The Fourth Way (essays on Gurdjieff)

P D Ouspensky

Introduction

The following essays assume a knowledge of the material presented by P. D. Ouspensky in a series of ten lectures he or his students would give to people interested in hearing about the work that they were engaged in. Today, those lectures are available in two books: *The Psychology of Man's Possible Evolution* and *The Cosmology of Man's Possible Evolution*. The context in which Ouspensky acquired the source of this material from G. I. Gurdjieff, as well as much of the same material, is described in Ouspensky's *In Search of the Miraculous*.

Without some familiarity (and in some cases a lot of familiarity) with the ideas as expounded in these books, the following may not make much sense.

The essays listed below are divided into two groups: psychological and cosmological. The cosmological ideas of the fourth way are closely bound with the psychological practices—this is not an armchair philosophy but an active way of life. The psychological and cosmological teachings go hand-in-hand, as "one hand washes the other", and simply reading or talking about the fourth way is to miss it.

"Speaking generally, you will never understand what I wish to convey if you merely listen."
G. I. Gurdjieff

In addition, there are several essays I've combined into a group called "Miscellaneous". These last essays seem to me to contain a roughly equal combination of psychological and cosmological material, and so really belong with neither of the previous two groupings. But it is all somewhat academic—the fourth way is a whole, and every part relates and connects to every other part,

and any approach must lead to all other approaches or it is simply not the fourth way. Enter from any angle you like, but be aware of other angles, and watch for connections. (For now, I am just appending any new essays to the Miscellaneous section, regardless of content.)

The scientific information contained in these essays is generally accepted and can be found on the web or in popular modern books. What is different here and not contained in those sources, is the organization or ordering of the information.

In particular, the structure applied here is based on my understanding of the fourth way. It may seem strange to see fourth way ideas expressed in terms of modern scientific thought, but much of the fourth way cosmology is supported by modern science (albeit unwittingly). It would appear, to one who values the fourth way above modern science, to give modern science a certain validity, especially in that area of modern endeavor known as quantum physics. In a similar way, we can find correspondences between modern psychological and neurological discoveries and fourth way ideas, but again the interpretation of the information, its meaning, is understood differently.

I am writing this and publishing it here because I think it is a useful example of how the fourth way can lead us into a more active and personal relationship with the world in which we find ourselves. We now find an announcement of some new scientific discovery intriguing, know what relates or might relate to it, "where it belongs" so to speak, and how it might add to our understanding in many different areas. We read a myth and suddenly gain an insight into something the inventors were trying to tell us. The fourth way enables us to integrate knowledge with life and so forge a path of ever-increasing understanding and wonder.

"After some time one comes to a position where nothing is independent of the work, where there are very few actions that are not connected with the work."
P. D. Ouspensky, *A Further Record*

The Praxis of Consciousness

The knowledge that consciousness varies and that we can learn to control that variation is the key to understanding a practice and theory of consciousness. This practice is based on the simple effort to be aware of ourselves in our surroundings. An already existing theory of consciousness becomes recognizable as a result of the practice, and serves as a map to direct further practice.

Introduction

We experience the variation of our personal level of consciousness at least daily. We can see it, for example, when we wake up in the morning. We come out of a dream state and progressively realize we are in bed, then that it is morning, it is Saturday morning and so on. It is something we are intimately familiar with, but before meeting with this set of ideas, ascribe no particular importance to it. We can take some of those remembrances of passive awareness, and apply some effort to explore them. If you want a challenge, try to be aware of your facial muscles as you remove your blankets in the morning.

We may effect a change in our awareness by trying to become more aware, to observe, for example, that as we write or talk our shoulders have a certain tension, our posture assumes a certain attitude, we are feeling uneasy or glad, nervous or comfortable. By increasingly adding subjects to our awareness we can become aware of considerably more at once than we were aware of only moments before.

By recognizing the fact of such variations in our awareness we come to what is perhaps the first tentative theory—consciousness appears to be a continuum. That is, the ranges of consciousness we perceive seem to fit nicely into a continuum, stretching from an unconscious deep sleep to ever more lucid and inclusive awareness. How far this goes, how much we can be conscious of,

is hard to say (if indeed there is any limit). We may have had experiences of a quality of awareness that seems far removed from our relatively meager attempts to increase awareness, but at least it can be said that such higher states of consciousness don't rule out the possibility that they are on the same continuum, and it is possible that those higher states can in some way be reached intentionally—if we can continue to increase our successful efforts to be ever more aware. In any case, unless we actually reach a point at which we are unable to increase our awareness by further personal efforts, it seems desirable to continue to make efforts to increase consciousness as long as the efforts are fruitful.

The Practice of Consciousness

The practice of consciousness can be performed by making efforts to be aware of ourselves in any and all situations. If we set out conscientiously to be aware of ourselves continually throughout the day, we first discover that we cannot do it. We get distracted constantly and, if we are honest with ourselves, we must admit that we spend our day more distracted than aware. This general distraction may be seen as a sort of pinpoint awareness; we are aware of one thing and then a different thing and so on, but rarely do we experience ourselves as existing simultaneously with the object of our attention. This realization of the difficulty in attaining any degree of increased awareness is a first fruit of efforts to increase consciousness.

So, in fact, the practice of awareness at once produces results. The chief difficulty, perhaps, is accepting what we observe and starting with that, not trying to force observations to fit pre-conceived ideas of what we might or should experience. It seems paradoxical, or even disheartening, to attain some result such as the observation 'my mind wanders' rather than something like 'I feel a peace pervading my being', but it is essential to build with clear, simple observations that suggest practical next steps rather than hope-filled dead-ends.

If we observe that our mind wanders and that this causes us to forget about trying to be aware of ourselves in our surroundings, we can make experiments specifically on this condition and see what diminishes it, and what aggravates it. Here too it is important to keep things simple and practical. We may find, for example, that we don't do well with the music blaring or the TV on, while we have better luck when walking down Main Street or weeding the garden. We may not do so well when lying in bed or drinking beer in the easy chair but better sitting in a hard chair or in an unaccustomed position. Or vice-versa. There is no end to the small experiments we can make and, in time, these experiments may produce a nucleus of tools we can use to keep our mind from wandering the way it did when we first set out to control awareness.

But perhaps it is not a wandering mind we face when trying to increase our awareness but something else, say strong dissatisfaction with our life, our job, our mate. These too are practical, useful observations. As in the example of a wandering mind, creative experimentation can lead to a collection of practical techniques to help in profiting by this. But first, the feeling itself must be addressed. It hardly serves our goal to become more aware if we simply find ways to suppress feelings which appear to be obstacles. It is necessary to evaluate the feeling, to pursue it with the awareness of ourselves pursuing it. That awareness of ourselves keeps this pursuit from becoming just another distraction and even makes it a part of our general effort to increase awareness. That is, there is no restriction as to what we may try to include in the range of our awareness: feelings, thoughts, muscular tensions, sunlight, wind, a ticking clock, are all fair game.

If, for example, our attempts to increase awareness seem to suffer due to an unpleasant situation existing with our spouse, we can examine our feelings about this, ask ourselves what is the difficulty, why is this difficult, always trying to recognize clear, simple answers that imply obvious next questions and ultimately suggest concrete actions. *But we must observe ourselves while we do this*, we ourselves must be another object of our awareness, so

we watch our thoughts and feelings interacting, perhaps feeding each other to become more and more angry or more and more sad. The simple act of continued awareness can do much toward clarifying turbulent waters and lead to practical decisions on how to deal with the conditions that seem to prohibit awareness. And, most important, we begin to see ourselves as something quite different from what we had imagined ourselves to be.

Consider what an exact knowledge of psychology might lend to such self-examinations.

It is as a result of such efforts that we may begin to recognize some of the obstacles to consciousness pointed out in the psychological ideas of the fourth way. At some point, we begin to connect the strange-sounding set of ideas to our personal experience, and it helps us immeasurably to be able to organize our perceptions by these ideas. We begin to realize that people have been here before, have known where we are and how to grow from this point. In addition, we begin to acquire a common language in which we can discuss this inner world with others in a similar situation.

While the practice of consciousness is a personal pursuit it should not be an isolating one. On the contrary, the increase of personal awareness of ourselves in our surroundings increasingly comes to include others—the friends, relatives, acquaintances, and strangers we are with in moments of greater awareness. And, if we are lucky enough to have friends engaged in the same pursuit of greater awareness, the sharing of observations can become an invaluable source of new ideas for experiments, and such gatherings in themselves are supportive environments to practice awareness.

Finally, the pursuit of personal consciousness leads us out of ourselves and through the back door, so to speak, through ourselves and out into life. *Now* we can give our friends and our world the attention they deserve—but only after having mastered our own attention to some extent. If the mind does not wander, how much better we attend to another's words and their meaning.

If the turbulent emotions of intimate contact clarify to a purity of thinking and feeling, so much finer is a moment with a loved one. If the noise of preconceptions stills, so much richer is the acquaintance with a stranger. In this way, awareness itself becomes an encouragement to us to find ways to increase it.

The Theory of Consciousness

The theory of consciousness is an ancient one, and many traces of it can be found in the sacred literature of almost all times and places. But it cannot really be *understood* that way. Ancient ideas are expressed in the way that they are for the time and place of the people they were intended for, and conditions are very different today. Also, we cannot read these ideas in their original expression. In the first place, we are almost always reading translations, and translations can never be at the level of the original, and in fact are almost always hampered by the understanding of the translator. Even in cases where one *can* read the original texts, for example by having a sophisticated knowledge of ancient Greek or Chinese or even Elizabethan English, many of the terms are used in contexts now lost, and have connotations impossible to recall today. In order to understand these ancient texts, we have to already know a great deal about what they are trying to convey. Then we may well be able to get something from them.

In addition to the problems of dealing with ancient written knowledge is the very real necessity of direct transmission. This leads to the necessity of schools for the development of consciousness, which consequently leads as well to the pseudo-schools that are much more plentiful. And all that leads to the usefulness of "pre-school", that is, groups or organizations with the purpose of studying what schools of consciousness must be, how they can be recognized, how to prepare for them, how to discriminate between legitimate and illegitimate approaches.

The most frequent email I get in response to these essays includes a question of the form "I live in X. Do you know where I can find a school here?" To this I can only say that nobody can tell you where a school is. So much the worse for you if they do. It is

a necessary first step to find school on your own. There are schools, and they do make themselves available, but we have to have the necessary discrimination to locate them through the confusion of the pretenders. And, first of all, we have to recognize the value of pre-school.

We need to find others with a working knowledge of this work in order to progress. Working in common with others *from the point of view of the work* is the only way I know of to see certain aspects of ourselves that we simply cannot arrive at alone. All the more so because we think we can. But we must not become persuaded, convinced, or hypnotized by others. We must actually learn and see a great deal about ourselves, all made possible by this new knowledge applied in fruitful and unbiased group work.

As an example of the kind of thing we can learn in this way and not by ourselves is what is called our "chief feature". Also, in any real emotional and practical way, our "type" and "center of gravity". And as we learn these things about ourselves we begin to learn them about others, and we can begin to help others that ask us for help. One reason that learning in fourth way group work is so effective is that we do not necessarily believe what someone tells us, and this is good, but when we see that many different people are trying to tell us something very similar, and when this is clearly being done out of kindness, and done sincerely, we either must begin to take what they are saying about us seriously or leave before we see something about ourselves that we don't really want to see. If we don't want to see it, we just aren't ready for it, and can go no further until we are.

It is necessary to find others with whom we can learn, and that is best achieved by trying it. Keep your aim in mind (and if your aim is unclear to you, keep trying to formulate it) and see if your efforts to achieve your aim are aided by being with the group. Ask questions, ask for help, and evaluate the results. Participate: be involved and active in the group and its exercises, techniques,

gatherings, and so forth. Above all, try to remember yourself when faced with decisions, be true to yourself.

Forfeit and Sacrifice

The difference between the words forfeit and sacrifice is telling and instructive:

> Sacrifice is payment in advance
> Forfeit is loss in advance

With sacrifice, we may purchase, or offer to purchase, the desired end; with forfeit, we get only the appearance of gain.

