a chimpanzee to speak chimpanzee, let alone English, because he doesn't have large enough areas for his tongue and his larynx." [6]

We are not convinced: an ape can make several distinct sounds, say six; this would allow about 26 or 128 unrepitive combined sounds, many more if repetitive, viz., "hubba, hubba."

Attacking the assertion of one pongid researcher, that "language is no longer the exclusive domain of man," one group of scientists has concluded from its study of a chimpanzee called "Nim," and an analysis of other pongid and infant studies, that

an "apes's language is severely restricted. Apes can learn many isolated symbols (as can dogs, horses, and other non human species), but they show no unequivocal evidence of mastering the conversational semantic, or syntactic organization of language." [7]

But all this is not because of a lack of tongue-motor. The brain stores, exercises as memories, and emits signals according to its history. What is used is banked and what is not used has no bank account to draw upon. If apes cannot talk, it is not because of a lack of these evanescent motor centers of the cortex. Nor is it because the brains of apes are too small. Fluency of speech is not correlated with brain size in humans, with a span of difference of hundreds of cubic centimeters, as much as one fourth. For that matter, the human brain is largely disused, so an ape ought to have brain-room for talking, even if only "small talk." The chimpanzee also has space for data storage in his brain, beyond motor areas. Nor are apes untrainable, witness the responses obtained by dedicated keepers over a period of time; they can be made to imitate man closely. Yet, as claimed above, very little speech ensues.

Is it then that the ape does not want to talk? Yes, that hits at the central problem. There is not enough internal conflict in the primate to "justify" the installation of a symbol and signal system. Even if it were to be, or has been partially installed, the animal is not schizoid enough to levy continuous demands upon the system, and it deteriorates from desuetude. George Miller says, agreeably, that "talking and understanding language do not depend on being intelligent or having a large brain. They depend on 'being human'." [8] So long as the source of human nature cannot be pinpointed, it is well to put "being human" in quotation marks. But I think that we shall no longer be required to do so. Perhaps to get apes to talk, infant apes must be first neuroticized by continuous injections of chemical sensory excitants and neurotransmitter depressants.

NEUROLOGY OF SPEECH

Monod (1971) maintains that the instructions for building human language may be contained in the genetic code. If so, the instructions are probably not complicated, as we shall explain. Writers are verging towards the concept of outer language being the language also of inner thought. Johnson writes:

Although it must be recognized that language is not the only tool of thought, for we have unconscious thinking as well, it remains true that most of the mental processes of humans actually use verbal symbols as stimuli for nonverbal responses. Inner speech is produced, and it can be used as an instrument of rational processes such as voluntary movements. Herrick (1956) states: 'I repeat my conviction that some form of symbolism is requisite and that without the invention of language symbols the human type of mentation is impossible [9].

Schizophrenic patients show a profound intuitive understanding of symbolism while trampling the rules of grammar. Otto Fenichel holds that their symbolism is not a tactic of distortion but an archaic form of thinking, thinking by metaphor, we would say. The right hemisphere can assemble word forms by itself, when cut off from direct communication with the language apparatus of the left brain; this would only confirm the residue in both brain hemispheres of the bilateral primate ability to utter a variety of sounds. The chimpanzee can use words, if strongly trained to do so; one of them, Washoe, used veritable sign language, derived from American Sign Language, leading Pribram to say that "primates *can* construct and communicate by signs, context-free, consistent attributes of a situation which are discriminated and recognized." [10]

In accordance with the theory of human Hologenesis, to be advanced later, and in striking coincidence with the philosophy of pragmatism, we can argue that language is thought, and thought is language. What happens interpersonally also happens intrapersonally. Since, as we have just argued, the brain treats "inner" and "outer" indiscriminately in relevant ways, the brain may actually employ language without discrimination as to the location of its referents. The infant babbles; a year later he utters a "word", that is, a reference that outsiders can

comprehend. Whether one is talking to an audience or talking to oneself may be a reference that is learned. It is within the ken of many people to hear a victim of trauma — an exhausted survivor, a tired soldier, a mourning widow—range back and forth from talking to the outsiders to talking to oneself and to "insiders" of the self.

Black (1971) has reviewed recent work which demonstrates that hallucinated words and sounds can affect the EEG [electroencephalogram]. The normal production of alpha waves are changed by such experiments, and evoked potentials are altered in hallucinating situations. The conclusion was that the EEG responds in a manner which demonstrates that hallucinatory material is processed as a reality to the nervous system just as any other phenomenon might be perceived [11].

And again:

It is a fact that Gould (1948, 1949) used a stethoscope to listen to the hallucinated inner speech of a patient. The externalized sounds can be heard when the instrument is placed in front of the patient's mouth, and normal speech can be heard at the larynx [12].

It is suggested that inner thought forms itself as a neural network of neutral references among cerebral engrams (gestalts, holograms). Consequently the network itself becomes a code for interaction among the references. That is, the holograms are indexed, or given names; then grammar becomes the rules for drawing upon the names. The basic linguistic expressions, such as: "Dogs fear men"; "Gods exist"; "Go away"; "Spring will return"; are references to a key set of holograms engaging the attention to expectations based upon their summated behaviors, to egocentric wishes that can be couched as demands or "laws of nature." The "decision" to employ sound for language is partly unconscious and habitual, since sound is an old underemployed facility, and then an invention. Sounds can readily be correlated with the thought code. Silent speech connects with the speech motor system and springs outward, with striking effects.

The outer world responds to the degree that it is human, or it seems to respond. Furthermore, experientially, the world responds to the thought rather well than badly. What begins as ejaculations, develops into propaganda, and propaganda in turn becomes principles — ethical and scientific. The language changes by feedback and alteration. Meanwhile, the patterned object of the grammar becomes himself a subject, if single, and a game between two subject-objects produces a "universe of discourse." Consensus on words and syntax develops. What happens "outside" happens "inside": the code one uses internally is never much different from the language used in dealing with the world. The private language of schizophrenics or anybody is merely a paranoid secret like the "Pig Latin" of children within hearing distance of their guardians.

If displacements are infinite, so are codewords for them; indeed, the wide variety of displacements determines the scope of the language. Economically, efficiently, quickly, energy-conserving: language proceeds. The words need be very few to refer to everything and all the interactions among them. A half-century after Shakespeare's niagara of words, Racine's 1000 words and even less were deemed adequate to say everything in French, and for a long time thereafter anyone inclined to be more verbose, at least in tragedy, was obsessively resisted.

THE STRUCTURE OF SPEAKING

What produces systematic symboling in the human? The elements of the process are self-dispersion, anxiety, self-collection, coding, metaphor, and algebra. There is a sequence in all of this, but it happens so quickly and continuously, and with so much overlapping, that it is misleading to make neat phrases. Of self-dispersion, anxiety, and self-collection we have already spoken. The self, split by instinct delays that scramble the ego, undergoes heavy anxiety, and strives for reinstinctualization or any other forms of what is hoped will be self-control. For this purpose, it ranges through the world and time by its techniques of displacement, lodging everywhere but then having to control these lodgments, too [13].

The displacements do not enter the brain pell-mell and without discrimination. The impulse that identifies them in the first place is motivated. A displacement must belong to a realm of control associations; it is metaphorical. The brain codes it by an ever-so-slight but significant tag so that it resolves into a data bank whence a codesymbol can retrieve it. If it is to be used to characterize an individual thing, it is pulled out in its entirety, sign upon sign, until it becomes a vivid picture. If it is to be used as part of a category, it is retrieved more or less as a naked index reference. As Benjamin Whorf once said, no word has a precise meaning. Mathematicians hate to admit it, but no mathematical symbol or arithmetic number has a precise meaning, either.

The poly-selves are pocketed or diffused all over the brain, the body, and the outer world, including the past; the poly-self is in millions of places, a shepherd, or better, lead sheep, of a gigantic flock. Wherever and whenever perceived, they return, finding their coded abodes and reinforcing their electrobiochemical walls. Given the strength of the major ego components, the selves or roles, the coded items are not randomly distributed in the brain, but aggregate according to an abstract hierarchical classification item. If this seems like a metaphor of the rational human operation of classifying subjects, the metaphor is reversed; I would conjecture that the external work of classification in every walk of life derives from an intuitively perceived basic classifying going on naturally in the brain; man is imitating his internal central nervous system operations, just as he copies, often subconsciously, his legs, musculature, eyes and other parts of the body in designing tools.

The permutations and combinations of the stored and coded material are practically infinite. The coded item which is both an abstraction and a metaphor, is "willed" to collect a sentence. (By "will," here, let us mean the set of determinants representing past operations which now demand a new operation.) The brain performs its algebra, imitating itself, and then speaks the presumably understandable words to the communicant.

The algebra is simple, such as a/b ; c/d ; $a=b$, or $a=c$, or $a-b = c$. After all, once the wish is present and the analogues are retrieved, what still needs to be said can be formulated according to a few basic functions. Formal characteristics of the statements are not required, nor are verbs and nouns, nor singular and plural, etc.; languages have varying codes for these; they produce interesting ideological configurations in their speakers but are probably not of essential importance in creating sub-classes of human nature.

Description, interrogation, demand: these three may suffice. Basically the mind works with such statements, putting into them the information bits supplied or wanted. "Fence-sitting tobacco-chewing man;" "name?" "Down, John." The first is additive of qualities, but could be of quantities; then comes the specification of an unknown blank in the "man" code data bank; finally an attempt to impose one's will.

The public words needed are the question of the name, the name "John," and the command "down!" Really, only the command is needed if the intent (and power) are clear. Even a glance would suffice, if the John had been half-trained not to sit on the fence. But the little that needs be uttered hardly represents the internal processing, very rapid speech signifies a disturbing problem, not that a speaker can talk as rapidly as he can think; this is an impossible feat, though listeners tend to correlate the two.

Noam Chomsky was probably on the trail of such facts when he foresaw the road that linguistics was taking.

Contemporary work has finally begun to face some simple facts of language that have been long neglected, for example, the fact that the speaker of a language knows a great deal that he has not learned and that his normal linguistic behavior cannot possibly be accounted for in terms of "stimulus control," "conditioning," "generalization and analogy," "patterns," and "habit structures," or "dispositions to respond," in any reasonably clear sense of these much abused terms [14].

Also, "The speaker has learned his art by internal processing."

Ernst Cassirer discussed the case of Laura Bridgeman, who was a deaf, dumb and blind child. She made distinctive sounds for people she knew, when she encountered them. Later on, like Helen Keller, she was delighted to discover that various objective (external) community names for things and people existed. Both girls wanted immediately to learn the name of everything [15]. This fact supports the theory of *Homo Schizo I*, that language, like culture as a whole, was hologenic with the first humans.

Many more coded messages are circulating interiorly than find their way into vocal utterance. They are of the same kind. The most brilliant and learned voices play upon these simple themes, so that we may follow for a considerable distance those students who have reduced brainwork to an immense computer, only we say, as we shall again in the next chapter, that a combined analog and digital computer is at work. Further, the computer invention is an intuited imitation of human ratiocination. The computerized robot is man's high hope for recapturing his primate instinctive behavior.

VOX PUBLICA

Symbolism is a neurological network set up to cope with the polyego predicament. Talking with oneself is not to be separated etiologically from talking with others. Basically, the same motives and the same sensory maneuvers are implicated, with the same basic effects.

Once again, we encounter the *hysteron proteron* phenomenon, a normal logical delusion: it is believed that language is a social achievement enabling people who are apart to exchange meaningful messages, and, further, that these messages are sometimes initiated by the insane to talk to themselves.

Instead, language develops as a solipsistic and holistic control of inner and "outer" messages. Without the compulsion to talk to ourselves, we would not talk to others. The outer messages are still messages to ourselves; the selves in this case are the identified, displaced objects outside of our bodies. And the aim of the outer-directed messages is to control the outer world.

Carl Jung stressed the psychological difference between extroverts and introverts. Certainly the consequences of inward as opposed to outward displacement-biases are many and important for analysis and therapy. No doubt the human race can be divided into the two groupings. But both groupings derive their existence from the same, more basic human polyego origins of speech and the dilemmas of choosing internal as against external modes of polyego integration. The greatest and most urgent need of the poly-self is to "put one's house in order," part of which task, because of the excessive and demanding fear, is delegated to outside persons and objects.

The feedback is extensive and compelling. The only way, or at least the best way, to control the world outside the body is to communicate with it, and the most effective mode of communication is by code or symbol, and to control by symbolism requires accepting a common medium of exchange, signs and words which prompt external behavior that reduces the anxiety of the person.

The solipsistic origins of the language are clearer in an oral culture. Writing assures the objectification and authority of language; it takes people out of themselves and helps to delude them into believing that they are not talking to themselves. Thus, writing disciplines and socializes the people, taking up a centralized responsibility for their fear therapy and not permitting them to go too far towards anarchic solutions. The origins of the alphabet, proclaimed among the greatest of inventions and originating, says Santillana, from astronomy and games, shows a great capacity to generalize from observation (hearing sounds, especially). Thus 20 or 30 letters are given the task of abstracting all speech. Pictograph and syllabic writing employed symbols much more extensively, revealing a lesser application of the human power of generalization.

A schizophrenic patient often invents "outer" language, swinging his clever symbolic manipulations of his dissociated egos to others, usually to ill effect, so far as his controlling them is conceived, but in certain cases, as when he "speaks in tongues," actually converting others to his will. The typical

internal struggle to accommodate one's egos often requires relinquishing attempts at controlling the outer world by the language that the "egos" understand: first things first.

F. de Saussure distinguished general language from speech, which is uniquely individual, like a fingerprint of structure and content. No two people speak alike. Each person has his own code, but the codes are forced together by the felt need to communicate on the part of both individual and group [16].

CULTURAL DISCIPLINE AND SPEECH DIVERGENCE

Emperor Frederick II of Sicily, Holy Roman Emperor, yclept "Stupor Mundi," set up in the 1300's a nursery of neonates attended by mutes, to discover from their untutored babbling how the original natural human tongue might have developed. The infants died from various causes before they could arrive at speech. As with experiments to isolate existential fear, experiments to discover the origins of speech are difficult to contrive. Psamtik I of Egypt tried a similar experiment two thousand years earlier, and James IV of Scotland also did so two centuries later. And there now is a humanistic topic for a master's degree in educational psychology. *Lingua Adamica*, it came to be called, whatever it might be.

Cultural agents teach the infant a language. The discipline is severe, rewards and penalties are numerous: "Speak our language or not at all." Teachers of immigrant children recognize this dilemma; children sometimes stop talking altogether. Exceptions occur privately, in dreams. 'Mad poets' can speak differently. So can scientists. Drunks can babble. Religiously-inspired persons can "speak in tongues" unknown. We can learn other languages, best when very young and the process is approved by our attendants.

It is not uncommon of old people, who have practiced a second language, an accent, a dialect or a jargon to perfection during their lives, to relapse in their final months into their infant and childhood language. The reason may be not that they performed best in their original language, or that the memory traces of the original words in *themselves* were more deeply imprinted, but

rather that they established their poly-ego system and its embedded network in the earliest years of life. The strength of their original tongue is in fact the strength of their ultimate ego defenses, holding together against the dissociations brought about by the erosion of approaching death.

Feral children do not speak a language, but can learn one very slowly. Some pygmy tribes are said to possess no pygmy language, but to speak the language of nonpygmy tribes with whom they associate, giving it a special accent of their own to the speech that makes their tongue incomprehensible to outsiders.

Kester in his book on Upper Paleolithic language sees six basic roots in all languages and finds thousands of analogous idea-centered words surrounding each root [17]. The roots are *ha*, *all*, *tat*, *os*, *acq*, and *tag*. I agree with Lowery, who, in an unpublished manuscript, asserts that Kester has not succeeded. Nor probably did Cohane in his book, *The Key*, where several sacred root words such as *have*, *og*, *ash*, and *her* were pursued into hundreds of presumably derivative geographical sites around the world. Yet I have been long in sympathy with Whorf, who in a fellowship application to the Social Science Research Council, in 1928, talks of "restoring a possible common language of the human race or in perfecting an ideal natural tongue.. perhaps a future common speech into which all our varied languages may be assimilable, or, putting it differently, to whose terminology or.. to whose terms they may all be reduced." [18]

There is a question of course as to whose code, whose exclamation would be authoritative for any given object, but the primordial scenario, which I portray in *Homo Schizo I*, has only siblings or mother and offspring as the communicators, and we must suspect authority in the second case to be in the mother and in the case of the siblings the same authoritative situation as arises in a gang of children coining new and secret words at "play." Language is essentially symbolism, a code that shortens inner and outer communication in respect to economy and speed of transmission.

More plausibly than not, it may be maintained that whenever and wherever *homo schizo* originated, he spoke one language and it is from this language that all subsequent ones have descended. We may also premise that, in the beginning, descriptive epithets (Great Zeus !) were ejaculated and a vocabulary of names that included the state of the object grew rapidly until every displacement was given a name. In part simultaneously, the equal sign of the "is" was generated, with its opposite, the "is not," and sentences began.

Little else need be said here: speech is basically an agreed-upon code referring to classes of objects and to their losing or gaining qualities. "Dog is wolf not wild;" "Sun is not, Moon is." But one cannot imagine a simple vocabulary and syntax enduring even for a few years. Nor can we imagine new features being deliberately invented. Language came in a rush—originated spontaneously, says Levi-Strauss. It was a cultural and organic quantavolution. Why should the first speakers stop at one or one hundred words, as if they were apes in training? There were, as I speculated in Chapter Two, impelled by the breakdown of the instinctive mammalian ego to busy themselves with coding inner communications and outer communications to their outflowing identifications.

Genera and families of language in the world are few, but derivative languages, comprehended by outsiders only with much learning, number in the thousands. It has been estimated that at the time when Columbus arrived in America some 2000 distinct languages were in use. Europe is dominated by Latin, Germanic and Slavic tongues with many national and sub-national derivatives. The North African littoral speaks Arabic, while in Central Africa hundreds of diverse languages are spoken. We do not know what produces many tongues and what causes a single speech to prevail without much change over a long period of time.

All effort is made to discipline people to a common tongue; yet languages ramify profusely. As propellants of divergences in speech among groups once linguistically united, several factors can be imagined on the basis of instances from history. Physical or social isolation is a necessary basis for most, if not all, cases

of linguistic divergence. Movements of population with the associated ecological change promotes new terms and disuse of old ones. Differential increments of new technology add new postures towards linguistic content and style. Partial incorporation of the language of groups newly encountered, whether as subjects of conquest or as conquerors, is often a factor.

Religious divergence is especially important when disasters of various kinds occur, focusing intense attention on new sacred beings of the world and all objects and relations supposedly touched by their holy hands. The practice of tactical secrecy, at first in sub-groups, then in dominating groups accompanying the fragmentation by violence or politics of the principal group, must also be considered.

Memory failures, collective amnesia, accompanying abrupt splits of human groups regardless of the source, can select and discriminate vocabulary, style and usages. Conflict, competition, accompanied by hostility, snobbery, and "trade secrets" can accelerate linguistic divergence as well. Most divergence is unconsciously generated; a little is deliberate.

Without a chronology, which is rarely discoverable, one cannot tell time by divergence, because the aforesaid causes may be quantavolutional or uniformitarian. The Australian dog, the dingo, is thought to have arrived 7000 years ago, but all tribes have special names for it [19]. The multitude of American tongues might have occurred in 12,000 years, or in much less or more time. Nor do we yet know how many languages were extinguished during the period, or whether the full impetus to change affected a single Asian mother tongue or also other Asian along with some proto-American tongues that preceded the conjectured recent invasions *via* the Bering Straits.

We would stress that languages can be constructed rapidly. In a few years, a youthful cohort aged thirteen to nineteen, granted libertarian linguistic practices, can fabricate an argot that is incomprehensible to the general society. The extent of the divergence and the rapidity of change are partially concealed because the argot is discouraged in youth-to-adult contacts and

the written media go their own way linguistically. Charles Morris describes the various special languages of political, poetic, bureaucratic, religious, and other cultures in his book on *Signs, Language and Behavior*. Zvi Rix points out [20] that "the accurate placing of by-gone happenings on the time-coordinate is the precondition for the understanding of reality. Reduction or loss of the time-component (i. e. flattening the four dimensional space-time universe into our less plastic three dimensional world) leads by consequence to misconceptions and delusions of paranoid character." It can lead to other forms of schizotypality. The Hopi, for example, who are said by Whorf to lack a word for time, are said by him and others to have a global immediate consciousness that would be regarded as abnormal if encountered by a Euro-American.

That is, we are under the influence of symbols but we do not know their origins and time of origination. Note how the invention of new words and language are attempts to get us out from under the influence of old behavior and ideology, while the opposition to new words and language is a conservative attempt, knowingly or unconsciously, to keep us under the influence of ancient symbols.

It matters not what is the elapsed time since the generation of a language, in judging its sophistication. Languages, like cultures, may be tribal, but they are never primitive. No scholar has yet advanced a viable method of differentiating old from young languages, or developed from undeveloped, this despite the availability of such recent historical models as Italian-Latin and American-English. Much less has anyone been able to demonstrate the primitivity or even the irrationality (except in missing technological terms) of a language. "Many American Indian and African languages," declares Whorf, "abound in finely wrought, beautifully logical discriminations about causation, action, result, dynamic or energetic quality, directness of experience, etc., all matters of the function of thinking, indeed the quintessence of the rational. In this respect they far outdistance the European languages." [21]

INNER LANGUAGE

We return now to the internal constitution of language. Language is useful in the animal-work of humans, as in hunting, growing, working, co-operating, and also in the displacement labors of worshiping and sacrificing. Still, language does not exist for these purposes. It exists as an internal message center. We note how words come out in a flood from a "quiet child;" the child has been talking to itself and belatedly concedes that it will have to talk to others. I think that in the behavior of Kamala, the Indian wolf-girl, who took years to emit words and then progressed rapidly [22], one can detect an inner speech, just as in mental patients who refuse to speak but who can be heard to talk to themselves, even their speech-muscles and EEGs betraying the fact.

The utility of internal speech can be identified as a message exchange in lieu of a missing automatism. A machine that is set to imitate a perfect animal, which receives and responds to stimuli undeviatingly, does not need a language. But the human mind is out of control and messages have to be sent throughout and back and forth in much greater volume than in the animal. The flock that is scattered everywhere has to be gathered. "Instead of dealing with things themselves, man is in a sense constantly conversing with himself," said Ernst Cassirer [23].

Inner language is not identical with outer language. A mad person may abandon society to control his selves, speaking a "disordered" language, which must bear significantly upon his struggle for self-organization. He does not care whether his speech helps others to coordinate the world. The effort seems not to be worthwhile; he is demoralized because he is depersonalized. If you cannot speak the language, you cannot be a citizen; and *vice versa*, in a radical double meaning.

Working inside the social system, there is leeway to use a broader and richer language, still recognizable but suspect by those who control the system. The language of politics and power is normally barren; cliches abound; conventional images are recommended in rhetoric. As is true of language and culture so with language and politics: each can stupefy the other. But

collective enterprises cannot move without rules, and rules, including language, stupefy. They do so insolently, too, and arrogantly, because connected with power and unconscious of their roots.

IDEOLOGY AND LANGUAGE

What appears as speech is a voiced code shared by the speakers. The silent or unexpressed language is both the full code and the key to the voiced code. When Whorf says that the voiced code represents an ideology or *weltanschauung* that is peculiar to its speakers, he may be criticized for comparing the overt results of linguistic expression of two or more peoples. This enables them to assert a more marked difference between humans than may be the actual case.

As Whorf and kindred scholars have established, a group's spoken language, properly studied, reveals many affinities, more or less cryptic, with the special outlook of this group on the world. Call this "the overt linguistic ideology." But now Whorf may be making too much of what is spoken. First, he assumes a mirroring of the overt language by the covert language of thought, especially since he can decipher subtle aspects of the logic of the speech. However, the covert language may contain precisely those elements of thinking seemingly absent in speech. Seen from the surface, a flounder is a brown fish with eyes; seen from the sand it is a white fish with a mouth. But it is a fish like other fish in most significant respects.

If this is so, then the many linguistic groups may not represent such profound ideological differences as Whorf maintains. What surfaces as speech, that is, may be phenotypical and the genotype may be even universal. This condition, if real, has much importance for our theory of human nature. Put bluntly, "Man thinks the same everywhere, but you'd never know it to hear him talk."