The words can be used as nouns or verbs. Here are the respective definitions of the verbs from Webster's Unabridged Dictionary, Second Edition:

forfeit v.t.,...

> to lose, give up, or be deprived of by some fault, offense, or crime; to lose or alienate the right to possess, by some neglect, crime, etc. ...

sacrifice v. t.,...

1. to offer to a god or deity in homage or propitiation.
2. to give up, destroy, permit injury to, or forego (a valued thing) for the sake of something of greater value or having a more pressing claim.

In general, wrong work is a forfeit of the right to possess consciousness, and the sacrifice of wrong work is done for the purpose of acquiring consciousness.

For example, a forfeit, daydreaming, gives us the illusion but deprives us of the reality of that which is imagined, while the sacrifice of daydreaming allows for the possibility of the real. In particular, the sacrifice of daydreaming makes it possible to see that we do not possess what we imagine, thus making possible the actual acquisition of what was formerly only imagined.

For another example, we might take our ordinary emotional state and higher emotions. Our ordinary emotional state is characterized by identification and negative emotion and uses what little emotional energy we have. To gain higher emotions, we must sacrifice our current emotions, sacrifice our negativity and identification. That sacrifice saves the energy normally expended and makes room for the higher emotional center to appear, and, in the ensuing quiet, for it to be heard.

Let's take the definitions singly:

forfeit v.t.,...

> to lose, give up, or be deprived of by some fault, offense, or crime; to lose or alienate the right to possess, by some neglect, crime, etc. ...

We "lose, give up" not by "offense or crime" but by "fault", or more exactly, *neglect*. We forfeit consciousness by neglecting to work for it; that is, we forget. We forget to remember ourselves, to struggle with imagination and negative emotions, to struggle with inner-considering and unnecessary muscular tensions. We neglect our aims, our desired course—at least that course we desire when we think most sincerely about what we want. The neglect, the forgetting, of our own aims, keeps us from being able to make the strategic sacrifices necessary to attain them.

If we were to substitute the word "forfeit" for the word "sin" in New Testament writings, we would get a much better picture of what is being said. The word translated as sin, as Maurice Nicoll has pointed out, is actually an archery term meaning having missed the mark, missed the target that one was aiming for. This does not have the judgmental connotation of sin, and more exactly indicates our loss of

something we want or are trying for, not something that others tell us we should want.

The definition of sacrifice is even more pregnant with meaning:

sacrifice v. t.,...

1. to offer to a god or deity in homage or propitiation.
2. to give up, destroy, permit injury to, or forego (a valued thing) for the sake of something of greater value or having a more pressing claim.

The first definition speaks of sacrifice in the religious sense—sacrifice to a god or deity. We may view higher consciousness that way. When we understand what consciousness is, and have a better understanding of what esoteric religion teaches, there is no difficulty in understanding that the inner idea of sacrifice is expressed exoterically in the sacrifice of, say, the sheep valued by the shepherd. We must sacrifice something of value to get something of greater value. Without a difficult "willing", there is no sacrifice.

The second definition of sacrifice, though, is even more interesting, more exact. We must give up our imagination, our inner-considering, and so on. We must destroy our illusions about who we are, what our value is. We must be able to permit injury to our idea of ourselves. We must forego our valued illusions about ourself, for the sake of acquiring something greater—a real objective picture of who and what we are.

We make the sacrifice of our illusions simply by seeing them for what they are. Simple, but difficult. It requires sustained attention without identification. That is the effort, the willing, required of us.

Rather than forfeiting our life in an illusion of attainment, let us work to sacrifice our illusions for a real gain in consciousness.

Forfeit is effortless. Sacrifice is work. Forfeit is easy, automatic, mechanical, it is our habit of taking the path of least resistance. Sacrifice requires that we stop to think, take a different course than we would normally take, even if only for the sake of doing just that.

Internal and External Considering

A good example of the difference between forfeit and sacrifice may be seen in the difference between internal and external considering. Internal (or "inner") considering, which occurs to us in spite of ourselves, is based on our false idea of ourselves. In one type of inner considering we expect others to values us more—to not cut us off in traffic, to not make us wait for them, and so forth. In another type of inner considering, we worry that another thinks ill of us, or that they do not understand what we really mean, and so on. We not only forfeit the possibility of responding to the situation in any real way, but we lose the necessary energy to do so because of our habitual reaction of inner-considering.

External considering has a different effect. First, we must refrain from inner-considering or any other mechanical reaction if we are going to externally consider. We must be aware of, and to some extent able to control, what is happening within us. Second, we must deliberately consider the other person or the situation we are in; consider, for example, whether they might *not* have acted with the intent to affront us. Consider whether they might, in fact, have been quite unaware of their actions. Consider what really matters to us anyway, we who are trying to struggle with imagination, with inner-considering, with negative emotions. Consider that we are in fact reminded of this now thanks to this situation. Consider whether reprimanding them or feeling sorry for ourselves could really help the situation in any way, or if in fact we might be able instead to say or do something that can relieve tensions, put the situation in a realistic perspective or comic light, and so on. Act in such a way as to *help the other*. Invisibly, or we'll just feed the worst parts of ourself in the process.

The sacrifice of inner-considering can result in a multitude of creative and energy-saving situations. Externally considering another person can unveil to us a new understanding of that person and others, and can help us chip away some of the awful baggage of selfishness and misunderstanding that we carry. Internal considering is a forfeit of our freedom to act, our freedom to choose, so we are left with the habitual, mechanical reactions that we are seeking to be rid of. External considering is a sacrifice of our habitual, comfortable sleep, requiring sustained effort and experiment, but

opening us to new possibilities in our life. Opening us to new possibilities.

Three Types of Thought

Some thoughts on thought follow. The way of viewing thoughts here is not identical with discussing the different functions of parts of the intellectual center, nor is it identical with the idea of true vs. false personality. I'll try to be more clear as we go on, but if in the following you read something that seems to contradict the basic "Psychology", pursue it a little further—different maps show different things.

We think in one of three possible modes: "pathological", "logical", or "psychological".

- *Pathological* thinking does not see itself. When it starts to see itself, it dissolves, like a witch in water. Pathological thinking is mixed with emotion, and it is the (unrecognized) emotion that directs it.
- *Logical* thinking works without emotion. It works by comparison, yes or no, either/or. It seeks conclusion, decision between two opposing choices. It is impartial, non-subjective. It works like a computer, composed of bits, dissecting but never understanding.
- *Psychological* thinking is intellect in harmony with emotion. It is aware of itself. When that awareness vanishes, so does the cooperation of thought and feeling. Thought then becomes logical, pathological, or disappears entirely.

Psychological thinking can be inductive or deductive, logical thinking is inductive, and pathological thinking is only destructive.

Pathological Thought

pathological thought cannot see itself

Pathological thought does not see itself, cannot see itself, and cannot see other types of thought.

The term "pathological" is used to designate thinking that is imbalanced by emotion. The emotion in pathological thinking is not necessarily "negative", although, say, anger or jealously are probably the most obvious examples of emotions that disturb thought. More apparently positive emotions such as "hope" can also influence thought and direct it to such an extent that they subvert the progression of a thought and lead to desired rather than reasonable conclusions. Pathological thought is well illustrated by a recent magnetic resonance imaging (MRI) study in which members of two different political parties were presented with the same ideological message and yet reached opposite conclusions. The MRI results indicated parts of the brain corresponding to emotion were activated instead of reasoning parts of the brain. But I should hope we can see this without the need of an MRI.

But certainly, pathological thinking is most obvious when it is mixed with a negative emotion, say anger, and is expressed vehemently, rapidly, and with, perhaps, intent to injure. If one listens patiently to a pathological tirade and does not respond in kind, it often forces a self-awareness which may derail the momentum of the speaker, leading to a more reasoned discussion. A perceived smug silence, however, may enrage it further, in which case a thoughtful unemotional response may prove far more effective in bringing the discussion into the light of reason and so transform pathological thought, which can only exist in the darkness of no self-awareness.

It should be recognized that the words spoken by pathological thinking do not mean what they say, that is, the words do not stand for their ordinary and simple meaning but rather serve an underlying emotion which may even be exactly the opposite of what is said. This can lead to endless confusion unless the difference between intent and verbiage is recognized. (This confusion is not necessarily only in discussion, but can also occur within us, when we are thinking about some situation. It is just more easily seen in another person, hence in conversation). If we listen to our own inflections when speaking, and the inflections of others, we may begin to recognize certain tones, also a certain speed and other characteristics that accompany the expression of pathological thought.

We are all subject to all three types of thought. We think we are not subject to, or only rarely subject to, pathological thought, but that is only because

by its nature it is not observed. Pathological thought does not see itself. But why is it not seen when someone points it out to us? Maybe because often that person has ulterior motives in pointing it out, for example they are mad at us, and what we see instead of our pathological thought is their pathological thought and we wonder that *they* cannot see it.

It is possible, if working with a group of people who know about pathological thought, to be shown moments when we are in it. And to show them when they are in it. This requires a certain finesse by the person showing us, requires a common group aim that overrides personal comfort, and may be aided by choosing a term with a less disturbing connotation than "pathological". (I use it here to make clear the relationship with the two other types of thought to be discussed.)

The emotions mixed in pathological thought are the goal of that thought. The purpose is to justify and express those emotions. The purpose is not to think, but to use thought as a tool for ends that it is not designed for. Thought is used by the emotions.

At its worst, pathological thinking steals energy from the sex center and leads to a variety of personal and social difficulties. We would do well to be wary of it.

Logical Thought

logical thought can see only itself

Logical thinking is not as common as it might seem at first glance. In general, we think logically only when we are presented with some new difficulty. For example, if we were to answer the question 'What is two plus two?' with 'four', quite probably we did not think logically, we did not think at all—we simply retrieved a pre-established response when we were asked. We may at one time have had to work that out with logic—find an example of two things and added two more things to them and see that we consistently arrived at four, or we may simply have memorized some addition table like a parrot at school; at any rate, the answer is now automatic and logical thinking is not required to supply it. There is nothing wrong with this—we surely don't want to have to work out two plus two every time it comes up, as the answer doesn't change, only we should not confuse automatic retrieval of stored information with logical thinking.

Logical thinking is a process that requires some attention to be directed to each step of the process. When a step is skipped, it has been filled by some

assumption, desire, fantasy; but each step in which logic is applied requires an effort of attention.

Logic is like finding one's way through a maze, a maze whose end is the same regardless of the hopes and fears of the person negotiating it. A particular turn is objectively right or wrong, that is, it leads to progress toward the end or it doesn't. And the end is pre-determined, fixed, and immutable. The end is also unknown, or there would be no point in pursuing the thought to find it, unless one were interested in the steps, say, to design a computer program. What logical thought cannot do is pursue an initial intent other than the intention to follow its course to wherever it leads.

Computers follow logical thought, and may be capable of piecing together pieces of logical thought to create new pathways, but that is as close as they can come to thought, having no attention. They are incapable of intending it, just as they are incapable of pathological or psychological thought.

Logical thought lacks scale, lacks hierarchical ordering by quality. It can only compare like things quantitatively and then apply pre-established rules to produce a result or decision. It is a powerful tool in its sphere, but its sphere is limited and completely uncreative.

Psychological Thought

psychological thought always sees itself

Psychological thought must see itself, and can also see logical and pathological thought.

Psychological thinking is self-evaluating—it progresses by reflection. It has as a goal understanding, and evaluates each step in light of that goal.

A sort of quintessential goal of psychological thought might be the understanding of psychological thought. A more commonplace goal might be understanding a personal relationship. Let us take the latter as an example of how to think psychologically:

I wish to understand why I am upset by R.
Why do I wish to understand this?
Because I am having difficulty in my relationship with R.
So?
I wish to understand the causes of my difficulty with R.

Why?
I want to work productively with R, and this difficulty is inhibiting my work.
Why, what exactly inhibits my work?
R has information I need to draw on and yet I so dislike our interaction that I do not draw on this information as often as I need to.

And so on. So already there is progress in psychological thinking. By reflecting on each statement, asking 'why?' at each step, I arrive at a more succinct understanding of the nature of the difficulty.

The example sounds not unlike the typical description of the therapist responding to someone on the couch. In one sense, it is not unlike that, this is after all psychology. But in many ways it is very different. First of all, the questioner has access to the subject's very thought and feelings directly. That is, I watch myself formulate my wish, I watch myself pursue it. And I tailor the questions by keeping in mind—really in feeling—what it is I wish to accomplish or discover. This requires active reasoning and divided attention. We have to watch our feelings as much as our thoughts, watch them interact and influence each other. Keep to the aim and yet learn from the deviations, and we often learn the problem was not exactly as expressed but coming from somewhere else.

Essence and Personality

Essence

- **Type**
- **Center of Gravity**
- **Dualities**
- **Other Aspects of Essence**

Personality

The Relationship of Essence and Personality

The Path of Development

The ideas discussed here are ancient (this is the "map of pre-sand Egypt" G. mentioned). It seems indisputable, to those who have verified some of the truths and natures of essence, that there was a certain area of ancient knowledge that was far superior to our modern knowledge. This was in the area of what we today call psychology, although the western science of psychology is so crude that it is considered a "soft" science. Ancient psychology, however, should not be considered "objective science" in the way western science uses those words today, because it necessarily requires a high degree of "art" or intuition (use of the the intellectual part of the emotional center, to get technical.) Whereas our "Western" knowledge

has been acquired experimentally, ancient knowledge was acquired experientially. Part of our work is to connect experimental knowledge with experiential knowledge.

Essence

When first hearing of the laws of essence to be discussed here, there is a lamentable automatism in our formatory apparatus that ejaculates something like "But that is not all there is to it!" "But it is much more complicated than that!" and so on, whenever confronted with the law-conformableness of human psychology. Of course whatever law is being discussed is not "all there is to it". I once knew a person who complained that the idea of seven types was "too simplistic". I wonder what she thought of the idea of two sexes?

The point being, a handful of elementary laws combine to produce the enormously varied, but nonetheless classifiable, human essences. Duality produces sex, the law of seven produces type, the law of three, center of gravity. This all applies to *physical as well as psychological* makeup. That is what essence is: our pre-determined, genetic program.

Type

Type (also called "essence type" or "body type") can be of one of seven types, or a combination of those types. But the types only combine in *certain combinations*, not any which way. The order of combination is illustrated by the internal circulation or web-figure of the enneagram. The inner circulation of the enneagram may be seen as a continuum (like the line of sex dicussed below), and we are born somewhere on that line.

Center of Gravity

Center of gravity can be described in various ways. Strictly speaking, we are centered in one of the four centers which are fully functioning at birth: the intellectual, emotional, moving, or instinctive. This is sometimes generalized as being a "number 3", "number 2", or "number 1", where moving and instinctive centers of gravity are both described as "number 1". (The relative number has no significance here—it is only used to distinguish the three groups, or "three stories of the human factory".) Much further distinction of center of gravity is possible, where each center is further

divided into three or four, and each of those are further divided into three or four. One may have, for example, a center of gravity in the emotional part of the intellectual part of the moving center.

Dualities

Examples of the twoness of human essence include the positive-negative and active-passive polarities of type, and the male-female dichotomy of sex.

Sex is dual but it is not an either-or proposition. It is better viewed as a continuum, where a person is born somewhere along the line. Way to one side and we have a very masculine man, way to the other, a very feminine woman. More towards the middle we get varied mixtures, right near the middle we get near-equal combinations.

Other Aspects of Essence

There are other aspects of essence, such as chief feature, "alchemy", and chief difficulty, that are not discussed here. In general, to see essence qualities to some degree you have to see yourself to some degree. The way to either is through School. I'm sorry, but you won't get far without it.

It is important to understand the purpose of this knowledge of essence—it helps us to "know thyself". We are strongly determined by our type, center of gravity, and other features of our essence. They determine to a large extent our interests, strengths, and weaknesses.

It is also important to understand the *effect* that knowledge of essence can have on us. If this knowledge penetrates us, that is if it is received properly and *understood* (see Knowledge and Being for the fourth way definition of understanding), it must lead toward greater humility and a non-judgmental attitude toward others. Because we begin to see that much of what we picture as our strengths were simply given to us, and much of what we picture as others' weaknesses were simply given to them. And our strengths often appear as weaknesses, or faults, to them. And our achievements, or anyone's achievements, are quite different than we imagine. Of course, false personality (see below) can take this information and use it to inflate the ego and judge others, but false personality can and does do that with any knowledge. If, with knowledge of essence, you find yourself judging others based on knowledge of their essence, you can be sure your aim has been hijacked.

So when that "I" says "That's too simplistic!", understand that things are necessarily stated one at a time, and that they are introduced at one level and then developed, and much else must be understood before new knowledge can find its proper place.

That, is essence, in addition to which we may develop capacities that we were *not* born with. And, conversely, we may educate and direct natural dispositions. This leads us to the discussion of personality.

Personality

In one way, personality is more easily discussed: there is false personality and there is true personality. On the other hand, there are no limitations, or pre-imposed structures, on the forms that personalities take. A personality may be sublime, another downright criminal, another moronic, another clever, one blind, one insightful, and so on. And furthermore, all such personalities can be in the same person. I am not talking about special cases like "The Three Faces of Eve" or other documented cases of abnormal psychology. This is about the psychology of us, supposedly normal human beings, and we must see:

- the difference between essence and personality in ourselves
- that the personality we see in us is false personality and that it has many parts, many "I"s
- a way to develop a true personality based on the understanding of our essence and our aim in light of self-awareness

Personality is acquired during life. It is learned, sometimes deliberately, but often through imitation. It includes our postures and movements, our attitudes, thoughts, feelings, and expressions. And all this is *false* personality. True personality is a result of work on oneself in light of a conscious teaching and cannot be otherwise. True personality can gradually take the place of false personality. True personality is put in place of false personality, because personality is required to protect and develop essence, but false personality over-protects—it suffocates and retards essence.

The Relationship of Essence and Personality

As we are, personality provides an external covering over our essence. Others see our personality, not our essence. In a sense, this is as it should be: personality protects essence like the shell of a walnut protects its

kernel. Our psychology has become abnormal though, because our shell has grown too hard, too restrictive. The essence it was meant to protect becomes increasingly suffocated, under-nourished, and is in danger of dying altogether.

But for many people, including people who have active magnetic centers—and certainly those who genuinely knock on the door of the fourth way—essence is not dead. It will be the case, though, that essence is lagging behind in its possibilities. In a properly conducted School atmosphere, however, our essence can slowly emerge, and so begin to develop more quickly.

Ultimately, we ourselves have to provide the proper shell to protect essence and yet allow it to grow at our own pace and in our own directions. The means of doing this is called "true personality". It is our acquired knowledge deliberately applied to protect and feed essence, and to grow in partnership with essence. Although it is not identical, this has a lot in common with the idea of the harmonious growth of knowledge and being producing understanding.

It can be very difficult—that is, painful—to see the extent to which we are controlled by our essence and false personality. This is the main reason the fourth way will never be popular. It may be more accurate to say that *work* on the fourth way will never be popular. Some imaginary ideas calling themselves the fourth way may well one day become popular, but that would have as much to do with the work of the fourth way as false personality has to do with who we really are. There is a great deal about ourselves that we will never see without working with others in an organization based on the fourth way, one directed by consciousness ("C influence"). The difficulty of such group work—given a real fourth way organization—is directly related to our reluctance to see the truth about ourself.

The Path of Development

False Personality->True Personality->Essence->Individuality

This work might be summed up by something like "becoming who we really are in potential". We begin (working) as almost nothing but false personality. The various tools of the work are designed to create in us a true personality. This true personality not only allows essence to grow, it

feeds essence deliberately, permitting a right growth. The result of the right growth of essence is our individuality.

We can see different relationships of essence and personality, different ratios, in different people. In an "educated" Westerner, for example, personality prevails over essence. An isolated rainforest tribe member typically has a much more developed essence but little development of personality. Our essence relates directly to another's essence if personality is not threatened, and we find each other charming. The energy of essence is literally finer than that of personality, and it is a delight to experience it. Children are another example of essence predominating over personality. We may have all witnessed the growth of children in which personality begins to predominate, say from the age of 7 and on, and we cannot help but feel that something is being lost. Strictly speaking, it is not being lost, at least not yet, but rather becoming covered by a protective coating, which is personality.

This over-layering of personality on essence is often likened to clothing protecting our body, and we meet in many teachings with apparently strange ideas about the necessity of "removing our clothes" and to "become like little children". This, for us, is a necessary first stage of growth, but must be done carefully. Yes, it is necessary to remove these old clothes, this personality, this "old Adam", but it is also necessary to then acquire a new protection for our essence—protection from the often harsh and potentially damaging influences of life in the human world. This new covering, or filter, is our true personality.

And when he sowed, some seeds fell by the way side, and the fowls came and devoured them up:
Some fell upon stony places, where they had not much earth: and forthwith they sprung up, because they had no deepness of earth:
And when the sun was up, they were scorched; and because they had no root, they withered away.
And some fell among thorns; and the thorns sprung up, and choked them:
But other fell into good ground, and brought forth fruit, some an hundredfold, some sixtyfold, some thirtyfold.
Who hath ears to hear, let him hear.

Gospel of Matthew

The analogy of the seed states that the outer husk is personality, which protects the kernel, or essence, allowing it to begin to grow. But too restrictive a husk, and the seed perishes. Too unprotective, it perishes as well. With a proper shell, or true personality, the seed is both protected and

nourished and, when the time is right, *and the environment is right*, the husk falls away to allow the new growth, or individuality, to emerge.

What you sow does not come to life unless it dies. And what you sow is not the body which is to be, but a bare kernel, perhaps of wheat or of some other grain. But God gives it a body as he has chosen, and to each kind of seed its own body.

Paul of Tarsus, First Letter to the School at Corinth (*Corinthians 1*)

That we are able to begin the work of the fourth way at all is due to a part of our personality—it is our "magnetic center". Although acquired *in* personality, it seems to be the result of a deeper "call" in us, some certainty or intimation within us of a higher reality that is accessible but for some reason not normally accessed. In any case, we engage in seeking, with the obvious intent of eventually finding. But there are many variables, among which I might mention the relative strength of the urge to find, the willingness to overcome obstacles including self-deception and societal discouragement, and the determination to hold onto something once gained and to build from there.

Magnetic center grows and, most importantly, magnetic center *improves* by a process of discrimination. That is, by discriminating in the first place between A and B influences—and pursuing, "collecting", B influences—magnetic center increases its relative mass and importance in one's life. But this is not enough. It is necessary to improve on our ability to discriminate the relative quality of the different influences B—if we do not, we become like one of those people that are only too common these days, full of ideas about every latest new-age fad but hardly distinguishing between their relative value, and adopting the next one to come along with the same vehemence and certainty each one was previously adopted. This road leads nowhere.

It is necessary to "separate the coarse from the fine", to gain in discrimination as a result of experience, and to use that discrimination to move in the direction indicated by it. There is no doubt that this takes a lot of hard self-questioning (what have I really gained?, what do I really know?, and so on) and it also requires a certain self-respect for one's own higher understandings at times when we don't have that same higher level of understanding.

The Sufi's have a saying about watching what people do, not what they say, and this is an example of the kind of discrimination that must be learned.

Many people can talk a good game, but when their corns are stepped-on, you see what they are worth, as Gurdjieff used to put it.

So magnetic center becomes a sort of bridge between false personality and true personality. It becomes a bridge, that is, when the other "shore" is found, that shore being school work. Work based on real knowledge, knowledge that is required for the development of true personality.

Such knowledge is chiefly psychological in nature, but it is aided by the study of cosmological ideas. Psychological and cosmological ideas must become more similar as one moves toward unity and away from multiplicity, and the separate but related study of each is a means of providing material to demonstrate and ultimately verify this. Psychological work requires working directly with others. Cosmological knowledge comes from others, although not necessarily by personal contact.

The knowledge we speak of is principles of classification and action. Specific facts must be incorporated by the individual. Such facts may be of various types, whether psychological or cosmological, religious or scientific. System ideas are the tools by which we are able to relate apparently unrelated and even contradictory ideas. This body of working knowledge, by which we increasingly relate to the work and then the world, is true personality. Like all personality, it is learned and comes from outside of us but, unlike false personality, it is deliberately constructed by us in light of specific goals toward our aim.