Whence, to appraise Whorf's original contribution, we would say, "Yes, the language that surfaces limits what can be readily communicated. Yes, the surface language, properly analyzed,

shows many connections with the internal thinking processes. Yes, the surface language plus its discoverable connections with the subsurface language gives an operating distinction between two languages that can be called an ideological divergence. Yes, too, although Whorf does not digress upon it, gestures, timbre, amplification, inflections, posture in speaking, and facial expressions are part of linguistic communication, and can distinguish speakers, even of the same language; Marlene Dietrich did not speak the same German as Hitler.

But no, now, these subliminal linguistic ideologies are not the human ideology; they are not basic. Language, linguistic analysis, even Whorf's penetrating analysis, does not mirror human nature. It is not the key to open all doors. The whole study of human behavior, human action, is the master key. Language, as a portion of behavior, deserves its place. If we were to bring together two strangers and they were urged not to speak, write or use conventional gesture, that is, forbidden to symbolize conventionally, they would begin to communicate by actions and imitations; emotional expressions, perhaps touching, would play a role. They would be almost incapacitated in the beginning but their activity would soon graduate into a new symbolism, and before long a common discourse would unite them. Perhaps some such mode of arriving at a universal language is better than the Basic English that Whorf so trenchantly criticizes for being so very English.

Language, Whorf properly insisted, is not merely a technique of expression, but "first of all is a classification and arrangement of the stream of sensory experience which results in a certain world-order, a certain segment of the world that is easily expressible by the type of symbolic means which the language employs." [24]

For instance, "the Hopi language contains no reference to 'time,' either explicit or implicit." Yet the Hopi "equally account for all phenomena and their interrelations, and lend themselves even better to the integration of Hopi culture in all its phases."

The Hopi language is rich in verbs and verb forms (but not tenses) whereas the Etruscan language prefers nouns. "Most

metaphysical words in Hopi are verbs, not nouns.." Whorf finds the Hopi possess two "grand cosmic forms," the objective and subjective, or the manifested and manifesting [25]. I would venture that these resemble the ancient Greek notions of Being and Becoming: whatever exists, is material, and what is historical must be distinguished from what does not exist (or is on its way), is subjective and is in the future.

A most impressive feature of Whorf's analysis of languages is his demonstration (which I am extending logically) that languages can be graded according to how much of the logic and philosophy of the users is buried in the language as opposed to how much must be added in speech [26]. Whorf regards "thinking as the function which is to a large extent linguistic." Then, "silent thinking is basically not suppressed talking or inaudibly mumbled words or silent laryngeal agitations..." It is the "*rapport* between words, which enables them to work together at all to any semantic result." [27] These are neural processes (Whorf makes an unsatisfactory distinction between motor and non-motor processes in order to get rid of the 'mumbling' and agitations) that are, "of their nature, in a state of linkage according to the structure of a particular language, and activations of these processes and linkages in any way, with, without, or aside from laryngeal behavior... are all linguistic patterning operations, and all entitled to be called thinking."

He writes, later on, "Every language is a vast pattern-system, different from others, in which are culturally ordained the forms and categories by which the personality not only communicates, but also analyzes nature, notices or neglects types of relationship and phenomena, channels his reasoning, and builds the house of his consciousness." [28]

Whorf takes pain to elucidate that "in linguistic and mental phenomena, significant behavior... are ruled by a specific system or organization, a 'geometry' of form principles characteristic of each language. This organization is imposed from outside the narrow circle of the personal consciousness, making of that consciousness a mere puppet whose linguistic maneuverings are held in unsensed and unbreakable bonds of

pattern." [29] And he insists that the savant and the shepherd are bound alike in the toils of their mother tongue.

Actually when we reach the pith of Whorf's message, it is that different linguistic groups express the same idea in different ways. And these different ways expose the falsity of thinking of language in its acceptable European form. But this is what we have been waiting for. We have now a genius in linguistic analysis to tell us that the same basic process is occurring, but is independent of our logical, grammatical, syntactical forms.

Speech does not determine psychology, but the psyche finds many ways of expressing itself. There are many codes. They arrive at similar ends. To take an example from Whorf: in English, it may be said: "He invites people to a feast." In the Nootka Amerindian speech, a long word says: "Boiling - cooked - eating - ers -he goes for." (tl'mishya/is/ita - 'ill - ma) [30]. But the English-speaking poet can say: "Boil-feasters he invites," or "Feasters he fetches." I am sure that the Nootka word sounds no more one than the English words when these are rattled off.

Whorf in several essays adverts briefly to the

schemes like Basic English, in which an eviscerated British English, with its concealed premises working harder than ever, is to be fobbed off on an unsuspecting world as the substance of pure Reason itself. We handle even our plain English with much greater effect if we direct it from the vantage point of a multilingual awareness... Western culture has made, through language, a provisional analysis of reality and, without correctives, holds resolutely to that analysis as final. The only correctives lie in all those other tongues which by aeons of independent evolution have arrived at different, but equally logical, provisional analyses [31].

Whorf would seem here to reach backwards for a larger truth than linguistic-thought-relativism, namely: a language whose practitioners are acutely self-aware and ingenious can be coaxed into ways of speaking that are like those of any other language. Is this not what occurs, actually, when an English dialect becomes after some time an American dialect, reflecting

a new ideology and lifestyle? And what occurs when a science takes hold of its mother-tongue and reflects and creates a new logic, an ideology and philosophy with it?

The tasks of logicians, poets, and anthropological linguists should center, then, upon the interpretation of naturally emergent speech, upon what a culture does to it, upon what it does to the culture, and how cultures interact through speech.

Language is here regarded as an immediate, primary function and manifestation of human nature. It is not, as often portrayed, a sort of luxury that the mind resorts to after its job of running itself is completed and it wants to communicate with its fellows. One should avoid the grand conceit that humans have a natural, built-in, realistic, and rational way of dealing with themselves and their environment, despite occasional vagaries.

What is rational is not to be demeaned. There is a pragmatism of the human that extends to his speech. It begins with the kind of problem-solving that besets and befits a dog or ape. The primordial needs of food, warmth, security, defense, and sex are addressed in recognizably mammalian ways. But, quickly, lacking the instinctive definitiveness that turns one to a tunnel-like solution or none at all, the human shifts first to a schizophrenic state and then into a process of trial and error, retrieval, and possible success. He requires a computer that stores, retrieves and manipulates data, and so copes with these problems in linguistic form. This is the most rational level of which the human being is capable. Here he fixes his mind as closely as possible upon the strict requirements of life as he views them.

But this is the farthest development from his born condition, the "buzzing and confusion" of William James' famous description of the infant mind. He has to pass through all the symptoms of madness before arriving at this accommodation, the closest to instinctual as he can ever be. His heads are pressed together by a culture and by the exercise of the structures dealt with in this chapter, along with cultural specifications. Between the animal and the pragmatic is the natural level of *homo schizo*, resisting

and unmaking and remaking the animal and the pragmatic in the vicissitudes of life as *homo schizo*.

And, if the world is ever to be united in mind, it will be partly owing to a new language, in our sense a rational language, fashioned to its goal. The history of rational languages begins, like most scientific history, with a mistake. Thus one John Wilkins laboriously constructed, saved from the flames of the Great London Fire, and finally published in 1668 a treatise *Towards a Real Character and a Philosophical Language*, wherein for example, the word "salmon" becomes the word "zana," a river fish with scales and reddish flesh. Jorge Luis Borges wrote recently about his brilliant, advanced ideas.

The socialists and communists, following Karl Marx, produced in the nineteenth and twentieth centuries a handful of words and slogans that dissidents of many countries might share, feeling that they spoke a common tongue. It is not technically beyond our means today to fashion a language that is much more efficient and appealing than Pidgin or Basic English, or Esperanto or Marxese to facilitate communications among the sharers of a new world belief and participants in an accompanying grand movement. This language would of course become a cultural language after overcoming its severe trials as a rational language.

Notes (Chapter 6: Symbols and Speech)

1. "Culture and Continuity," 9 *Tech. and Culture* (April, 1968), 210
2. See this author's review of Ernest Dichter, *Handbook of Consumer Motivations: The Psychology of the World of Objects*, in 8 *Amer. Behav. Sci.* 2 (Oct. 1964).
3. Malcolm Lowery, letter to the author, 4 Dec. 1976.
4. J. B. Gleason, "Gestural Linguistics," 205 *Science* (21 Sept. 1979), 1253.
5. "The Natural History of Language," in F. Smith and G.H. Miller, eds., *The Genesis of Language*, Cambridge, Mass.: MIT Press, 1966, 248, 219-52.
6. "Brains and Behavior," in Spuhler, *op. cit.*, 17.
7. H.S. Terrace *et al.*, "Can an Ape Create a Sentence?" 206 *Science* 4421 (23 Nov. 1979), 901.
8. *Psychology of Communications*, New York, 1967, 104-5.
9. Johnson, *op. cit.*, 170. He cites Monod.
10. *Op. cit.*, 309.
11. Johnson, *op. cit.*
12. *Ibid.*
13. Cf. T. Thuss-Thienemann, *The Subconscious Language*, N.Y.: Wash. Sq. Press, 1967 on the thoroughly metaphorical and associational development of language.
14. *Cartesian Linguistics, A Chapter in the Historical Rationalist Thought*, N.Y.: Harper and Row, 1966, 73.
15. *An Essay on Man*, New Haven: Yale U. Press, 1944.

16. *Ibid.*, 122.
17. *Sprach der Eiszeit*, Berlin: Herbig, 1962; mss. trans. by Malcolm Lowery, 1976.
18. Carrol, intro. to Whorf, *Language, Thought and Reality*, Cambridge, Mass., MIT Press, 1956, 12.
19. Norman B. Tindale, *Aboriginal Tribes of Australia*, Berkeley U. of California Press, 1974, 118-20.
20. Letter to Peter James, Aug. 28. 1977.
21. *Op cit.*, 80.
22. J.A.L. Singh and R.M. Zingg, *Wolf Children and Feral Man* (N.Y.: Harper, 1942).
23. *Op. cit.*, 25.
24. *Op. cit.*, 55.
25. *Ibid.*, 58-61.
26. *Ibid.*, 85.
27. *Ibid.* 67.
28. *Ibid.* 252..
29. *Ibid.*, 257.
30. *Ibid.*, 242-3.
31. *Ibid.*, 244.
32. London: Royal Society Printers, 1668.

CHAPTER SEVEN

THE GOOD, THE TRUE, AND THE BEAUTIFUL

The good is what one wants; the true is how to get it; the beautiful is a mask of the good and true. Such is the frame of the argument here to come. The repugnance that should be aroused by it is one which I can feel as sensibly as the reader, for do we not appreciate that the good is what we good ones want? And the truth is more than mere means, but ought to be good means? And the beautiful is the subtle expression and adornment of our good means and good ends? But let us hide our light under a bushel and speak of others.

How does human mentation work on these matters? Most mentation, we should have to admit, is a muddle, testifying as a whole to the frustration and futility of humankind, but this is so widely known that we need not take the time to describe it. Mentation, like human behavior generally, seeks to recapture instinctiveness and, by so doing, to hold its poly-ego in a comfortable balance as near to automatism as possible. The closest it has come to this *Nirvana* is a state in which the rules for quickly achieving goals are routine and effective, and the sublimation of the instinctive ends and means is at a minimum. This is ordinary scientific and rational behavior. Man chooses art, and whatever else is blessed as voluntarism and beauty, because he cannot attain instinct directly, or finds himself stranded in the muddle.

THE MUDDLE OF MENTATION

A most apparent excrescence of the human mind is egotism. The human emits a plentitude of ejaculations, demands, and wishes, which he believes are reasonable simply because they emanate from himself. To all of his positive identifications he ascribes a good, to all negative ones (and many are ambivalent) an evil.

He characteristically emits denials of whatever would appear to oppose his good, quite aside from the rules of logic or reason or justice, although to these he may even subscribe. His capacity for denial of the opposition extends to non-perception and non-recognition. The very sensing of things by eyes, nose, taste, ears, and feeling is broadly prejudiced. Nor is this selective sensing a "logical condition for survival" or "a preference — *de gustibus non disputandum est*"; it is a severe effort to destroy what threatens.

The human possesses a rudimentary notion of cause which labels whatever he dislikes as the cause of the evils he perceives and whatever he likes as the cause of the good. Guilt and blame are displaced liberally upon his negatively construed objects.