True personality has a dual nature in that on the one hand it works to build up new principles and actions based on personal verifications of revealed teaching and, on the other hand, it works to break down and remove wrong ideas and habits acquired over the decades by false personality.

The gradual reduction of false personality and the establishment of true personality in its place allows for the growth of essence. Essence, which had been severely restricted due to the graceless growth of false personality like a crust around it, now begins to receive essential nourishment once again in the form of direct impressions of diverse and finer energies.

And from this point on arises the possibility of a true individuality. This individuality grows out of essence, and is expressed through it. Gurdjieff, for example, did not ceases to be a Martial type, or to have a moving center of gravity, but he used these as tools to pursue his aims—as opposed to being a helpless prisoner of them, which we are until we can fully see our

mechanicalities and successfully resist them and, ultimately, transcend them.

We start by struggling with false personality.

"[...] and when he has bound together the three principles within him, which may be compared to the higher, lower, and middle notes of the scale, and the intermediate intervals—when he has bound all these together, and is no longer many, but has become one entirely temperate and perfectly adjusted nature, then he proceeds to act [...]; always thinking and calling that which preserves and cooperates with the harmonious condition, just and good action, and the knowledge that presides over it, wisdom [...]. Plato, *The Republic, Book IV*

Knowledge and Being

The fourth way is the *way of understanding*, and understanding is defined as the *relationship between knowledge and being*. These terms may appear familiar to us but be aware that their definitions on the fourth way are much more exacting than the ones you will find in the dictionary. The definitions are not in conflict with common understanding, but are defined exactly, in order to be used rigorously.

The fourth way is characterized by a work on being in harmony with a work on knowledge. The work on being distinguishes the fourth way from all other approaches, approaches that can ultimately lead to nothing of lasting value, except by the occasional accident—certainly not consciously. Being may or may not develop as a result of various practices when there is a fortuitous interaction with that particular practice on a person of the exactly requisite type and center of gravity. And then that person thinks they know "the way" and tries to reproduce the same results in another. Eventually, perhaps centuries later, there will be another lucky combination.

The fourth way teaching is as much about the acquisition of higher knowledge as it is about the means to use that knowledge, which is being. It could equally be said that the fourth way is about the development of higher being, and the means to acquire that being, which requires a higher knowledge. That is why it is said: the fourth way is based on understanding. That means, according to the definitions of the fourth way, that the fourth way is based on the relationship of knowledge and being.

If you think of this as "playing with words", you do not know when to play with them and when to work with them.

Examples of Knowledge and Examples of Being

Knowledge	**Being**
Everyone has a chief feature.I have a chief feature, my chief feature is... etc.	Seeing our chief feature
We are asleep, we do not remember ourselves	Self-remembering
It is useful not to express negative emotions	Not reacting negatively when someone cuts us off in traffic
We can do nothing	Sustaining the actual realization of our mechanicality
Like what it does not like	Appreciating the moments of

the experience of
helplessness.
Using the
frustrating traffic
situation as a way to
develop being.

All of the above knowledge is useful if it is applied, understood. It may come as a surprise to realize that the touchstone of the fourth way is the same as that of Western science—test knowledge against experience. The integration of knowledge and experience results in understanding, which is the aim. Many people hear about or read these ideas, and may even parrot them, but never come to work on *being*. At the first hint of seeing their being, they denigrate the people or situations that began to show it to them. This, above all else, is why the fourth way is "esoteric" or "occult". Not hidden, but hidden from.

If we look at the examples of knowledge and being above, we can see something about the conditions common in life. How many people even recognize the items in that left-hand column as knowledge? Real knowledge is hard to come to, and here we begin to see the inner connection between knowledge and being: We cannot really know the being side of things without struggle, without trying to self-remember, trying not to express negative emotions, trying to work on chief-feature, and so on—the struggle against mechanical momentums which is the Work. And the experiences gained in that struggle can be seen in our knowledge of what are useful techniques, what are overly ambitious goals, and so on. In this way, we can begin to see how a person's knowledge is a reflection of their being.

Because of the direct relationship of knowledge with being, it is possible to estimate a person's knowledge by their level of being, and to estimate a person's being by their level of knowledge.

That is a difficult idea to accept if we can even hear it.

"For the truth of being and the truth of knowing are one, differing no more than the direct beam and the beam reflected." Francis Bacon, On The Advancement of Learning

We cannot know that we do not remember ourself if we do not try to remember ourself and honestly note the results. By seeing our being, we gain real knowledge. We cannot see our chief feature unless we can bear to see it, even want to see it. Our inability to see ourself is lack of being. Any hard-won increase in the ability to see ourself is accompanied by an increase in our knowledge of ourself. And this is Socrates' first commandment—know thyself.

What is *being*? No definition, no knowledge, can convey what being is. We can try to use words, ideas, knowledge, round 'em up in a certain way and try to express or indicate being. But immediately we come to the fundamental difference of knowledge-based cultures and being-based cultures: they do not even recognize each other.

The best expression I know is that being is the ability to be. To be present. Being, on the fourth way, is self-remembering. Sleep is our level of being. Helplessness is our level of being. In fact, our level of being is not really even *there* yet—our level of being is such that we do not even experience our helplessness, our sleep.

I don't know if there is anything more difficult than seeing oneself, seeing what we are, seeing our level of being. On the fourth way, we may begin to appreciate that vision, as we begin to realize that just such a hot seat may make us move. In fact, we may begin to "like what it does not like". The extent to which we can see ourselves is the measure of our being. Similarly, the extent to which we see ourselves corresponds closely to our ability to tolerate the mechanicality of others. A more tolerant, understanding person indicates a higher level of being.

"[Y]ou can understand other people only as much as you understand yourself and *only on the level of your own being*." P. D. Ouspensky, The Psychology of Man's Possible Evolution

Another clue to being is reliability, although this is by no means obvious at first glance. Someone may be reliable, for example, because they are afraid of losing their job. That is not being. But being reliable when one gains nothing from it but a sense of personal integrity is an indication of being. Everybody, of course, thinks they are reliable. We have to see how we are not, where we are not, and that seeing is a beginning of being.

It is an absolute perfection, and as it were divine, for a man to know how to enjoy his being loyally. We seek for other conditions because we understand not the use of ours; and go out of our selves, not knowing what is abiding there.
Michel de Montaigne, *Essays*

Sailboat

For those trying to recognize and understand the fourth way's idea of centers or functions, this note may prove useful in describing the functions and their relationships in a different way. For those already familiar with the functions, it no doubt offers less, but perhaps will lead to an insight or two. The following is much like G's carriage-horse-driver analogy.

The analogy is this: We are like boats. Our body is the boat itself, with its characteristic shape and consequent strengths and weaknesses. Our emotions are the wind which fills its sails. And our minds, charged with adjusting the sails and the rudder to move in the direction intended, are asleep at the wheel, dreaming.

Our boat with its wind and pilot is our fate, essence. How we deal with it depends on how well we know it. We may be a boat designed for speed, or long voyages, or perhaps designed to operate well in shallow water, or with little wind or a lot of wind. Many, many different kinds of sailboats, many different essences.

Nonetheless, sailboats fall into one of several types, as do our essences.

Additionally, we tend to be becalmed. When the wind rises, that is, when emotions increase, we try to avoid it, we reef our sails. And so go nowhere. But we have an ability to use the wind—in fact, that is our greatest ability—but we have to learn it. We begin with the non-expression of negative emotions. It isn't the way the wind is blowing that determines the direction you sail your boat, but the set of the sail that catches the wind and, with a pilot watchful and active, takes you where want to go.

Starting Over

The triangle repeats
The web repeats
The circle repeats

The enneagram itself shows us the recurring nature of a cosmos. The circle begins at point 0 and ends at point 9—which is again point 0. The inner web is the repeating sequence 1428571..., and the triangle is 0-3-6-9/0... Completion is a starting over, a new beginning.

I find it important and probably essential that I start over in my work on the fourth way as often as possible. Every day I begin again, begin to exercise the basic ideas, try to understand them for the first time. I try to remember myself for the first time, for the first time sustain this self-remembering, for the first time

actually realize the profundity of divided attention. For the first time, decide once and for all: Do I want to pursue this? Why?

The master is the one beginning anew each moment, open to possibilities. The fool and the charlatan rest on their laurels and are certain. The rest of us are somewhere in-between.

This is a life's work: The further you get, the further you see to go.

I realized, in writing that last sentence, that I've gone through a lot of changes since I first became acquainted with these ideas. The way I think, my attitudes, how I feel, react emotionally, have all changed significantly. I realize this now because I was wondering what it would have been like to have read that sentence back then, when I was sorting through different attractions of the magnetic center, searching for the miraculous. I think that the sentence would have struck me as depressingly empty, as if all one could hope for in this way was to lose everything and arrive at nothing.

Today, though, I see that sentence as the way, the life, and anything that does not exist in just that way as quite dead. Nor do I see beginning continually as some sort of limitation of possibilities. No one has ever, or will ever, go anywhere of value that does not begin in this moment. Any other "attainment" is illusory, ephemeral, "an insubstantial pageant faded" immediately. We can bring more and more to this moment, but we gain nothing by chasing after next moments. But it requires this continual return, this continual new beginning.

Another way to view this is that we can not build up and save things *in time*. What we truly gain is *being*, and that is with us each moment. Any real attainment is eternal, out of time. In other words, this continuous restarting is a means by which we dismiss all those ephemeral achievements and build on what is real. And if, by starting again, we should attain anything in this living moment that is of value, it becomes part of our being, hence

available to us each moment, and it behooves us to continually "clear away the dross", or "separate the wheat from the chaff", so that our existence becomes increasingly grounded in our actual being and, given right effort, ever richer.

"Be clever: Remember yourself."
P. D. Ouspensky

The Technology of Consciousness

Our mind/heart/body is a complex machine, or interacting combination of machines, designed to work with and produce certain matters (energies). While we ordinarily have no knowledge of the possibilities of this vast mechanism, there is a theory that, given proper knowledge, we can learn and acquire practices that attain those possibilities, practices that improve and ultimately perfect the operation of the machinery. The result of this perfection is a constant condition of the highest energies and finest operation, enabling a connection between us and divinity.

But what does the divine have to do with technology? And surely the divine, if it wished, could simply make us—create us as, or transform us to—the highest energies and finest operation …

The theory is that the purpose of our existence as we are is to require *us* to make this transformation, not alone but with help, but we must make the effort, and we must learn how. Help is given as direction, indications, a confusion of hints (some good some bad, but most a mixture of both), and the

very weeding-out of the bad and cultivating of the good is a part of our learning, part of our effort.

We are, then, by design imperfect but capable of perfecting ourselves, to gain something for ourselves that we most deeply seek. And, perhaps, by so doing,contribute to something much bigger than ourselves. By design.

The basic technology has three steps: destruction, refinement, and regeneration. In terms of the food diagram, destruction is the breakdown of incoming material (food, air, and impressions), refinement is the continual separation of finer from coarser matters, and regeneration is the use of certain of these finer matters by higher consciousness.

The fundamental diagram of the fourth way, the enneagram, has been anthropomorphically represented as the "food diagram":

This diagram shows how we transform coarser, heavier matters to finer matters, higher energies. The food we eat, for example, ultimately becomes the extremely fine, powerful energy of sex. In the technical terminology of the diagram, the matter or "hydrogen" 768, "do" 768, is transformed into hydrogen 12, "si" 12.

To a certain extent, the transformation of our energies occurs mechanically, that is, we do not consciously participate in the process. Sex energy is produced without our control. But there are other parts of this diagram, other processes in us, which we *can* consciously control. Indeed, if we do not attend to them, they will not occur.

The points at which we can control processes are known as "intervals". In the musical terms which are used in the food diagram, there is an interval (a missing halftone) between mi and fa, and between si and do. Some intervals are bridged mechanically, and some may be greatly facilitated by conscious action.

For example, if we follow the line of the food that we eat, we see it starting at the mouth where it is called do 768, descending to the stomach where the now masticated and more refined material is called re 384, and via the venous bloodstream into the lungs where the material is called mi 192. Here an interval occurs, the mi-fa interval. Nature ingeniously provides the necessary "shock" to bridge the interval by introducing a new octave, breathing, at this point. The energy do 192, the influx of air we breathe, combines with the product of digestion mi 192, in the lungs, enabling the digestion process to

proceed to fa 96 and so on. The interval has been bridged mechanically, automatically, by our breathing.

If, instead of the digestion of food, we now follow the octave that begins with our breath (inhalation), we again come to an interval at mi, in this case mi 48. And here, we come to a problem. Whether nature intended this interval to be bridged or not is largely a moot point—the necessary shocks to bridge this gap are lacking in us. They are lacking because we do not perceive the world we live in with sufficient intensity, but instead in a muffled sort of way. We can, however, consciously increase the intensity of our perceptions, and so bridge this interval, allowing mi 48 to be further refined, even up to extraordinarily fine energies.

The technique we use to intensify our perceptions is self-remembering. Self-remembering, properly done, vivifies our incoming impressions (in the diagram represented by the line entering at the eye as do 48) by splitting them, and so, in effect, doubling them. At this point, we leave physiology and begin to talk in terms of psychology. The matters of hydrogen 48, 12, and 6, are psychic energies, and it is these we cultivate. By applying the necessary "shock" to bridge the interval, we not only allow the octave of breath to continue further than usual, we create sufficient force for the octave of impressions to proceed to its next interval at mi 12. The single effort of self-remembering causes refinement of energies to proceed on two octaves that are otherwise stuck.

Work of the eyes is done,
now for some heart-work
Rainer Maria Rilke

In addition to what we've spoken of thus far, and in addition to the diagram shown above, is the possibility of still another "conscious shock". This effort is concerned with the interval at mi 12 which is in the impressions octave—the line shown in the diagram starting at the eye. The effort required to enable mi 12 to proceed on to fa 6 requires a certain facility with *emotions*, and the result ensures sufficient energies to enable our highest possible functioning.

Energy is the mechanical side of consciousness.
P. D. Ouspensky

All the hydrogens 12 and 6 in the world will not help us if we are unable to use them intelligently. In fact, such energies might well be dangerous. Such matter is highly volatile and explosive, forming its own channels of release if unused, or deepening existing channels in misuse. Other disciplines, albeit unwittingly, may generate and accumulate certain of these higher hydrogens, yet any practical results tend to be purely accidental or, at any rate, applied without understanding. There are "ways", for example, in which one develops finer

matters and then uses them to visualize extraordinarily refined images, images that, because of the use of finer matters, seem much more real than our ordinary life. In such a manner people become enamoured of illusion, and find themselves at a dead-end without ever knowing it.

Or, as another example, people may work on the "wrong" hydrogen, for example si 12 instead of mi 12. We see this in various attempts to control and "sublimate" sex energy by means of less effective energies: the classic example of the monk banging his head against the cell wall in a desperate attempt to overcome the power of sex comes to mind.

Work on the fourth way must, above all, be conscious. We must know what we are doing and why. There is no authority to tell us—a thousand clues but no authority—so we must verify each step along the way, learn each little technique or tool as we encounter it, and so build a practical tool-chest and personal map, tried and true and of our own devising. But we need help.

There is another way of viewing the technology of consciousness which may also seem theoretical at first, but is at least equally valuable. This is based on a somewhat different map of the human machine. In this case, we speak of the three parts (seen in the food diagram above), further divided into three parts (and those three parts further divided into three parts as well but we will not go into it that far here). But now we speak of these parts purely in terms of the psychological functions. In speaking this way, the top part we call the intellectual center—it is what is commonly referred to as mind or thought. The middle part is the emotional center—our "feelings", a poor word to describe something that is distinct from sensation. The lower third is the center of our physical functioning, including sensation, movement, and sex. It is the work of the fourth way to harmonize these different parts.

"There are, as we have said many times now, three distinct types of soul that reside within us, each with its own motions. So now too, we must say in the same vein, as briefly as we can, that any type that is idle and keeps its motions inactive cannot but become very weak, while one that keeps exercising becomes very strong. And so we must keep watch to make sure that their motions remain proportionate to each other." Plato, *Timaeus*

The key idea I want to discuss here is the profound insight that observation of our attention—which requires an existing and accurate knowledge of true psychology as may be acquired after years of fourth way study—determines without doubt precisely which part of which of the three centers is active at any given time.

The importance of this lies in the realization that when our attention comes from certain parts, as opposed to others, our possibilities of exercising consciousness, and harmonizing the work of centers, become that much greater.

Today, as always, there are various "spiritual" movements, varying greatly in intent and effectiveness. Many such teachings concentrate on the physical functions, primarily the moving center, focusing attention on controlled movements for extended periods of times resulting in an increase in finer hydrogens, permitting more refined perceptions and more powerful experiences.

It is somehow guessed that the movements themselves are sacred, but the knowledge of centers and the workings of attention which make such results possible is completely unknown. Almost any extended control of attention produces results, partly simply from the fact that it restricts customary wrong work. If, in addition, the activity requiring attention serves to some extent to bridge an interval in an internal octave, the results will be more impressive, though again, the realization that it is the bridging of an internal inteval is lacking.

But techniques that focus on the emotional center are also relatively common. Attending church services, for example, may require a person to focus on more proper emotional behavior and restrict the expression of negative emotions for an hour or more, producing some not unpleasant results. Or an Eastern meditation practice may focus attention on the intellectual function, keeping it from wasting energy in daydreams, useless deviations, and so on, again limiting the loss of finer energy. But it is generally assumed that the object of attention, a mantra for example, is producing the result. All of this lacks gnosis.

To put it simply, we have an intellectual, an emotional, and a physical component. To begin to qualify this, we must understand that each of these components also has an intellectual, an emotional, and a physical component. And it is at this level, this secondary level so to speak, that the nature of attention differs, thus allowing us to determine which part we are using, which part we are "in", based on the nature of our attention.

For example, we may attend to our thought, we may attend to our feelings, we may attend to our movements, *but it is with the intellectual part* of these functions that we so attend (1). The significance of this is that the intellectual parts of the different components work well together, whereas the emotional and physical parts work apart or, when trying to work together, make a mess of things. Our road to unity lies in the harmonious functions of our parts, and that harmony requires our attention.

Now the way this relates to the food diagram discussed above is that it is in the very use of these intellectual parts that we can "bridge intervals", that we can supply the necessary "shocks" to further energy production at those points where the shock is not automatically provided by nature. Self-remembering *is* controlled attention, and controlled attention of a very special sort. Our attention is divided, and so doubled, and we need not stop at that. And, curiously, it is with attention to this attention that we can learn proper use of these finer energies. Never was a finer machine even imagined.

Note It may be useful to think of the intellectual parts of centers as the "attentive" part, because intellectual here means something quite different from what we normally think of as intellect. For example, the intellectual part of the moving center may be seen in a Tai Chi exercise, the intellectual part of the emotional center in a wordless appreciation of beauty.

Storming the Kingdom of Heaven

From Here to There, and Back Again

An essay on the differences between the artificially attained, the accidentally attained, and the practically attained states of higher consciousness. The molecular models you may see in the background include human serotonin as well as closely related "hallucinogens".

Artificial Attainment

It may seem strange, if we have not thought about it before, that something like taking drugs may result in experiences of higher consciousness—a relative term meaning at least higher-than-one's-normal-awareness, but more usually meant to indicate some of the highest states

of human experience. Part of the difficulty with accepting this idea is that it seems it would be somehow "cheating", as if someone were getting something for nothing, gaining illicitly and even indecently something that is attained otherwise only through a lifetime of dedication and devotion, if indeed not only bestowed by divine grace.

It is easily objected that the experience was simply a drug-induced illusion, and this objection is often even made by the experiencers themselves. And that is at least partially true.

Drugs

So what are these drugs that can offer a glimpse of "higher states"? I speak here of the so-called mind-manifesting, or "psychedelic" drugs, a group of drugs that include marijuana, hashish, and other cannabis preparations at one end, and mescaline (the peyote alkaloid now synthesized), psilicin (the mushroom alkaloid now synthesized), and lysergic acid diethylamide (first synthesized and later discovered in natural form in ololiuqui) at the other end. I've listed these in an ascending order of power in that a much larger portion of the first drugs, say hashish, must be consumed for any kind of psychedelic effect, than must be consumed of one of the latter drugs, say mescaline. In fact, 150 millionths of a gram of LSD can have a much more powerful effect than a full gram of hashish. (I mention modern synthesis of these molecules not so much for discussion here as to make the point that we are surely in a new relation to these chemicals if we can make them, and modify them at will).

At any rate, we come to something very interesting, especially with mescaline, psilicin, and LSD: the dosage is incredibly small, yet the effect extremely powerful if not to say profound (and it is certainly not necessarily profound). What this seems to indicate is that we are dealing with "higher hydrogens"; whether LSD "causes" the effect or "triggers" the effect, it has the same significance: a very small physical change produces (potentially) a very large change in consciousness, analogous to how a very small amount of matter can produce a very great amount of energy.

So, given some unknown optimum conditions, some miniscule amount of a substance and presto! a profound experience sometimes occurs. What of it? *The entire point of the psychedelic drug experience is to get a glimpse of a much higher consciousness that we do not normally have access to*. And to realize that now we have to find out how to earn that, achieve it, in a manner integral to our more typical level of consciousness. Anything else is a terrible illusion, and a too horrible price to pay for information that may be got elsewhere. I do not wish to make a moral or value judgment on anyone who considers or has pursued this approach—I myself have—but I

think it a good point a former teacher of mine made when he said "The trouble with drugs is that those who don't need them take them, and those who need them don't."

In a now-classic example of the use of drugs and perhaps their ultimate utility, P. D. Ouspensky relates how, after an experiment of his own, in which he tried desperately to convey something to himself from the higher state he was experiencing, he had managed to write down one phrase. The next day he read on the paper "Think in different categories". It is not a bad idea, in fact a good idea, but just another idea, with no particular power of its own for us, no power at all like the power that has made one read this far, the power that results from somehow knowing there is much more, and that leads one to look for a way to it.

[All that said I cannot help but add that I don't believe anyone has since approached Ouspensky's acquired ability to "think in different categories" in a practical way. It should go without saying that what is demanded is not to think in arbitrary, "alternative" (that is, reactionary) ways, but to in fact internally test and build a new and superior model of the universe and use it.]

Accidental Attainment

Too, it must seem strange to hear that an epileptic seizure, or a near death experience can include an experience of higher consciousness. Here the objection is more often that some temporary or permanent physical damage or condition, say lack of oxygen to certain parts of the brain, must invariably produce just such a convincing hallucination. In this case however, the objection seems most often to arise from someone who has not had the experience, and many of those who do have the experience seem to adjust their lives from that very day. At any rate, there is no virtue in assuming that the experience is invalid—this is rather forcing the data to fit one's preconceptions, the preconception that higher consciousness is bunk. The data, that is the reports of the experiencers, suggest otherwise.

While much of true knowledge available today is also ancient, the knowledge of the near-death experience is truly modern. Not that people did not have this experience before (Plato's *Myth of Er* being an elaborate and apparently elaborated example), but rather that today it is possible for reports of that experience to be shared and studied like never before, and the reported nature and effects of it can hardly be denied by an open mind. In addition, due to modern science, more and more people are able to

recover from extreme states that would have surely meant death one hundred, fifty, or even ten years ago.

Depending on one's belief system, there may be no objection to spontaneous and accidental experiences of higher consciousness—these may be, for example, described as (indeed they may be) divine grace. But such acceptance is usually limited to experiences interpreted within the narrow stricture of dogma acceptable to one's beliefs. A Catholic will hardly credit a Bushman's vision of a tree god any more than the Bushman will credit a Catholic vision of a God treed. And someone considering themselves a scientist may well regard any such visions as due to the above-mentioned physical causes.

In any case, none of these means of experiencing higher consciousness has much to commend it in the way of a practical approach. The use of the powerful psychedelic drugs is inherently dangerous and ultimately fruitless. Even if one can experience a higher state under their influence, after the experience one is no longer in the higher state, and only the vaguest of memories concerning it remains. All one can do, and few accomplish this, is somehow remember there was *something* there, and seek to find it by another path.