Everyday thought exhibits an abundance of what psychologists term "erratic cognition." Some Hindus say that "The Sun and the Moon rise and set only because the brahmin recites the Jayatri." The Aztecs, who were butchering and eating an estimated 200,000 persons per year when the Spaniards arrived upon the Mexican scene in the sixteenth century, claimed that, without a gift of human organs, the sun would not rise. Still, four centuries later, the Nazis, adorned with the prehistoric swastika, conducted a holocaust of millions of humans in the belief that they were purifying themselves and Germany. Among those killed were some persons institutionalized for mental disturbances.

In a related type of case, a disaster occurs; it is "normal" to believe that it happened because the victims had been bad. "They deserved what they got." The reasoning is to be discovered both in the Bible and in present-day Christian communities, whether in Alaska during the 1964 earthquake or in the Wilkes-Barre, Pa., flood of 1973; it permeates every culture's ideology. Nor is this universal reasoning simply a product of the lazy human mind, which does not seek scientifically for the antecedents of a disaster. It is an effort to control the world. It gives humans a great collective responsibility, an intolerable one. The destruction of the world itself is laid to human wickedness. In order to believe in human

control, it may be necessary to believe that humans can bring the world to an end!

Considering that the first psychic and social formations, such as religion, were put together under most unfavorable internal and external conditions, the basic mentation of humans is quite understandable. The formation of the logical person was a pragmatic process and still is; to the instinctive animalistic behavior that yet remained was added the ability to determine the consequences of actions and thenceforth to adjust one's behavior in accord with predictable consequences. But this pragmatic process has always been stifling under a blanket of Schizotypality.

Human mentation is normally preoccupied with the great battle for control of fear. This is and has been of much more interest and concern to the organism and society than the pragmatic concerns of the several areas of life—work, sex, science, health. All of these life areas—the immense structure of civilization—emerge from a "madman" trying to control his head. That pragmatic behavior is neglected in the frenzy for control is normally observable in human thought and behavior.

Governments operate in the same muddle as individuals, whether they be democratic, communist, military, traditional-authoritarian, theocratic, or tribal. It is quite clear among them that the good is what they want, the truth is how to get it, and the beautiful is what adorns their good and true. The documentation of this statement is so profuse that I can only allude to it here [1]. A century ago, Ratzenhofer expressed the consensus of the most discerning political scientists when he suggested classifying politics as a branch of psychopathology.

Raison d'état carries properly its cryptic original sense: whatever the state wants is reason enough. "Do not ask questions; it will do you no good." The governments consist of the men who run states; these men are basically similar to those whom they rule; they are constrained by attitudes, ideology and capabilities. They have the same or slightly more of the schizoid traits of split personalities, fear, obsessions, paranoia,

and immersion in symbolism that are observable in ordinary people.

THE OMNIPOTENCE OF OUGHT

Man exercises from his gouty toe to the heavens above what Freud has called "the omnipotence of thought." He builds in his mind an image of a new reality that is under his control and, further, will believe and act as if the corresponding events are occurring as planned. The concept appears obviously when a physically constrained mental patient claims a power to move the world and to consult with others, such as gods and kings, who are engaged in the same business. Thus it is a kind of megalomania.

Still the indulgence of omnipotent thought is ordinary, even usual. The notion of "free will" in morals and law is an example. A person is expected to claim voluntarism and, if he does not, the community claims it for him. It is appropriate behavior. He must practice affecting himself, others, and the world with his mind, and he is abetted and encouraged often in imagining his own spheres of power; so heaven is attainable, as is hell, good as well as evil, world destruction and world renewal, the triumph of the Ideal, of Truth, of Order.

What grammarians say "ought to be" is obsessively regarded as "is," that is, achieved: "God is on our side." "Work is fun." "Parents are good." The distinction between a preference and a fact is overridden, not because some humans cannot comprehend it, but because they cannot tolerate the world that exists. In the beginning, and in the case of every infant, the "is" is painfully segregated from the "ought" so we should not be surprised at the universal recidivism from "is" to "ought." When philosophers like J. R. Searle, in a desperate spasm of sublimity, attempt to derive "ought" from "is," they end up deriving "is" from "ought." Still the naturalistic fallacy is an indefatigable Sisyphus.

The overriding drive to control the self and everything else is the "should be" of all "should be's." The gods are made "to be" as they "should be," friends of ours, of our tribe, or perhaps

even of humanity. No matter that they are also believed to have repeatedly destroyed the nations and that they will do so again; they remain, in Homer's cliché, "the source of all blessings."

Wishful thinking, in matters both small and large, is universal and practically ineradicable. Megalomania is but an obvious pathology, slightly out of step with the fundamental human delusion of making a wished world out of a real world. Masses of people who are helpless and frustrated by lack of control achieve miracles by prayer—for the cure of illness, salvation of the soul, and the recovery of popes and presidents who have been shot.

That will and morale are powerful agents cannot be denied. Not so long ago, in the dust bowls of empiricism, these words brought shudders. The development of psychosomatic medicine, the infiltration of the West by Hindu Yoga, the respectabilizing of consciousness-raising and, paradoxically, of suggestive techniques, brought them into new prominence.

Hilgard discusses the experiments of Spanos and others on suggestion [2]. Hypnotized subjects believe all the more readily that their arm is becoming stiff if beforehand they have been supplied with fantasies, as that the arm is in a splint or made of wood or iron, and therefore cannot bend. Spanos calls these "goal-directed fantasies." We regard them also as a type of psychosomatic conversion. We see in them evidence that will-power can become an operational concept, even in practical affairs, after a century of ridicule and obloquy. Will-power in politics, religion, sports, or business must be an exertion upon external objects of the same physiological system that accounts for psychosomatism up to the point of the system impacting on the body tissue, which completes the operation if internal, but carries the operation only into an external activity if involving a displacement removed from the organism.

There is little question but that *homo schizo* can mobilize his mind for remarkable feats of organs, mentation and behavior. We note this, too, in the connection between so-called visceral learning and yoga, and the illusion of omnipotence of thought. All serve to validate the very old supposition of *homo schizo*

that he could do anything if he only wanted to do so badly enough. The fact that our contemporary world is so extreme a chaos of wills and wants obscures the enormous potential that this age-old idea possesses when harnessed to modern psychology. "We demand a character for which our emotions and active propensities shall be a match. Small as we are, minute as is the point by which the cosmos impinges upon each one of us, each one desires to feel that his reaction at that point is congruous with the demands of the vast whole—then he balances the latter, so to speak, and is able to do what it expects of him." [3]

Once again we must allude to the enormous impact on the world of the drive for control genetically engendered in *homo schizo* by the failure of animal instinct and the fearful balkanisation of the human self.

SECRET WORDS AND PANRELATIONISM

Ordinary language is like the language behavior of primeval humans and of the mentally disturbed. There are many repressed inutterables and also blasphemous ejaculations. Words are kept secret; words are coined in profusion. Words are made to be deceiving and used to deceive the self, others, gods, animals. Words are given reality, made more "real" than the real. Names, too, are often secret; to name a person or thing is believed to possess it. Words are sacred: "In the beginning was the Word."

God-words are addressed to those who appear both in the skies and on earth as controllers of the world and these have nevertheless to be controlled to relieve one's fears. Words are played with like fire-crackers: known to be dangerous, they are yet thrilling and give relief to anxieties. They are covered up or sublimated—all through poetry and philosophy.

From Plato to Rudolf Steiner philosophers and poets have been word-players and handlers of words as sacred and secret. Words are regarded as absolute: one is forbidden to touch them. There is a fear of clarifying them or defining them operationally: to

define a word instrumentally is to murder it. There is much of this in philosophy, as well as in politics and aesthetics.

The animate world has never been and is not now limited to life. Animism is rife. Everything is alive. Thus the world may be controlled by incorporating it in oneself. Considering the "natural reason" supposedly granted to humans, it should be simple to draw a distinction between natural forces and animate forces. Yet it was not and is not done. In fact, the more disturbed that people are, the more they see themselves in animals, plants, rocks, and skies. This phenomenon is of course closely related to paranoia, as for example, in the belief that eyes are watching one from everywhere. The "all-seeing eye" is one of the earliest and most nearly universal symbols. It is, incidentally, inscribed upon the "Almighty Dollar" and the Seal of the United States of America.

The "eye" of myth and symbol relates to primeval and schizoid thought. Isaac Vail believed that the primordial eye was the boreal opening from which Saturn on his throne looked down upon his domain [4]. He thought that it was an illusion of solar light playing upon a hole in the thick cloud canopy covering the Earth. That is, it was based on reality and psychologically perceived as an eye, and it is in keeping with the universal association fallacy: "like" means "same."

Homeopathic magic, superstition, homeopathic medicine, and many more behaviors rest upon the belief that things that appear to be alike are "in each other." The "cosmic egg" is the vault of heaven and bird's egg. Both become broken. Each is the other. It is by means of such associations that mankind is not only deluded but also charged with an interest in the mundane; for the mundane is infused with the sacred. It is only then worth much attention control, development.

Pan-relationism, the stretching for analogies in all of existence, is typical of mentation. The "most remote" things are brought together by a fancied resemblance. This would seem to contradict the schoolboy's resistance to recognizing the "most obvious parallels," unless we allow for his contradictory

motives; and, of course, once outside the schoolroom, his heart hangs upon a cloud.

Misplaced metaphors; the use of the part to indicate the whole (and *vice versa*) the tendency not only to dissociate analytically unanalogous things but to super-associate ("to flounder in a mire of uncontrolled associations," as Bleuler put it); to coin many neologisms—all of these "illogical" techniques of mind along with those mentioned before are rife in primordial thought, in psychopathic thought, and when dispassionately analyzed, in individual and social thought today.

In German legend and folk tale, Erlikönig (King of the Alder trees) is vaguely an ogre, who skulks in the fogs, a pedophile who then disposes of the young bodies; he is also a late descendent of Odin (identified as Wotan, a complex of Saturn and successor gods). He is also related to Rübzahl, the threatening companion of Santa Klaus (Saturn). Whence one is permitted to connect oral ingestion (cannibalism) with the sexual (especially the sexually aberrant). One does not elaborate a major connection here, but only a typical overlapping and transacting of cultural and religious displacements, according to what should be understood as the omnipresent holistic character of culture and religion. We leave it to psychiatrists to search in their practice for the suggested connections and refer to other passages in our works, *Homo Schizo I* and *The Divine Succession*. Folk tales, mythologists now generally agree, are a happy hunting ground to the sublimations of the culturally perverse, as well as for the most ancient images and experiences.

If a group were miraculously to be deprived of its illogical schizoid forms, it would collapse immediately, for it has been founded upon them and penetrated by them throughout its existence. That "language loses its power to communicate on a rational level" under all of these circumstances, is true and expectable. It is also operationally and structurally not so significant as one is given to believe; for there is only a highly limited rational level in language. The human does not distinguish well between "friend" and "foe," even on the level where these interact personally with him as people and animals,

much less on the level of spirits, ideologies, and gods. Again we hear that he does distinguish, but the task is difficult, "causation being often impenetrable by rational means.' More likely, the human elects friend and foe out of a need to like and dislike and as part of his translation of reality into opposites.

Quantitative thought is difficult for the human, at best, and even a slight anxiety will cancel his efforts at shading his distinctions. Useful though this latter shading may be for other purposes, it is not so comforting and reassuring to a temporary ego stability as a clear-cut invidious distinction. Whenever A is not identical with B, either A or B is deemed bad. Under conditions of the highest sublimation, $A * B$ becomes Yin and Yang, logos and mythos, and other concepts that lend themselves to disputation, and provide fuel for the ever present ambivalence, which is conveyed by the ever present anxiety into doubt, distinction, and dislike.

Most of the mentation that occupies the human mind is composed of operations such as the foregoing. They are the easiest way to believe. They arouse the least internal resistance, even though they hardly make the human consistently successful. They rather lend to his life and history that miserable erraticism upon which thrive moralists and mind healers.

RATIONALIZATION

In this age that is dominated by a belief in "rationalism," much that is believed not to be rational is gathered together in the concept of "rationalization." Rationalization is supposed to be finding persuasive arguments for doing what one thinks one wants to do. It therefore depends upon the sophistication of the persuaded and upon the demands that the rationalizer makes upon himself. Rationalization is assigned to linguistic emissions whose purpose is to conceal real mentation by describing it in acceptable linguistic, moral and logical forms. Thus, as in the case of the anarchist, G. Zangara, a man hates his father, displaces his hatred upon a remote authority, the president, and tries to kill the president, believing and asserting that the sole source of his action is in the policies of the president.