Regarding the near-death experience, this, of course, is not to be recommended:-O. In one sense though, these experiences seem to be of more practical value. The reports of profound influence in the experiencer's lives are often supported by witnesses, and the descriptions of the experiences themselves are often imbued with an uncommon beauty and serenity of truth. Nonetheless, hearing or reading another's report of higher vision may stimulate one to search on, but can hardly be the end of that search. Secondhand, it can have no such power.

As for divine grace:

'tis a consummation devoutly to be wished.

Still, what could one keep? What could one remember of higher states in lower states? Again, little more than the realization that there is something there, and a renewed commitment to seek it. In the case of saints and mystics and others who do report on these experiences and noticeably change as a result of them, there is something more at work here—that is, these individuals have in one way or another cultivated not only a receptivity to these experiences, but normally even live in a state or situation that aids in their remembrance. As a very general statement to

illustrate this point, they are more likely to be isolated ascetics than bank presidents. And their way of life is aimed at gaining the kind of being that can profit from these experiences.

The Near Death Experience

One of the most remarkable facts of the near death experiences related by others, is their *intelligibility*. That is, they convey enough to give us the ability to understand something of the validity and even the nature of the experience, although one has not oneself undergone it. This is nothing at all like the drug experience which is invariably relayed in mystical, or rather subjective enthusiastic and incomprehensible, anecdotes that almost always leave the inexperienced listener with a distrust of the experience.

Ouspensky spoke once of how one can realistically determine the validity of the mystical experience through a mere summary study of the reports in different places over different times and recognizing the commonalities. Similarly, I think, with the genuine reports of near death experiences. Of course, one can find many that do not fit the pattern (one can also find many so-called mystical experiences that do not fit the pattern) but this again relates to the education of our ability to discriminate. Anybody can say they know the way to Philadelphia, so how do you determine the more valid from invalid directions? You must already know something, and figure out how to build on that.

The Intended Experience of Higher Consciousness

A few comments on neo-Platonic, Christian, and Sufi practices.

Plotinus, more than anyone else, is the figure most associated with neo-platonic mysticism. Here was a fellow absolutely, almost perversely, dedicated to the experience of higher consciousness. Unwashed, unkept, he followed his best guesses, and in the end said his life contained nine experiences of transcendental consciousness. Plotinus comes down to us in terms of the philosophical picture he drew based on his experiences.

I'll avoid stories of Jesus here when speaking of mystical Christianity, and instead begin with Paul. It is at least possible, though near heresy for many, that Paul's experiences may have been related to (temporal lobe) epilepsy. To many people that is to negate them but, as I've discussed above, such experiences may well be of higher consciousness. I'll only add that historically, such experiences were often recognized to be of great value in diverse cultures (for example, the Greeks' "sacred illness"). Also, even if one accepts that epilepsy of some sort may put one in momentary contact with higher consciousness, it is always the same problem—what does one do with those experiences, what can one remember, what can one keep?

There is no denying that Paul, however he contacted higher consciousness, held it well. At any rate, the expressions of love in Paul (not the pseudo-Paul of Timothy and other faked letters) are unmistakable and unforgettable, and proved so long-lasting in time as to evidence eternity (see Time and Eternity). It is equally obvious that because someone has temporal-lobe epilepsy, they do not become like Paul. But the inexperienced must find a physical reason for everything, and ignore anything that refutes that.

But I have wandered off. With Paul, we do not seem to have the "usual" intentional acquisition of higher states of consciousness. There is no record of long labor in school work and in fact quite the reverse—we read instead that he was struck by a higher state while on the road to Damascus performing his professional duty of persecuting Christians. If this is not a metaphor, it is an historical record of a fortuitous occurrence. As Ouspensky said, it is nice to find money on the street, but one cannot count on it.

In Sufism, we have perhaps the richest Western literature of the deliberate work on the technology of consciousness prior to the modern appearance of the fourth way. Sufism is as varied as any tradition one can find, and the pursuit and attainment of higher states may have an intellectual, emotional, or physical bent, and often these approaches are combined in some way. But the "proof is in the pudding", and it does not take a great scholar to recognize powerful independent expressions of a common, though individually expressed, higher experience.

But all that says very little about my topic, and I despair of doing better no matter how much I write. Investigate the ancient Vedic traditions and yoga, Native American teachings, Eastern Orthodox, Buddhist and more than I will ever know. But, on the fourth way, view these things from the point of view of the fourth way. Or pursue these other approaches in their own right and don't mix things. And of course, for every genuine teaching there will be ten if not 100 misinterpreted "enhancements" of it, some closer, some downright charlatanism. But remember:

"People would not counterfeit gold if there were not real gold." - Rumi

I once had the opportunity to look through some of the boxes of papers at Yale University of Ouspensky's lectures, letters, and so on, and in them there was a letter to Ouspensky from someone who had met with someone or other in the Sufi tradition in the mideast. The Sufi said that truth was like the hub of a wheel, and there are as many ways leading to it as there are spokes to the hub of the wheel. But it was important to find one's spoke

and stick with it, because by jumping from spoke to spoke one got no nearer the center.

There may be many ways to the truth, but for me there is one, one that recognizes others, and can do so without condemnation. This has been a fragmentary essay at best, so I'll attempt a summary to tie a few things together and then just let it be. In a few words, all I mean to say is there is little value in discounting other approaches, or even other seemingly illegitimate experiences, but much to be gained from seeing how these relate to the fourth way. The fourth way is not naive, far from it, and in its higher expressions not only recognizes the validity of other approaches, but is strengthened by understanding them. But it is a distinct and definite "spoke". Do not spend your life searching for a way—find yours and move on it.

Prayer and the Divine

Work as if everything depends on work. Pray as if everything depends on prayer.
G. I. Gurdjieff

I want to discuss the relationship between prayer and the divine, so I better start by telling you what I mean by prayer, and what I mean by the divine.

Gurdjieff spoke about prayer, in Ouspensky's *In Search of the Miraculous*. He was asked if prayer was useful, and replied that it was if one dealt with it in a certain way. And the way he described directly related to the teaching he was giving—realize that it is an "I" that is praying, realize that we do not even understand what the words that we are saying mean, try to understand them, and so on.

It seemed undeniable to me that the technique described could be of some use psychologically, but it was a long time before I understood that it was in fact the means to prayer, at least on the fourth way.

We do not see ourselves, we do not know ourselves. We think we do, and as long as we think so we can never see ourselves, let alone know ourselves. It may happen that we slowly begin to recognize a certain inconsistency, as if we were not quite a unity. Some extreme situation produces a reaction that we can only label as something like "that was not really me!" With persistent work, over the years, we begin to recognize almost everything as reaction, as automatic, unthinking, unconscious response. This vision, painful as it is, is a necessary preliminary to separating 'I' from 'not-I', and we come to see that we are not at all what we thought we were. In fact we seem to be nothing, except perhaps an almost unnoticeable, and unnoticed, awareness.

I am searching for some kind of image here, and what I come up with is something like an ice-encrusted window. The appearance of the window may be wonderful and complex, with the patterns created by "Jack Frost", but it only lets some light through in a distorted fashion. If we can manage, despite the cold, to clear off even the tiniest portion, we can begin to see through to whatever lies beyond. We begin to use that window for vision as well as light. Our conscious state is like that iced window. With enough work, friction properly applied, we begin to improve on it, perhaps sacrificing some of that design (personality) of which we were once so proud, and now begin to see it simply as an obstacle to be overcome.

Consciousness is divine, pure consciousness may be pure divinity. At least we can know that, relative to us, consciousness is divine. We may begin to see consciousness as not so much "ours" at all, but something more than that which we normally think of ourselves to be.

It is important to realize that calling consciousness divine does not reduce what divinity is—we cannot reduce what divinity is—though we may certainly underestimate what consciousness is.

So what are gods and angels? Consciousness. But are they personified, individual existences, with lifetimes and so on? Beats me. One thing I have come to understand is that from higher levels of consciousness we can understand lower levels, but from our habitual lower levels we almost cannot help but misunderstand higher levels. For us it may well seem a problem of just how to relate to, how to "address", higher consciousness. Really, no problem. Address higher consciousness from the attempt to be

more conscious. And Gurdjieff's approach to prayer becomes obvious and profound.

But what can an angel *do* for us? Nothing, really. We have to do it ourselves. That is our work: to act by pure will, not because we are forced by desire, circumstance, or false personality. It may be part of the work of the angel to create conditions and to show us ways in which we can do true work, but it presents for us no easy solutions, no shortcuts. We have to do the work, and all that could ever be given us is the opportunity, perhaps accelerated, to *work*.

To truly pray is to fully inhabit our being, and be in relationship with the divine. It may be that as we penetrate more deeply into our conscious being, we find it is more and more like prayer. That consciousness is prayer. Just as it is conscience, compassion, sincerity, and so on. The gem of many facets. The pearl of all color.

We must continually watch as we pray.

"Watch. Sleep not."

The Role of Thought

In school work there are undoubtedly *obligatory* subjects and there are, if it is possible to put it in this way, auxiliary subjects, the study of which is proposed merely as a means of studying the obligatory. *P D. Ouspensky*, In Search of the Miraculous

All who want to participate in the fourth way have to think about the ideas, just as all have to work on emotions and the physical. But these essays include non-required thinking, auxiliary approaches, in the sense that some of them offer tools for those with a particular facility for such tools, but for those not interested in it, not attracted to it, some other auxiliary approaches are more useful.

Why *think* about these ideas? Why not just *do* them?

The point is, we *do* nothing. We think, we feel, we act. These are our tools, and each has its place. And in each of us, one of these three has

the predominant place. It is right, natural and preferred by us. And it is our strength.

We do not use a telescope to examine the content of a cell, nor do we use a microscope to examine the stars. We would smile indulgently (after some period of alarm) if those devices would say "Looking into small things is best" or, "Looking into great distances is best." Each has its own best use, but the technology of each has profited by that learned with the other. Optical refinements, new technologies to correct distortion, photograph analysis etc., learned in one are soon applied to the other, to the extent that they translate well. In short, their progress is in each other's interest.

We, of course, are more complex mechanisms, with many more possibilities. A very large part of realizing those possibilities is finding out just what kind of mechanism one is, what its strengths and weaknesses are. "Know thyself" becomes a way of saying "know your instrument."

The purpose of the right development of functions is to make them more receptive to consciousness. A balanced, harmonious machine is one that performs its function best. Whether this function is the expression of ideas, emotions, or actions depends on the individual. In the fourth way, we see that school, which requires all types and all centers of gravity, nonetheless has the flavor of its teacher's type and center of gravity. It may even be viewed as a higher development of the teacher's essence. But one that is naturally based on it.

"G. himself said that there are no "general" schools, that each '*guru'* or leader of a school works at his own specialty, one is a sculptor, another is a musician, a third is still something else, and that all the students of such a *guru* have to study his specialty." P D. Ouspensky, *In Search of the Miraculous*

There is room in the fourth way for every true expression and conscious development of essence, and the possibilities are limitless.

The purpose of the fourth way, for you, is the consciousness of your Self. That that consciousness is attained by working with others in many different ways to aid in their conscious development is wonderful and practical.

Rodney Collin once remarked how people took the fourth way as merely some way to make adjustments here and there to their psychology, and forgot that it was meant to lead to the miraculous. That is the role of thought—to lead to the miraculous.

When I heard the learn'd astronomer;
When the proofs, the figures, were ranged in columns before me;
When I was shown the charts and the diagrams, to add, divide, and measure them;
When I, sitting, heard the astronomer, where he lectured with much applause in the lecture-room,
How soon, unaccountable, I became tired and sick;
Till rising and gliding out, I wander'd off by myself,
In the mystical moist night-air, and from time to time,
Look'd up in perfect silence at the stars.
Walt Whitman

Sexuality and Pornography

The fourth way has much to say about sex, but it comes later, chiefly because the sex function assumes its final form later in life than our other functions, so it is necessarily affected by the formation of the other functions, which are therefore studied first.