The idea of a separate process of rationalization characterizes all human communities, but especially modern communities, where all behaviors are supposed to become "rational," tied in as cause-and-effect with appropriate and approvable community conduct, or at least with an ideal ethic recognized as such, even if opposed, by the community.

In the theory of *homo schizo*, rationalization is nothing but a pandemic mode of discourse; it is the "rational," but defined and shaped by whatever level of rationality that the community manifests. The most exalted philosophy, as well as the lame excuse of a malingerer schoolboy, are equally rationalizations. The human does little but rationalize its wants; it does not do something extra and special called "reason."

Where is the line to be drawn between rationalization and rationality? Out of the clouded mental sky do not some few stars of intelligence shine? If intelligence exists, we would say, it is a rare ability to continuously compress mental operations according to symbolized rules along a track of highly correlated "cause-effect-cause-effect... n" ties, and to make many track-switching associations, as we shall soon discover. But it is worth investigating.

THE DISSOLUTION OF LOGIC

The digital (or linear) and analog logics can perform all mentation thus far ascribable to "reason," it would appear. I know of no computer designer who would admit an inability to program any sharp rational process on one or the other or both kinds of machine. As I would portray these logics, in *homo schizo* theory, the digital or linear is a coding to take care of "elapsed time" on delayed instinctual reactions, while the analog is a coding to utilize the displacements engendered by the same glitch. In both cases a language appears, which when working "as it should" accomplishes "rational thought."

"Rational thought" is defined as appropriate public symbolic behavior aimed at a solution. The public may be anyone or everyone. A trite lesson in logic goes: "all men are mortal;

Socrates is a man; therefore Socrates is mortal." (All X is Y; S is X; *ergo* S is Y.) Presumably, the lesson is based upon reality. We characterize many men, and then observe that Socrates shares their modal characteristics. Further, one observes that, among other happenings, they all die; whereupon Socrates must die, too. It helps to observe that Socrates did die, unfortunately.

Obviously, all depends upon whether Socrates is accurately placed as a member of the human species and whether any exceptions to death occur. It is clear that Socrates can be deviant from all human norms except this absolutely inclusive norm of death. The problem is first one of analogy, then of algebra.

The procedure is called an Aristotelian syllogism and has long been regarded as the classic deductive proof, but, even as William of Occam surmised in the late Middle Ages, it is an emanation from the structure of the mind, not a quality of reality, that is being processed. The lioness who has seen and hunted many antelope knows that all antelope are mortal, and that the antelope she sees now is mortal, and she can expect it to die by her claw and fang like the rest. The philosopher has to prove it symbolically, cutting through a mass of confused human neurology before putting the major and minor premises together in a conclusion.

Modern psychology and pragmatism have pushed much of Aristotelianism into a corner and occupied its premises otherwise as well. Its three basic laws have become tautologies: that a thing is itself, 'A' is 'A'; that a thing cannot be both itself and something other than itself, 'A' cannot be both 'A' and 'not-A', and that a thing must be either itself or not itself, 'A' being either 'A' or 'not-A'. These statements are suppositions of narrow utility, overwhelmed by the multitudinous demonstrations of modern psychology and anthropology that 'A' may or may not be 'A'; 'A' can be both 'A' and what 'A' is not; and 'A' can be either 'A' or not 'A' or both. That is, no thing, no occurrence, no process, no 'A' exists but exists holistically, in the company of its opposites. Causes and anti-causes cohabit. This is the actual operation of the human mind, acting out of its

structure. It is also *homo schizo* theory, which is non-Aristotelian and non-Cartesian.

The mind can recite "2 and 2 are 4" and is trained to insist upon its rationality; it can apply the form in a number of cases in which it understands how numbers stand for things. It thereupon resists "entraining," which is the strenuous achievement of philosophers and psychologists; these say, "You must ask what the number-base is; and what is '2' in each case; what do '*and*' and '*are*' mean, and '4'?" So the mind resentfully goes from primordial muddle to philosophical muddling.

The question of whether this is the actual condition of the real world rather than of mind alone might not appear germane to the present discussion. However, inasmuch as *homo schizo* seeks to control the universe because he is displaced throughout its time and space, he will presumably seek to know it for control purposes. Therefore, he will wish to elaborate and perfect whatever human apparatus is best adapted to that end. All of his efforts at controlling the divine and the mundane, objects and existence, will be pragmatically judged. All of the non-logical and logical procedures generated in all of human history are so tested.

The modern age has proliferated not only forms of non-Aristotelian logic to this end, but it also witnessed occult ideas, cults, therapies, and countless other modes of confronting reality. Every nook and cranny of psychiatry, philosophy, mysticism, magic, behavior, life as art, group configuration, and of Siberia, the Caucasus, Egypt, South America, the Caribbean, China, Indonesia, Rumania, Iceland, Tahiti, Africa and India—the whole geographical and ideational world and outer space, too — have been poked, prodded, pierced into and opened up for a better way. All are driven by the hope of discovering and seizing upon a procedure that will give the longed-for control and set the human mind once and for all at ease. After reason has failed to prove reasonable, it is every man for himself, *sauve qui peut*.

Internally, the "appearance" of the linear and analog logical forms must be "messy." That is, nothing is as clear in

neurological language as it is in public language; this is a truism, since public language has to pursue a clearly communicative format. When a few scientists first began to speculate about the brain as a computer, John von Neuman remarked that probably "it is futile to look for a precise logical concept, that is, for a precise verbal description, of 'visual analogy.' It is possible that the connection pattern of the visual brain itself is the simplest logical expression or definition of this principle." [5] Pribram, with the hologram image in the vanguard of his work, can today supply much of what was missing then [6].

In any event, preceding public speech, "the mess is cleaned up," in anticipation that the company to be entertained will be critical. In babbling children; senile adults; persons with "thought disorders" or brain lesions; feral boys; "mad" poets; flows of free associations provoked by psychoanalytic therapy or electric shock; dreaming; autistic reveries; or deliberate imitations of stream of consciousness as in James Joyce's *Ulysses*—the internal language is not sorted out and cleaned up prior to public delivery. Such is accidentally true as well of what Freud called "The Psychopathology of Everyday Life," the multitude of slips of tongue, memory failures, etc. that accompany us through life—and of course, we understand that the "accident" is not a 'real accident,' not fortuitous.

In ordinary cases, training maintains its grip on the external communication. The mind selects the arithmetic and analog rules which, it has been thought, are acceptable manipulations of terms. The mind "makes sense," publicly. The degree to which its public demonstrations of logical mastery grip the mind, and influence it, can vary greatly. The display logic may convey little of the "true" thought processes; it may conceal them and in any event express only some part of them. But, we stress, this display is what excites much of the response in the transactions between external minds. So two people deal in a currency that scarcely measures the internal values of the exchange.

The language expressed by schizophrenic patients with "thought-disorders" is reported to differ markedly from the

language of a comparable non-thought-disordered group of "schizophrenics." [7] But it appears that the language of the second group, whose thought did not exhibit disorder is not somewhat disordered, nor is it normal; it is a guarded, more concise tongue, showing that the speakers are exercising stronger controls over language than either the normal or the thought-disordered patients are.

In general, what makes for intense memories in people also makes for obsession with "correct" logical expression and for following compulsively the dictates, or solutions, provided by the logic. People in logical or rational communication must convey what they intend to convey in all critical circumstances, whether football players or bankers or scientists, or else the language breaks down.

THE USES OF PUBLIC REASON

The languages of general and specialized social groups realize this principle, and they exact discipline in communication and impose heavy penalties for not speaking the language fluently and functionally. It does not matter much what "gibberish" the same people speak to their spouses in bed, or to themselves internally, or in their "free time," so long as they speak properly when "on duty."

The advantages and limitations of rational language and thought are now becoming more clear. When a Corrections Commissioner says to a Prison Warden: "your remission rates are 59%. You must do something about it," the Warden understands him on the level of the discourse. The Warden does not recite to himself the history of corrections in the world and in modern society, the history of the concept of "rate," the significance of rates, all that is known about his prison, changing economic conditions, the full background of the Commissioner, and all the options facing him along with their rationalizations. He takes the statement as close to its face value as he can and tries to deal with it as narrowly as he can. "Yes. I've already set up a pre-release rehabilitation program."

We can make much or little of the exchange. We can extol the marvels of speech, that lets a few words stand on top of a mountain of explanations. Or we can regret how pathetically little the words convey of the world in which the two men are operating. The language is acceptably "rational": a condition is quantitatively denoted. The condition is offered as a non-refusable challenge. The challenge is accepted, even anticipated, and a "step in the right direction" is assured. Released prisoners returning to jail may be fewer, future remission rates even decline (although the situation and the problem are grossly simplified here).

The example is fairly typical of the use of reason in human affairs. As the problem becomes more special and the need for a specific result becomes more acute, humans are capable of herculean efforts at instrumental rationalism. To dispatch and recall a space shuttle, many thousands of highly trained people must work for years under the most intense discipline and supervision, and billions of dollars must be spent. Success of the venture can be said to represent every form of rational behavior known to man, from the navigational computers to the psychiatrist watching over the astronauts' social behavior to the public relations experts erecting a network to keep the public as intimate and yet non-interfering as communications technology and socio-psychology will allow.

Success of a shuttle flight does not include, however, full assurances of rational behavior. For example, no one doubts that space shuttles of the next generation will be more highly rationalized in their technical and human operations. Furthermore, the original decisions to attempt a space shuttle are not of the same order of rationality, but rather typical of political decisions. Would the resources have been better allocated to the construction of new American cities? Or to other presumably beneficial ends? In such a case, too, all known types of instrumentally rational behavior might have been exercised, as indeed they are when a military nuclear missile system is designed, organized and installed.

Knowing how such decisions are made does not solve the problem. Public opinion, interest groups, legislators, officials,

scientists, and the media enter the decision-making process. With the increasingly rationalized tools of social science analysis, one can follow the course and weight of influences leading to the final choice, just as a radiologist, by employing chemicals, can trace the ramifications of a foreign element in the human circulatory system. Even so, one cannot locate an ultimate rational source.

One can only ascend to ever higher levels of instrumental rationalism, investigating choice-behavior, with a mathematical precision that can win a Nobel prize, but without ever reaching a heaven where choice is made absolute by marrying "the Good." The Good forever basely remains what one wants, hence what one is capable of wanting and trained to want, be it comfort, love, landing on the Moon, ridding the earth of enemies, worshiping one's gods, or something else.

THE SECURITY CONSENSUS

Thus rationality is ultimately the practical ability to achieve one's good, including all lesser goods or bundles of goods that add up to the configuration of one's good. Moreover, this good of one may be the greatest "evil" as well as the greatest "good." It is only made "good" or "evil" by persons, such as the readers and author. Finding the "good" is not a discovery of the treasure in a sunken ship. It is the assembling of an internal psychic code prompted and guided by external coded transactions resulting in futuristic code-images. If the emergent image possessed by "Jean Smith" and "John Doe" coincides with your image and my image, we share the good. By many means, some more logical than others, we can determine the fit, thus the consensus. Thereupon, we may proceed with this collective good, more or less in logical language, in some cases foisting our codes upon other people and things, obtaining a broader consensus.

The consensus, despite the brevity and vagaries of external language, is reassuring. It unites our externally displaced identities with our internal identities, making us "one with the world." Our sense of control is heightened, our anxieties lessened. Credit must be granted to logical processes for the

welcome security, insofar as the transactions are actually or apparently couched in logical language. When children chant the table of multiplications together: $1 \times 6 = 6$, $2 \times 6 = 12$ etc., they are exchanging passwords for security, as well as confirming the validity of the terms and building habits of rationality. They also may chant prayers, identically, except that habits of non-rational belief are established.

Plato's *Timaeus* as interpreted by Taylor argues also that those who cannot do a sum take fear when the planets show oppositions, occultations and reappearances [8]. This is not the only indication from ancient legend and science, nor from modern psychology and behavior, that numbers are a *security* device as is measurement, hence astrology, astronomy and astrophysics. The universally observed magic of numbers and the superstitions of numbers support this hypothesis.