Pornography as such is little spoken of, although Ouspensky does discuss "infrasex" in his *New Model of the Universe* and he quotes Gurdjieff on the "abuse of sex" in *In Search of the Miraculous*. We have to tread carefully when dealing with sex in general because sex energy is a refined and powerful energy (technically, it is *si 12*), hence explosive if mishandled. For example, both those that defend pornography ("freedom of speech", etc.) and those that

attack it ("filth", and so on) may be equally unbalanced due to a misuse of sex energy.

The energy of the sex center in the work of the thinking, emotional, and moving centers can be recognized by a particular 'taste', by a particular fervor, by a vehemence which the nature of the affair does not call for.
G. I. Gurdjieff

In order to better discuss what pornography is, we need to see what sex is, and that is a tall order—our ability to see our finer energies is profoundly limited by our normal state of being, and so we must increase in being to see sex for what it is.

Rodney Collin referred to the sex function as one that "seeks perfection". That is, for example, one which seeks our other half, our missing complement (to draw on Plato), to form a more perfect union (and now Lincoln). But it manifests similarly in many ways, from the trivial to the profound. A proper balance of sex energy, for example, aids in healing a wound, or saying the right thing to someone offended. But it has also been associated for as long as we know with attempts at human transcendence, in many cases with resisting sex, in some cases, pursuing it. But it cannot be ignored on any way, and on the fourth way we seek to harmonize all functions.

So, herein lies the question: How can we have a "right relationship" with sex? One which does not deny it or abuse it, but integrates its higher possibilities into our everyday lives? Certainly the denial, the suppression, of sex won't help us—witness the deranged preachers or extreme moralists of our or any other time. But incessant "satisfaction" of every sexual impulse leads nowhere as well (although, within limits, that is a lot less dangerous for all concerned.)

A genuinely healthy relationship with sex is a very big thing, because it means right work of a center with Hydrogen 12, the same level as higher emotional center. Our work on the non-

expression of negative emotions is an indirect and productive way to prepare for right functioning of the sex center. Like the higher centers, the sex center is said to have no negative half. So, as O. said, "Never let anything negative touch sex."

I am a heterosexual man, and there is a certain sexuality possible for me. It is no doubt more and larger than I have experienced, but that does not mean that it is "all-inclusive", that it can ever have the same ultimate unfolding as the sexuality of any other person, whether male or female, gay or straight. Sexuality is very deeply connected with who we are, as it explicitly involves our essence signature, our DNA.

To get to the point, my sexuality, even fully realized, whatever that may mean, is not the same as your sexuality, fully realized, whatever that may mean. As we are different, so is our complement different. Our sexuality is our relationship to our complement. How do we deal with the "other"?

Through hard experience we learn we have to "listen". We learn we have to suspend our own judgment, if only for a moment, to let another in. We learn our view of things is not so all-encompassing, and we may have to suffer tremendously to come to allow for another. Sex, true sex, cannot compromise because it is real. Dangerous compromises are made in people's lives, dangerous because the achievement of these compromises is sleep ('"love" is blind'), their failure a rude awakening.

Because most, if not all, relationships are not perfect complementarities. Not that they should be, or can be. But it must be recognized.

So what then, is pornography?

In our sleep, in our somewhat perverse craftiness, we have learned certain psychological manipulations that please certain

parts of ourselves. Lacking any real psychological knowledge, we could not say, for example, "Oh!, I am feeding one 'I' at the expense of another." And this is what pornography does—we shift, we redirect, a certain vivifying energy into duller channels, and so experience something even through our sleep which, if not convincing, is at least distracting. An opiate.

Pornography, and I speak with male sexuality in mind now (and female pornography is rare), literally charges our blood. We rather easily, almost irresistibly, introduce hydrogen 12s into our bloodstream—it is a "rush".

It is especially important here to talk in parallel—pornography and sex: in bed and aroused with my love, as opposed to sex-starved and with "literature" designed to sexually excite. In either case, I may find "release": the use or abuse of si 12 which diminishes the uncomfortable experience of si 12 looking for an expression. What is the difference?

Things are not simple. And I am talking about people in the work, of course. We must see "who" in us is doing "what". There is a sex which leads to regeneration, a sex which leads to generation, and a sex which leads to degeneration. A sex which leads to Life, a sex which leads to life, and a sex which leads to death.

This may be a good time to discuss the idea of ascending and descending octaves. Ascending or descending is not a value judgment, but simply a way of stating whether the result of a process has a higher or lower energy level than the start of the process. For example, the ray of creation, which creates this beautiful world we live in, is a descending octave. It starts in perfect unity and absolute energy, and by the time it comes to Earth is relatively lifeless, moribund. This is the same (albeit at a much lower level) as human creativity in the sense it is most commonly used—Andy Warhol was creative, Madonna creative, and so on. Some sort of "inspiration" is changed into something they can express and market.

True art, on the other hand, objective art, is an ascending octave. From lifeless pigments, a Rembrandt creates an image that will

shake people for centuries (if they "get it"). From the common tongue, a Whitman arranges the words to acquire a life of their own. Properly speaking, this is not creation, but regeneration. (For a discussion of the processes of creation, regeneration, and the other four processes, see The Six Processes.)

In the case of creation, we have a descending octave—one which moves toward "more density of matter, less density of vibration" to use an old phrase. In regeneration, we have the opposite movement, and from something practically inert see arise something practically alive.

It is in this sense we can judge our sexuality. There is a sexuality of release—it is a descending octave in that we have less energy afterwards, and that release of energy may be very welcome. There is also a sexuality of regeneration, in which proper restraint (what G. elsewhere called "celibacy in all centers"), or even proper experience, can lead to an increase in energy. An energy that we can use for regeneration. Or rather, an energy that *is* regeneration.

To Put Away Childish Things

From the first letter of Paul of Tarsus to the school at Corinth:
When I was a child, I spake as a child, I understood as a child, I thought as a child: but when I became a man, I put away childish things.
Chapter 13, verse 11

Brethren, be not children in understanding: howbeit in malice be ye children, but in understanding be men.
Chapter 14, verse 20

Paul is not talking about dolls and games, he is talking about anger, jealousy, cruelty, spite, judgment and all these childish emotions in which we lose ourselves, forget ourselves—hurt ourselves and others for no gain and much loss.

But suppose one really likes those sad country songs, or enjoys rooting against a disliked football team, watches a negative TV show, and so on? Must we give it

up? To my mind, to judge these things and so attempt to purge them from our interests is to miss the point entirely. Judging ourselves or others for something we now call childish, is simply substituting one childish emotion for another. In addition, these interests of ours are a big part of what we are, and that is not something we are trying to avoid; in fact, it is just the kind of thing we are trying to see, to penetrate.

Much better to begin to apply our understanding of system ideas to our life, our interests. The point is, there are *reasons* for putting away childish things, and when we *understand* these reasons, both theoretically and personally, practically nothing will be able to stop us from putting away those things that are delaying our evolution, interfering with our deepest intents.

Only apparent change comes from without—whether that "without" is society, or our false personality. Real change comes from within.

So, when I find myself identifying with the music or the game I try to see "who" is identifying. Which "I"s are these, what do they want? The point is to observe me acting them, to watch me, for example, watch the television. Watch the "I"s, observe them with interest, but don't get stuck on any observation. No preconceived judgment—our own or others—has any real power to change us. It is just another way to avoid seeing ourselves, a buffer, a way to avoid work. We have to learn our machinery by watching what it does. Again and again and again until we separate from it, like a seedling separates from its empty husk in the sunlight. And slowly we learn how to loosen a screw here, tighten a valve there, and begin to conserve energies, and refine them. Ultimately, to store and consciously deploy fine hydrogens as we intend.

On St. John's Wort

When I first heard of the herbal use of Saint John's Wort and read some of the common experiences with it, it reminded me of statements I had heard and read about Prozac. I had been interested in such drugs as Prozac but really had no desire to try it nor did I have access to it—without lying to a Doctor, getting it illegally, or whatever—generally not practices conducive to opening pathways to conscience.

I say I was interested in it, though, and that for two reasons. One reason was that I was curious about the fact that Prozac, and similar drugs, are so-called serotonin re-uptake inhibitors; that is, they are believed to influence our use of a product of the pineal gland. This gland was the one Descartes called "the seat of the soul", and Rodney Collin also spoke

of it in interesting ways. Modern science generally admits it knows little about it, but all agree it is, for some reason, a light-sensitive organ functioning deep inside the brain.

The other reason such drugs interested me was in their time of action, or speed of effect—Prozac, for example, was typically stated to take about a month before the effects were felt, and this indicated to me it operated on a cellular rather than molecular time scale, as Rodney Collin might have put it. Some research into the matter determined that this was so—the time it takes for the serotonin re-uptake inhibitors to produce their effects is considered to be due to a long term alteration in receptor sites in neurons, the nerve cells of the brain.

In other words, unlike so many of the modern medicines that act almost immediately, say within a half-hour to an hour, because they introduce the chemical (molecule) directly to the receptor sites by either mimicking or duplicating a natural molecule, these serotonin re-uptake inhibitors had an effect, or at least used a technique, much more akin to the effect of herbal- or lifestyle-type approaches to health.

Now I was thinking last night about the effects of St. John's Wort. I should tell you that, unlike the situation with Prozac, I went ahead and gave Saint John's Wort a try. After 10 days or so, I first began to notice a subtle change in myself in that I had a little more resistance to characteristic irritabilities. When I first noticed this I realized it might not be the herb at all, of course, and thought maybe I was just in a good mood that day. But as I continued daily use, it became clear to me that the subtle change I had noticed was in fact caused by Saint John's Wort. But what came together for me last night for the first time was the realization that the particular areas of minor irritations and annoyances in which I noticed the alleviating action of Saint John's Wort were areas I had come to know quite well over many years of work on negative emotions.

Certainly Saint John's Wort may have other effects as well, but I am talking about the little daily annoyances and my own level of being in relation to them. It is as if Saint John's Wort gave a view of what having more being in that very area might be like—nothing so much gained as something so ridiculous becoming ignorable—but of course I do not mean to suggest that Saint John's Wort increases being. Being is a result

of our work, the development of will, and comes from within, not from without in the form of a pill, an environment, or anything else.

What interests me is that St. John's Wort affected me in an area I work directly on in order to work on being, and that it works something like Prozac, that is, like a serotonin re-uptake inhibitor. What this clearly showed me is that in working on these negative emotions I was working directly with neural functioning, and with reasonable certainty with the function of the pineal gland. And it was also clear that work on and change of being produces physical changes: in this case changes in neuron physiology, modifications of serotonin re-uptake (or total production perhaps), in brain cells. Of course it follows that *any* long-term repeated activity, for example repeated fantasy, anger, boredom, and so on, may cause changes in neurons—but the particular point in discussion here is that work on negative emotions appears to work directly with neural functioning known to be related to the pineal gland.

It need hardly be added that *not* working because we do not know what changes to our impressionable brains we are causing is absurd, because disuse, or any other activity, would also affect neural changes in knowable or unknowable ways. In a sense the issues haven't changed—the behaviors and states we want to encourage must be cultivated. It is only that now we are beginning to guess at some of the physical results of our behavior on our brain. And it is more than a little curious to me that the work on negative emotions seems to be directly related to the pineal gland.

(An aside about this in relation to the six processes: What we are doing,or trying to do, is apply a *form*—in this case the technique of work on negative emotions; apply it to the *matter* at hand—us, what we are, our being, characterized by physical components including nerve cells and psychological components including negative attitudes; and bring something new to *life*—the transformation of negative emotions into higher emotional functioning. This is, in Rodney Collin's terminology, form-> matter-> life, the triad of regeneration.

So with much effort we can, with consistency of action, change a habit such that we acquire a new habit. In other words, somehow we change neural patterns by changing neuron behavior or we change neuron

behavior such that neural patterns change, and the brain's plasticity seeks to automate whatever most frequently occurs (this is analogous if not identical with the "imitation" of the moving center).

A physical theory of this might be that consciousness (light) affects electrons in atomic shells, creating ions that determine charge and hence affect neurotransmission. In brief, and to the point: sustained or repetitive attention, rightly applied, can mold our physiology to conform to our intent.