Numbering may have originated in the fight against fear; numbers and measures may ultimately become logical-rational procedures; but they may originally have been methods of fighting fear. Counting, ordering, measuring, have in them a fear therapy. So children are told to count sheep in order to fall asleep. "Hail, Mary's" are recited by soldiers until panic passes. Parachuters count before leaping. The count-down before space-vehicle launching is a public ritual of prayer, wish, and suppression of last frightened thoughts.

CAUSATION

For thousands of years, the leading forms of philosophy of truth have been directed generally at the destruction of commonsense truth. The analysis of discursive symbolism among the ancient Greeks affected human communications with these questions: What do you know? (perception and cognition) ; how do you know it? (logic and proof); then, do you know yourself? (Socrates). The three questions cast much of what passed (and still passes) for knowledge into the realm of the non-rational. Strong currents even of skepticism and cynicism moved through the intelligentsia.

The classical Greeks were neither first nor last to go through the act of first constructing natural laws and then of finding out how to evade them. It would appear that this constructive-destructive process is characteristic of high periods of mental development, whether in the Arabic enlightenment, the high Middle Ages, the Renaissance, the Eighteenth Century Enlightenment, or the past century. The more man subjectivizes, the more he can control the outer world, but also the more he can see of the limits of his truths.

So it happened that in more recent times, we have seen the destruction of Euclidean geometric space as an absolutely existent phenomenon; "time" has been reduced to a relative, generically impelled habit and coincidence, and the "caused" has become a "function." Needless to say, the outlook of science has been forcibly affected by this relativism, but ordinary life has proceeded on its commonsense paths, carrying on faithfully the belief in absolute truths of knowledge while of course carrying along its full complement of illusions and delusions. Yet ordinary life has been always affected by the relativism of time and space, and the incidentalism of causation.

The concept of causality has caused philosophers infinite headaches, leading up to its final denial; but the path remains to support the commonsense belief that stress causes pain. Analysis of alleged "causation," freed of commonplace prejudices, quickly arrives at the conclusion that in any given case of "causation," everything in the vignette can be termed a casual factor, and that what is called "the cause" is whatever the judge deems it to be.

Thus, in the statement, "I rang the doorbell," "I" may be presumed to be the cause only because I, at least, am interested in my participation in the event. But, ultimately, the simple act breaks into infinite smithereens of the universal moment and of the endless past, eliciting statements such as, "if copper were not once geologically formed,... there would be no bell," so ancient deposits of copper are the cause; or, "my finger caused the ringing. . . etc.," or millions of other causes more or less as meaningful, *sub specie aeternitates*, as "I."

To make matters worse, lurking beneath the superficial determinism is a notion of free will that would furnish a potential "non-bell ringer." If I were completely free to not ring the bell, one would have to say that at least one and by extension millions of past decisions were unnecessary. The bell was rung, but by an unnecessary cause. Perhaps the cause was all the more unnecessary, since my excitedly expectant friend, say, opened the door just as I was about to ring the bell, and claimed that she heard it.

Quantum mechanics also would destroy ordinary causal theory, lending as it does an indeterministic element to the "decision" of a causally potent condition as to whether or not to actuate, that is, happen.

A given electron may or may not "choose" to leave its radioactive atom, for example. Or, in order to discover the momentum of a given particle (which is at the same time a wave), one foregoes by the conditions under which this can be observed and measured, the chance of discovering its location—and *vice versa*. With quantum theory and the Heisenberg principle of indeterminism (uncertainty), the following must be foregone: certainty; predictability; causation; space and time; Aristotelian logic (see above); nor can the quantum-uncertainty principle be proven true or false empirically. What remains, however, are statistical probabilities governing aggregate behavior. As we cannot ask an explanation of the basic fact that "inertia is", neither can we ask why there is a state of indeterminism [9].

As if this were not enough, what we see in causality in the human mind is a spasm of incompleteness between two events that it is felt ought instinctively to happen in sequence. Here again is the instinct glitch. Anything once delayed builds a secondary displacement circuit or hologram. The circuit continues to be excited by analogous events and the analogous sets become grouped into perceived causal classes, as, for example, "stress causes pain."

When I press the bell button by a door, millions of past events, known and unknown, are bridged, but to the self-aware human,

the act (or the hesitation before the act) is interpreted in the light of many analogous actions. The principle of causation seems obvious even to a child: "Go ring Auntie Mabel's bell to see if she's home."

TIME AND SPACE

The world, it may be agreed, is essentially vacant of time, space, or causality. So is the human mind. No time-clock as such registers impressions and expressions of the central nervous system. However, what comes to be sensed as time is the neurological superposition of halos imprinted upon neurons as they occur. Then, typical left-hemisphere operations ensue, ordering impressions by digital logic, cleaning up inner time for incorporation into external and especially cultural time schedules.

The past tense of time is perceived as one's recall reaches for lower figurations in the "stack" of impressions. The "lower," the older. When a woman tells a man, "you remind me of my father," perhaps tens of thousands of circuits are retrogressively lighting up. In her mind, a coded representation of his behavior is vigorously seeking analogues (holograms). If, is as likely, she is engaging in wishful thinking, non-analogues and distasteful analogues are being censored.

As with practically every other human trait, a rudimentary time sense is invaluable to the communication of animal instincts, and the storage of time in memory as well as the projection of time are readily observable. A dog will crouch patiently besides a hole, from which once a squirrel emerged, in the hope that he will once again appear. We resort, as usual, to the human glitch and the splatter of displacements to account for the rich human display of temporal effects.

No matter what philosophers may say in derogation of time, every cell and every species, even every grain of sand and atom, enjoys its big-sequences and big-rhythms. Not only are all things in change; they are also changing in patterns, and uniquely, hence a kind of triple paradox of change, pattern, and uniqueness occurs.

"Our fearful mind anticipates the future but we can only understand what was in the past," declared Kierkegaard. Something has been said earlier of the sense of dread regarding death, the divine, and the future. To the schizophrenic, writes Meerloo, "the past is something demonic. The feeling of unbroken homogeneity with the present has been lost... 'The world clock stands still,' says one patient." [10] Mendel perceives the dissolution of historicity and with it the future as a major characteristic of disease.

Exaltation, which can be viewed as an agitated nervous crisis of the present moment, of which the use of the historical present in literary style partakes, is frequent in mental states pronounced insane as well as divine. It collapses both history and the future. It also reverses time. The ancient prophets — the Hebrew Isaiah, Saint John the Evangelist, the unknown Egyptian author of the Ipuwer papyrus concerning the destruction of Egypt, for example, used the future tense to say what had happened in times past. Leonardo da Vinci, whose genius included a set of *Profetie*, also refers in these prophecies to historical materials using the future tense [11]. Time becomes like the chain that propels a bicycle, going backwards as it moves forward. The faster a person or culture moves, the more its future and its history are changed. But a culture denies that it can change, it denies the charge of *hubris*, and celebrates continually its very beginnings as if they were today and in the future. Time, man's great tool, is repeatedly and deliberately destroyed. Time is projected memory. To control himself, man must control his projections both past and future. Time, to him, is an event, a fact, that must be controlled along with every other happening.

Left hemisphere brain damage interferes with the perception of sequence but right hemisphere damage does not [12]. If our theory that two types of logic form in the brain, one analog, the other additive or digital, and that the first is right-brain or bilateral while the second is left-brain, the inability to perceive sequences may be attributable to a disturbance of time-counting by digital sequence coding. The analog contribution to sequencing would be by superposition of images. It may operate like holography, as was suggested earlier, allowing

replicated images to be stored in large numbers, so that the excision of even a great many holograms in either or both hemispheres would not disturb the detection of sequences.

Future tense arises out of obsessional expectations of the return of an event. For ordinary and minor events, the future is helped to emerge by the transference of analogous major obsessions. The anniversary complex has deep roots in the human mind: an intense private celebration, when congruent with a public consensus, forms the peak type of human memory event. When an anniversary is forgotten, whether private or public, it is because of dread of the reoccurrence. Ordinarily, a deep enough trauma is quite suppressed and is celebrated only unconsciously, with depression or psychosomatism or displacement behavior. Thus any of these neuroses may befall a woman upon the anniversary of the painful death of a dear mother, especially if her age approaches the age of her mother at death. Public trauma can be bifurcated to give a mourning occasion followed by a saturnalian release, or a joyful one, as before Christmas, or at Eastertime, among Christians and Jews, for different reasons, the Judaic mourning and joy in these cases relating to the great Deluge of Noah and to the Passover of Exodus, respectively. Thus we both remember and forget.

Space may be dependent upon time. That is, without time, space might be inconceivable. An animal is master of the space around it, more than the human, who probably suffers more awkward bumps and falls in the house he has built than do the animals that may share it with him. But only the human is driven to conceive of, measure, and manage all space, so that one must guess that he is the jack of all space for being master of none.

Human concepts of space are perhaps built upon an infrastructure of time. Once the sense of time is developed, space can be calculated as elapsed time between the self and the displacements of the self, where they were in the memory, where they occur now. Thus we think of primitive space as distance in time from an object or event to the experiencing self. Direction is also a point of reference from one's body—front, behind, right, left, up, down. Accurate mapping of space

within the confines of experience becomes possible. What is beyond direct experience—over the mountains, the stars above—may be naively construed as far away, but much less far than they really are. The celestial bodies are measures of space—"I live a day's walk from you," or "six hours by airplane." But, thus, too, is time.

THE COST OF LOSING MAGIC

James Fraser, a century ago, explained the practice of magic by two principles. According to a law of similarity, like produces like; a magician can produce an effect by imitating it in advance. By sprinkling water, one can bring rain, providing other matters are attended to also. Second, the law of contagion maintains that things once in contact continue to interact ever thereafter. A spot struck by lightning is forever sacred to Jupiter. Such was the belief and practice of the ancient Etruscans.

These principles are found in current as well as ancient and tribal thought. Science often proceeds by imitating nature and unraveling strings of consequences. In them one can locate the operations of analogy that seem to be naturally produced in the brain. Analogy took the primary and more powerful role in the development of Greek science from magic and myth [13].

We do not change brains or develop new organs in going from "falsehood" to "truth." We get rid of the "hocus-pocus" that accompanies magic. We make the magic public (open display and repetition of experiments). Then we increase the validity of the analogies and sequences until they become reliable.

The history of science shows us many a relation in tandem between magic, religion and scientific practice. Astrology as astronomy and magic is perhaps the most famous. The ancient Chinese could foretell eclipses, a major achievement of scientific observation and logic. But at the same time they applied rituals and emergency policies to quell official and public fear of eclipses and to repel astral invasions. Mesmerism and hypnotism are another example, from the nineteenth

century, of parallel evolution of cult practices and scientific method.

The discipline involved in the change from magic to science is intense, obsessive, and costly. An experiment by Liam Hudson performed upon students of history and engineering involved interrupting their sleep upon observing signs of dreaming and asking them to report their dreams. The engineers reported more frequently that they were not dreaming at all or could not recall the dreams. "The engineers' inhibition in dealing with 'primary process' thought— with ideas and images that have not been ordered in a conventionally rational way — is not a superficial aspect of their thinking; it is an integral part of the way in which their minds work." [14]

What we are observing here and in primitive magic are lesser and greater degrees of the conversion of obsession into bureaucratic and scientific habit and showing that, like a form of psychosomatism, the specialized disciplined worker overdevelops a *point d'appui*, working from the conscious into the unconscious along a narrow band. This is not science as new theory or hypothesis, not science as poetry, which is an altogether different mental operation, distinguishing two types of scientists as night from day.

So must the routine administrator or bureaucrat be distinguished from the organizational innovators of the type of Epaminondas, St. Therese, I. Loyola, Thomas Jefferson, Henri de Saint-Simon, Mussolini, Trotsky, Henry Ford and Gandhi; a great many unnamable persons have produced the largest number of inventions—there were, after all, engineering students who did recall their dreams. The rational is the routine, true, but ought one not permit the term for the creative? But, then, the creative is non-rational. So it is both rational and non-rational, a contradiction if both are the same.

Therefore do we propose discarding the term "rational" or letting "rational" mean the ability to obtain what one wants, namely, "truth." We must disagree with those who, like Arthur Koestler, assert of the human dilemma: "No matter how much the symptoms vary, the pattern of disorder is the same: a

mentality split between faith and reason, between emotion and intellect." [15] Faith and reason subsist cheek by jowl in the mentating process; we must abandon this medieval dichotomy if we would understand human nature.

So, too with emotion and intellect: emotion is intellectual and intellect is emotional. At the turn of this century, George Mead was lecturing at the University of Chicago that: "It would be a mistake to assume that a man is a biologic individual plus a reason, if we mean by this definition that he leads two separate lives, one of impulse or instinct, and another of reason.. On the contrary, the whole drift of modern psychology has been toward an undertaking, to bring will and reason within the impulsive life." [16] There is little neurological or pragmatic basis for the words. Nor do they help in programming policies for humanity.

Close in outlook to Mead, John Dewey, too, was long engaged in combat against traditional logic and psychology. In 1929, in his book *The Quest for Certainty*, he devoted a chapter to "Escape from Peril," where he continued his attack upon the philosophers' search for the immutable, the truth, by way of "pure knowledge." "The quest for certainty," he said, "is a quest for peace which is assured, an object which is unqualified by risk and the shadow of fear which action casts." [17] We would add that *homo schizo* normally wants to escape his perils and invented first historical religions, then theology, then philosophy, moving outwards into abstractions to develop the sense of certainty that would relieve his anxieties. But each further stage of abstraction displaces him farther, too, from the origins of existential fear in his inability to act like an animal.

SCIENCE AS INSTINCT

If theologians and philosophers vainly sought certainty in order to displace fear, are then scientists merely at another stage of displacement or sublimation? Would the counting of binary star systems be such, too? Might the rejection of the holistic term "human nature" be a collective schizotypical symptom of depersonalization among psychologists? Would perfecting solar

energy systems fall in a similar category? Yes, we would say, but all with a notable difference.

Truth or the rational is how to get what one wants. Then "howling for bread" is true if it brings bread. So is prayer. Yes. What works, what is effective, is considered rational and true.

Would not bread be more certainly forthcoming if one farmed wheat and baked bread? Perhaps... in some cases... yes, on the whole... etc. The sparrows don't look for the morrow, said Christ; trust in the Lord. The infant howls and is fed. The mob riots and is fed. The primitive band gathers nuts and fruits and herbs. But we applaud the ancient inventors of the science of agriculture. Now they could feed more mouths while resting in place.

Science — and reason — are suppressors of unruly processes [18]. They discipline the fearful selves to follow rules which, they assert, will reliably bring desired consequences. "Get rid of the excess and costly baggage of superstitious behavior: don't chant and dance around the growing crops; hone your spades, plant more seed, dig deeper; (then, reluctantly) it may help if you play music for the crops to grow by."

The rules of science and reason are simple. All things are sensible. They must be given exclusive denotations. These must be acted upon in exclusively denotable ways. They can then be grouped within a closed system of logical counting which is not so empirical. The process and the consequences are to be watched and confirmed by others. At no stage of the process should "wishing" be admitted and given any weight. Scientific procedures give *homo schizo* controls to add to his kitbag of controls. To some extent they are more reliable controls, though often for things that he wants to let be un-controlled or cares little about, or are not what he wants most to control

Behaviorally, what *homo schizo* has done, which has come to be called "rationality" and "reason," is to select out of his experience certain operations whose traits are that, first, they give success (by test) in naming, and in the transfer of naming (also by test), and, second, the names can be counted and the

count tested. Success in testing is validated inasmuch as the names and their manipulation produce psychic and material effects deemed favorable. Why does man select these operations, and make so much of them that a wonderful science ensues? He finds their effects *reliable*; he can make easy and gratifying obsessions of them.

Is this all? This is a great deal. It makes the difference between uncontrolled fear and a bearable equilibrium, between helplessness and ruling the earth and all of its denizens. It is the difference between a blank gaze and a child counting apples, or even more, a computer guiding a spaceship out and back to earth.

By temporarily giving up his chaotic mentation, by submitting to the controls determined by others, by obsessively dedicating his mind to the proven possible and proven practical, he can gain a share of control. The rules, the identifications, the promises, the secrets of language and experiments, the mystique and authority of science — all help him feel comforted and less fearful. The myriad displacements augment the normal complement of animal foci of attention and sources of stimuli.

The responses are the fantastically engendered capabilities of the human. Satisfactions emerge from a perceived coping with the stimulus by the selected responses. Science takes homo-specific urges, applies species-specific responses and obtains species-indulgent effects. To a foreign intelligence, none of these would make sense, much less truth. What the process resembles, in a sinister shocking way, is where it all began, the home that it never left, amidst the unselfconscious breeds of life.

The closest I find to this idea of the search to recapture instinct as inherent in pragmatic or operational science is in Mead's essay on the biologic individual.

After describing the physical world that faces the human as a biological and instinctive organism, Mead says "Just in so far as we present ourselves as biological mechanisms are we better

able to control a correspondingly greater field of conditions which determine conduct. On the other hand, this statement in mechanical terms abstracts from all purposes and all ends of conduct." [19] Then he compares modern scientific method as a way of moving into the "now" to test reliability and truth.

On the whole, *homo schizo* would prefer more direct and easy methods of reaching the good, the true, and the beautiful, than science has thus far afforded him. If he were always comfortable, he certainly would not be rational; but then, if he were always comfortable (that is, had his quota of the values of sex, respect, health, knowledge, affection, and power) he would not be *homo schizo*, for there is no quota, only endless discomfort. Paraphrasing Heraclitus, we could say, "One can never bathe in the same river of truth twice." But *homo schizo* would hate this truth, even though he has had to live by it.

What *homo schizo* would most desire, because it would bring him immediate surcease from his existential agony, would be to become once more a generalized mammal, whose mind fit its body, able to act decisively, unconsciously, instinctively upon the presentation of a stimulus. The good, and the truth that leads to it, depend upon reestablishing the unitary ego, defining stimuli, and affixing their specific responses, all to occur together, holistically. Linear and analog science help. They build a bridge over the stimulus-response chasm.

If only science might find a holistic way of bridging the chasm, of healing the instinct glitch, man would feel even better. The clue to this is in the incessant human attempt to embrace the good, the true, and the beautiful in one holistic motion where what is called ethics, science and art have no place and little interest, where he feels at one with himself and the world, an intuitive well-being. Although stoicism and Buddhism and Taoism and many other formulas of conduct prefigure this kind of confrontation that brings comfort and surcease from fear, they cannot manage reliably to control the "reality principle," that is, the persecution, hunger, massacre, frustration and demands visited upon them by the unregenerate *homo schizo* outside the cult.

SUBLIMATION AS PREFERABLE DISPLACEMENTS

Sublimation is a concept that should desist and refrain from spoiling clean scientific analysis. Originally it arose out of an exaggerated interest in sex and purported to designate how sexuality might be unconsciously suppressed, and disguise itself as a virtuous activity, so that, for instance, a man who was inordinately and illegitimately fond of his mother plunged obsessively into sofa design, and thereupon was deemed to sublimate. Sublimation was looked upon as a socially welcome outlet for unmanageable, if not perverse, sexual impulses, hence applauded.

But a scientific definition of sublimation, divorced from preferred behavior, must go rather like this: sublimation is a displacement activity whose original motivation is unrecognized publicly. Then sublimation is for all practical purposes identical with displacement, as in Tinbergen's example of the stickleback fish quoted earlier. Why, then, use the term, unless it be to propagandize a form of behavior, a way of life?

German youth leaders say, "When you are hiking and hungry, sing to forget your hunger." Perhaps that is why the child in the old English nursery rhyme "sings for his supper." Here is a sublimation, quite explicit because the locus of the displacement barely shifts around the oral cavity. Sex, food, respect, well-being, safety, knowing, capability: such are most activities, running on tracks dug early in life, and taking up most of later life. All of these values must be satisfied within the larger control framework. No solution suffices, it appears, or succeeds except temporarily, with all of these goods, unless it carries with it a quota of control. The human is readier than any other animal to give them up, or compromise or complicate them in order to get on with the business of the triple control of his selves, others, and the world.

Ethically, of course, it is important how *homo schizo* spends his time. As was said, the good is what we want. And if we wish to call good ways of handling problems of fear and control by the word "sublimation," none may interfere. We may apply our

flighty word to an emaciated artist who paints "still-lives," a gynecologist who is sexually unarousable, a politician with an adoring public and no friends, a rich woman who hobnobs with bohemians, and a miser who leaves his wealth to his university alma mater. What can we call a man who cannot paint but loves to eat; a Don Juan who detests the physical apparatus of females; a strict parent who leaves a personally irresponsible life; a "public enemy" who is loved by his friends; a poor social-climber; a generous man who ignores his community's needs? These are fixated on "primary gratifications;" and then what?

The human is so displaceable, that one might even put up stiff arguments against his having definite primary needs, as have, for example, some advocates of homosexual liberation. As is often complained by western generals, the Chinese soldier can fight on a bowl of rice. But then there was the Persian folk hero, Nastrodjin, who had just managed to teach his donkey to work without eating when, unfortunately, the animal died — showing that even animals can be trained to displace.

Superficially, *homo schizo* is infinitely devious, because basically he is terribly interested in sensations of control and will go anywhere into himself or into the furthest reaches of space and time to find surcease. Or he may not need to go very far but will sing, or dress like a peacock, rather than eat.

I trust that we are all in favor of fine arts, literature, history, and science and will do our best to commit homo schizo to their practice. Nevertheless, or should I say therefore, the analysis of cultural product must proceed apace. When we enjoy to witness the *Amphytrion* of Plautus or of Moliere, we must observe, too, the fascination which the plot holds because of its play upon the confusion of selves—Zeus and the Theban general two look-alikes, Hermes and the general's valet the same, and who is talking to whom? When we watch Shakespeare's *As You Like It*, there to observe the dissolution of court life into a forest of exile, where Celia receives the name *Aliena* and *Rosalind* becomes a transvestite and the philosophers speak schizophrenese, we realize in ourselves, the audience, the same transformations, the controlled momentary loss of control of

ourselves and the world, joyful and comic when and only when we can reestablish ourselves afterwards. And so with the catastrophic underpinnings of *Hamlet*, *Midsummer Night's Dream* and *Anthony and Cleopatra*, as Irving Wolfe has shown [20].

The same person, *homo schizo*, is operative in the creation and uses of science and history, the former already treated, the latter more adequately analyzed in *Homo Schizo I*. Only two examples are put forward here, to suggest the need for applying more trenchant theory to the "highest" products of *homo schizo*.

Proclus, the Neo-Platonist philosopher (410?-485), wrote of the planets and gods. In several passages, he described unmistakably not only the rings of planet Saturn but also the bands of planet Jupiter, phenomena not rediscovered until the nineteenth century. He explained them by the self-discipline of the god, Jupiter, who, in binding his deposed father, Saturn, to a new regime of law and order, also righteously bound himself to his own laws. A set of natural events in the sky was observed, and was animated into a theophany; the gods were made to behave as man wished they might, as guarantors of order in the skies, and brought to earth as exemplars of order in human affairs. The language of philosophy thoroughly subdued the frightful story of the bloody struggle of gods; a euphoria emerged from an age-old collective amnesia. Thus have philosophers sought to create certainty, as John Dewey claimed.

Ernst Cassirer, like Proclus a distinguished philosopher, a German refugee to America, wrote a book on human nature, entitled *An Essay on Man* [21], during World War II. I studied it well among the first books coming to hand when I returned from long army service. The book maintains throughout a high rational level of discourse. It is learned, soothing, endearing, acceptable—a shimmering smooth amnesiac screen behind which other types of *homo schizo* were destroying the total culture of Europe which he was discussing. As in Ovid's *Metamorphoses* the most frightful activities are blended into a lovely serene background setting.

So well was the philosopher's job done, that none, not even myself then, could suspect that here was as fine an instance of the mind of *homo schizo* at work as was the disastrous scene of slaughter and rapine from which I had just separated. I say of these two examples of Proclus and Cassirer, as might be said of the higher products of the human mind in general, that they are all suitable candidates for analysis by the conceptual implements of the theory of *homo schizo*. Ordinary appraisals of art, literature, science, and philosophy are pathetic. This has much to do with *Wissenschaftsoziologie*, the sociology of knowledge. But the sociology of knowledge still requires the appropriate launching pad for its flight of analysis: this the model of *homo schizo* may provide.

In his work on *Schizophrenia in Literature and Art*, John Vernon explains by way of Aristotle, Locke, and especially Galileo how it came about that the world was made to split into divisions of objectivity and subjectivity, so-called. Galileo, he reminds us, performed the schizoid feat of thinking "I do not believe that there exists anything in external bodies for exciting tastes, smells, and sounds, but size, shape, quantity, and motion swift or slow." Thus came about the distinct "soft world" and "hard world." [22].

Says Vernon, "The threat the world presents for the schizophrenic is often a threat of control. In the West, the split of the world into two absolute principles, subject and object, has enabled civilization to control and manipulate nature.. " This all "makes reality something unreal and makes the structures of classical thought that constituted that structure insane — that is, schizophrenic." [23]

Subjectivity appears to be fantasy and is relegated to the fantastic humanities. Now the same culture that creates the absolute reality-fantasy division also creates an absolute sanity-madness division.

But we have always had bifurcations and contraries that obsess philosophies, science, and religion, outlooks that we have said earlier may emerge from the essential ambivalence of *homo schizo*. The division of man into a body and soul is one such,

which rationalizes the polyego to make it more logical, following the impression that there must be a sharp difference between ape and man and discovering this in the human soul.

So, too, the difference between mind and conscience, which even Freud could not evade and finds favor among many psychologists; there the attempt is made to have the split-selves appear to be an imposition of a "false reality" upon a "true reality," the former being subjective and socially imposed whereas the latter is totally mammalian.

THE ORIGINS OF GOOD AND EVIL

The monarch of bifurcation is "good" and "evil." On the shoulder of every little girl and boy perches a good angel who speaks into one ear (the right ear?) while upon the other shoulder perches an evil devil who speaks into the other ear, as the catechist would explain. Human existence and fulfillment, it is generally believed, depends upon the recognition of good and evil and of their consequences. This juxtaposition of forces is certainly a crowning obsession of mankind.

No one knows where France's great dramatist, Molière, lies buried, because he was a *comedien*, an actor, a player of roles, a deviser and divider of human souls whose dividends did not equal the "angel" and "devil" into which the Catholic Church insisted and insists still, for reasons valid on its premises, that *homo schizo* must be divided. Unless an actor repented on his death bed, he (or she, as for example, Adrienne Lecouvreur, of whom Voltaire had something to say) was denied burial in hallowed ground.

The ordinary person thinks he understands this but often may not, believing, "Yes, actors are naughty and must repent their licentious and blasphemous lives." But, no, even a hypothetical blameless actor, who is punished on the stage for every sin he commits on the stage, must also be barred from consecrated soil. The culture, as authoritatively represented by the Church, decrees that the schizotypicity of man should consist of two contraries. Other poly-egos are regarded as culturally dysfunctional and are tabooed.

A common anthropological misapprehension, couched in sympathetic terms, would observe: "Unfortunately, humans are often superstitious and misguided, and go about seeking the good and bad, making a great many mistakes, exaggerating, failing to consider their own motives, casting stones at others and not looking into their own sins." Underlying such commentaries is the feeling that a rational procedure must exist somewhere for discovering and applying the good.

To the contrary. it is perhaps obvious by this point in our proceedings, that some mechanism of *homo schizo* is operating to perpetuate and maintain in royal style the distinction of good and evil. Good and evil are the product of ingenious and successful attempts of *homo schizo* to reduce his poly-ego problem to manageable proportions, in order to control himself and extricate himself from his predicament.

If a dominant self can be named head of the confederation—and let this be called "good"—and the other members of the confederation can be joined together as the opposition and called "evil," then we shall have a ruler and this ruler shall be preferred to the other—the evil devil—on all matters and decisions: and ego conflicts can be blamed upon the evil of the other. Further the evil other can be transferred almost at will, both consciously and unconsciously, among the inner selves, interpersonal relations, the natural world, and the divine world.

Ideas of "good" and "evil," we conclude, wherever they manifest themselves, function as schizotypical ways to control the world on behalf of *homo schizo*. It may be informative and intriguing to depict the nuances of value, the quantitative and transient nature of preferences, the complicated and multiform balances in concluding the truth of propositions or the desirability of behavior—so confesses *homo schizo*. But then he adds resolutely: "When the moment of truth appears, and a choice must be made, and my soul is tortured by doubts, then I must have the good, and only the good, and nothing but the good, so help me Good-God !"

Notes (Chapter 7: The Good, the True, and the Beautiful)

1. H.D. Lasswell and A. Kaplan, *Power and Society* (1950) and D. Truman, *Governmental Process* (1951), both dependent to some extent upon prior works, such as Machiavelli's *Prince* (1532), Michels' *Political Parties* (1915), Pareto's *Mind and Society* (1916), Mosca's *Ruling Class* (1890), Bentley's *Process of Government* (1908), supplemented by many case studies such as N. Leites' *Operational Code of the Politburo* (1951), where he reconstructs the logical and thought systems of the leaders of the Soviet Union until 1950, and one can nitpick the "rational" from the multi-colored weave of ideology. Perhaps to be mentioned also are such works of this author's as *Politics for Better or Worse* (1973); the more formal *Elements of Political Science* (1952); and, as a case study, *God's Fire: Moses and the Management of Exodus* (1983).
2. Ernest R. Hilgard, *op. cit.* 230.
3. W. James, *Essays in Popular Philosophy*, 84.
4. Isaac N. Vail, *Selected Works*, Santa Barbara, Calif.: Annular Books, 1972.
5. "The General and Logical Theory of Automata," in L.A. Jeffress, ed., *Cerebral Mechanisms in Behavior*, N.Y.: Wiley, 1951, 24.
6. *Languages of the Brain, op. cit.*
7. Rochester and Martin, *Thought Disorder and Schizophrenia*, also Steven Schwartz, *Language and Cognition in Schizophrenia*, N.Y.: Wiley, 1978.
8. Thomas Taylor, *Timaeus* of Plato, e.q. p. 244. on counting, fear, and planets.
9. F. Waisman, "The Decline and Fall of Causality," in A.C. Crombie *et al.*, *Turning Points in Physics*, N.Y.: Harper, 1961 84-154.

10. "Father Time," 22 *Psychiatric Q* (1948), 599.
11. Eissler, *op. cit.*, 247.
12. Carmon and Nachshon, 7 *Cortex* (1971), 410-8 cited in Ornstein *op. cit.*, 1972, 89.
13. Bruno Snell, *The Discovery of the Mind: The Greek Origins of European Thought*, N.Y. Harper, 1953, chap 9.
14. "The Limits of Human Intelligence," in Jonathan Benthall, *The Limits of Human Nature*, N.Y.: Dutton, 1974.
15. *The Ghost in the Machine*, 259.
16. G. H. Mead, *Mind, Self, and Society*, Chicago: U. of Chicago Press, 1934, 347-8.
17. N.Y.: Putnam's, 1960, 8.
18. Cf. J. R. Kantor, *The Logic of Modern Science*, Bloomington, Ind.: Principia Press, 1953, Part 11
19. *Op. cit.*, 352
20. "Heaven and Earth: Catastrophism in *Hamlet*," III *Kronos* 4 (1978), 3-18; IV 1 (1978), 67-89; "The Seasons Alter: Catastrophism in *A Midsummer Night's Dream*," VI *Kronos I* (1980), 25-47. Cf. R.J. Jaarsma, with E. L. Odenwald, "Nor Heaven Nor Earth Have Been at Peace: The Contemporary Foundations of Shakespeare's Cataclysmic Imagery," VI *Kronos* 1 (1980), 12-24.
21. New Haven: Yale U. Press, 1944.
22. Urbana, Illinois: U. of Illinois Press, 1973.
23. *Op. cit.*, 28, That science may not pursue this dichotomy much longer is evidenced, e.g. in Judith Wechsler, ed., *On Aesthetics in Science*, Cambridge, Mass.: MIT Press, 1978.

EPILOGUE

The elephant's trunk is not a nasal tumor. The androvorism of the praying mantis is not a perversion. The seal's flippers are not a deformity. Nor is the human polyego a tumor, a perversion or a deformity. It is the humble beginning of his claim to rule the world.

In his immediate arrogance, like a newly ennobled baron, man invents his ancestry. The gods created him specially. The event was attended by the shaking of heaven and earth. All the beasts and flowers attended his dispositions. His every blemish became a sign of nobility: fallen hair, clumsy toes, an appetite for everything that sprouted or moved, a jerky gait, a never-ending anxiety, superstition, and suspiciousness. Compelled to count, he summed up everything. Compelled to displace, he permuted all objects into personal associations. When all is done, he looks at his work, and like Elohim, is satisfied.

But he does not rest. He destroys. He tortures himself by inner contradictions. He attacks his fellows — not with the simple anatomical instruments of the beast but with an ever-elaborating paraphernalia and by all media — by the word, the organized onslaught, the manipulation of the whole range of the humanly valued—persons, objects, ideals, subsistence, affection, dignity, freedom and life itself. No insult is too subtle, no injury too enormous. If it can be conceived, it must be developed for use. So goes history; so goes the world. All of man is good and bad, mingled inextricably, beyond separation, beyond therapy, probably even beyond meaning in his brain. What is to be done with this creature?

The chances that an intelligent, sharing, and peaceful creature can be formed of what exists are low, so low that it appears useless to bank upon them. Gross deficits exist in knowledge, in design, and in power.

We can imagine three different scenarios. One is organization. Another is selective breeding. A third is cloning. Organization has been the largest hope of theologians and philosophers from our beginnings. By its promise, evermore increasing with the advancement of the human sciences, a leadership would be recruited to promote all observable tendencies in the cultures of the world that elicit intelligence, generosity, and pacifism. These qualities would be so fortified by all that we know or may come to know about discrimination for "good" and against "evil" that opposing individual, popular, and organizational tendencies would be frustrated, and socially extirpated. Eternal vigilance would be required, and every investment provably promoting the three virtues would be jealously protected.

A second scheme is selective breeding. What is now unknown would have to be discovered: tests for genetic tendencies or docility with regards to intelligence, sharing and pacifism. This is not an impossible task. Ever more refined research may eventuate in methods of analyzing genetic correlates of these traits, as has already been done with intelligence. It might even be accomplished with crude means. Such would be the licensing of births, conditioned not only upon prospects of health but also upon the prospects for intelligence, generosity, and pacificity, as judged by ancestry to the extent possible. Where at least some precision were obtainable, for a few if not for all potential parents, a sperm bank might be created whose use would become a condition for birthing, in the absence of positive criteria otherwise.

The third scheme would foster research into cloning, roughly considered as the substitution of certain undesirable genetic material in the egg of potential parents by desirable material. This would have an acceptability in that potential parents, who are often cognizant of their own deficiencies and those of their families, would accept just enough alterations to permit genetic gains while preserving most traits that are their own. All three visions have a probably fatal flaw: *homo sapiens schizotypus* fears them, naturally, as he fears all things. Fearing them, he will wish to control them. The more obsessive, selfish and violent his efforts at control, the more likely he will succeed in

obstructing, or suppressing, or perverting the three types of human reform.

At the very best, a determined group, thoroughly dedicated to the visualized plans, and agreeing to subject themselves ultimately to them, would come to command the power to put the plans into effect, and, once in power, would do so. There are isolated instances of this kind of behavior in the world, but no indications of their having broadened into a world revolutionary movement without losing their *raison d'être*. Cincinnatus resigned his post as Dictator of the Roman Republic and returned to his farm and plow. Not only are there few persons like him, but retiring from the scene is forbidden under the rules of the utopian game under discussion. We must conclude that even were science to guarantee high probabilities of success for these proposed solutions of *homo schizo*, we would not be able to obtain the power for the solutions without losing the dedication to them.

Under such circumstances, only one course can be recommended—that whoever believes, should do what he can, no matter that it may be an iota of the envisioned state of affairs. Devise a politics—call it "kalotics"—and apply it. Invent a therapy and proceed to apply it. What else can one do without doing evil?

We know this: that *homo schizo* has the capability for anhedonic, obsessive identification with an ideal, and he may as well work to transform himself as to destroy himself. Then, one day, just as a humble change made *homo schizo*, another humble change may be discovered to remake him. What a great day, when *homo sapiens schizotypus* becomes *homo sapiens sapiens*.

=====

End of

HOMO SCHIZO II

=====

Home