A key issue here is: How might intentional action be different in effect from "learning-by-rote" on affecting speed of molding? Because conscious learning—understanding what we do—is as G said "ten times" more effective, that should be demonstrable in a rightly-conducted experiment studying neuro-plasticity with just these variables. We must perform these experiments ourselves, on ourselves, and move on, but there is nothing intrinsically denying more conventional scientific experiment, at least eventually, of establishing similar and even more exact practices.

But finally, regarding Saint John' Wort, I should say a few things. That it alleviates depression seems a godsend, and should certainly be recommended as a gentle means of doing that for those in need of it, fortunately not myself. A few minor side effects—a sensitivity to sunlight, mainly on my skin but somehow more general than that, is physically the main one and, for me anyway, minor.

But.

I feel certain that I am less able to remember myself in terms of continuity or depth while affected by the herb, and one explanation for that may be in just that central importance of intelligent work on negative emotions in the fourth way. It has been about two months now, and while I cannot say I've never had a weak two months of working, I can say that I've learned something about the effort required to achieve certain modest results. That effort is curiously difficult to muster—I get more superficially distracted than usual, but don't really care much. I am unable to bring intensity to it, which seems to doom any plans to continue with this thing (I some time ago decided to see it through this first bottle of 100 pills which is now nearly gone).

And now it is a few days since I last took any Saint John's Wort, and I notice old annoyances returning, especially old negative imagination, arguing in my head with people, with friends. I had not done this for months. Back to work!

On the other hand, also today, I notice a certain numinous quality to some moments...

The Mozart Effect

In the last few years, a lot of attention has been drawn to scientific experiments designed to prove or disprove what is called "the Mozart effect". It began with an experiment in which two groups of people were given a test on spatial skills—one group had previously listened to 10 minutes of a Mozart concerto, the other sat in silence. The result was a significantly better performance by the group that had listened to the Mozart concerto. People were surprised at the result. They shouldn't have been. Certainly psychologists shouldn't have been surprised.

Already in Ouspensky's first group of lectures we learn that our centers are divided into three parts, and that one of those parts—the intellectual part of whatever center—requires attention. We also learn that the intellectual parts of centers work together. That is, by being

"in" the intellectual part of a center, one is also closely connected with the other intellectual parts of centers.

Now Mozart's music is very much oriented to the intellectual part of the emotional center. Hence it is no surprise when another researcher finds a tendency, for example, for some of Mozart's music to be constructed according to the "divine proportion", a feat of the intellectual part of the moving center. In fact, the experiment on spatial skills, producing the "Mozart effect", exercised the intellectual part of the moving center. So, naturally, this function was energized or activated after the subjects had *paid attention to* a Mozart masterpiece.

Of course, this immediately led to such nonsense as exposing children in the womb to Mozart. No doubt someone will soon claim, if they have not already, that listening to Mozart in your sleep improves your intelligence. But what is required here is, first, to attend to the music, and second, to appreciate, or actively relate, to it. Mozart's music, if actively appreciated, evokes the intellectual part of the emotional center, receiving the fine hydrogens that the function can use, and so aids in a general harmony of the human organism. I trust it is needless to say that such modern "music" as the guy who takes a buzz-saw to a piano will have no such effect. Incidentally, that is not a "judgment"—the effect of a piece of music, or any piece of art, can be evaluated by consciously attending to its psychological effect in the light of a knowledge of our functions. One piece of music energizes the emotional part of the moving center, another the emotional part of the emotional center, and so on. We have here no less than an objective criterion for evaluating art. The subjective "school", which says such things as "I know what I like", and "Only you can know what is good art for you", merely describes our mechanical response to art that is produced by the same center of gravity as our own. But it gets worse—if we are completely in false personality, we can delude ourselves into liking anything, and even our essence preference is smothered.

It would be interesting to do this experiment right. Take a random sample population and divide it into three groups. One, the control group, gets no special attention, just comes and takes the test. The second, the Mozart Effect group, gets the treatment described in the

original significant experiment. The third group gets an environment consciously designed to evoke intellectual parts of centers.

The intent in the latter group would be to create an environment rich in finer "hydrogens", involving tasks that require the individual's attention to finer impressions in general. An appropriate piece of music playing. Quality art of high development East or West is presented and, if possible, appreciated. Ideally, each subject is individually addressed to evoke and maintain their intellectual parts of centers. For example, if they showed no particular interest in the music or graphic art (designed to evoke the intellectual part of the emotional center), one might try to discuss with them their thoughts about why we are here, the purpose of life, discouraging cute responses and encouraging real thought (to evoke the intellectual part of the intellectual center). Then they would go take the test on spatial tasks.

Another group of mystifying modern psychological experiments that comes to mind are the well-known experiments of Rupert Sheldrake, one of which I recall at the moment and would like to discuss. In this experiment—I don't have the material handy so forgive me if the paraphrase is not exact—Sheldrake had subjects surreptitiously observed in some random sequence, and suitable controls instituted. The idea was to determine if the subjects could guess when they were being observed. The results were significant, though not wildly so, but enough to give pause to a surprising number of the more open-minded psychologists and scientists who have looked into Sheldrake's apparently rigorous methodology. The results seem to contradict "common sense", that is a logic based on the known five senses, and lead to endless speculation about ESP and so on.

I have a simple answer, simple if you know fourth way language that is—the intellectual part of the instinctive center. A function we all have, operating as it should (if we are healthy, anyway), and one which we tend to be unaware of. That said, some people are more aware of it than others and, roughly speaking, such people are most often instinctively-centered, and naturally more adept at their essence proclivity.

Of course, this has nothing to do with "higher powers", which do indeed exist but have to do with the genuinely higher functions—

higher emotional and higher intellectual. But these higher functions are only operative as a result of enormous effort and science (in the real sense), or sometimes accidentally or fortuitously triggered by extreme emotional situations, such as apparent or imminent death. (For more on higher perceptions, see The Seven Houses of Perception).

Again, the experiment could be made more convincing. I'd do it like this: Let other researchers provide 100 subjects and I'll provide 100. We will perform the same experiment as Sheldrake's and my subjects will prove more able to determine when they are being watched than the other researcher's subjects. Why? First, I'd choose instinctively centered subjects. Then I'd select my 100 based on their being the best at sensing the observation in previous trials I had run. Then, I'd take my more sensitive 100 and improve the sensitivity of their instinctive center by having them fast and abstain from sex prior to the experiment. And so on. While I believe my subjects would "win", this has nothing to do with higher understanding, but could only demonstrate a little more knowledge of ordinary psychological functions.

Well, this essay is becoming a catch-all, but I'll trust in your tolerance. Regarding the modern sciences and psychology, I find it interesting to watch the development of the science of the brain. I came across this recently:

High Brain Centres Teach Lower Brain To Adapt To Injury
"Lower brain centres need input from the cerebral cortex initially to adapt to damaged sensory pathways. Once the lower brain centres have been given enough time to adapt to the damage, however, the cerebral cortex is no longer needed to maintain this new re-organized state. In this sense [...] the cerebral cortex acts much like training wheels for lower brain centres such as the thalamus."

From the University Of Toronto

This appears to be a good example of one of the ways our moving center learns—in this case it has learned from the intellectual center, in a similar way to how we learn to walk or ride a bicycle. The moving center learns by imitation. For example, the intellectual center performs some activity repeatedly and then the moving center takes

over (and performs the activity faster and better—at the speed of moving center in contrast to the speed of intellectual center).

I had a very young kitten once, and he was with me almost continuously for the first several weeks of his life, so I had become acquainted with his repertoire of behaviors. One day a friend came over, knocking at the door. I opened the door, my cat was right there as usual, and on opening the door we were confronted by my friend's large dog. My cat instantly went into that remarkable instinctive defensive response that we perhaps have all seen in cats—arched back, hairs standing on end, tail fluffed to look huge, sideways jumps, and so on. For the next several days, the kitten's playfulness showed a new skill—he would arch his back, raise his tail, and jump sideways at my feet and away again. His moving center had learned some new tricks from his instinctive center.

The study of the role and interaction of functions or centers is a very interesting and profitable one. Certainly we must study these functions in ourself, but we can also learn by observing them in others and even, to some extent, in animals. But the power of such observations is only realized when we begin to recognize the nature and strength of our own mechanicality. It is a way to self-knowledge.

Psychological Hydrogens

If we are to fully profit from the immense part of this teaching that tells us about "hydrogens", we have to make it practical. We have to realize it. Hydrogens must become as obvious and recognizable as fresh bread.

The idea of the hydrogens, which integrates fourth way cosmology with fourth way psychology, is the widely accepted notion that we are "the stuff of stars". But in modern thought, the stuff of stars is only primitive, ultimately combining into its most complicated expression—us. In fourth way thought, the stuff of stars is divine. And we are out here on some distant limb of creation, apparently more stuff than star, but ideally capable of recognizing and actualizing our stellar quintessence.

Hydrogen 48

As usual, more than enough indications are given to allow us to proceed. Mr. O., when asked, suggested our perception of a blank sheet of paper as an example of H48. Think about that, or better yet, feel about it. What does it mean? It is neutral, not exciting, nor exhausting. It does not affect our perception, we perceive it simply, without remark.

Hydrogen 48s are neutral hydrogens for us. Simple logic, for example, without an emotional element to it, works with H48.

Hydrogen 96

Hydrogen 96 is not naturally a part of our psychological makeup. It represents matters too coarse, energies too inert, to work properly with any of our centers. It is the energy of false personality, whereas H48 is the energy of true personality, and H24 the energy of essence. Physically, H96 is experienced as rigidity; emotionally chiefly as dullness if at all; intellectually as a mess. Indeed, the matter itself may still be among those we commonly refer to as matter, Ouspensky suggesting "vitamins" being at this level of hydrogen.

Hydrogen 24

We can look at a sheet of paper and see it quite differently. Certain papers, literally "finer" paper, show a texture and color that is derived from the natural substances that comprise it.

H 24. Nature. Driving down the road, a look to the distant hills, and something in me *feeds* on this. *Not* a blank sheet of paper. Or look at a marble ashtray, the grain of wood on your chair, a chunk of rock—attentive looking, actually seeing the thing and not just recording it from sleep, can be energizing, can refine our psychological state permitting finer distinctions of feeling and thought, and serve as a general tonic for the physical functions which work with H24.

This level already requires us, such as we are, to sustain our attention. Our essence works with H24, and our machines are so inclined toward personality that if we forget to maintain the production and use of H24, we automatically slip back into personality. In some cases—

through isolation in nature, school disciplines, drugs, and so on—we may be placed in a sustained state of H24, but without attention to it we are simply asleep in essence.

A bird seems to show us H24 of the instinctive center. Watch it look around for danger, preen itself. But a flock of birds shows another H24, this one of the moving center. The speed at which a bird moves its wings or picks a flea does not strike us—though it probably should—but to see a flock of birds apparently simultaneously veer sharply in flight, as if of an apparent single mind suddenly settling down to feed, is also H24.

By nature, our intellectual center receives neutral impressions at the hydrogen level labeled 48. A key idea of the fourth way is that we can *intentionally* refine that energy, we can in effect split that incoming H48, by an act of attention, into H24, an energy twice as fine, twice as dynamic. And the intentional splitting need not stop there. This splitting requires educated work of the emotional and intellectual centers.

Hydrogen 12Hydrogen 12 is, with only the rarest of exceptions, the highest energy we experience by nature. One H12 is the energy of true sex, another the proper energy of our emotional center, still another H12 is a physical energy naturally, but not normally, available to us. With hydrogen 12 we begin to approach a more harmonious "vibration". These are the energies intended for our finest emotions and our higher emotional center. It can be overwhelmingly powerful, and that is its blessing and curse. It has become our curse through unintentional misuse, and it becomes our blessing through right action.

If we look at the the table of hydrogens (see The Technology of Consciousness) we can see three different hydrogen 12s in the lower story of the human machine. One, si 12, is the normal end result of the octave of digestion or refinement of the food we eat. Another, sol 12, is a refinement of the air we breathe, and the third, mi 12, a refinement of the octave of impressions.

The first and third of these octaves, the octaves of food and impressions, are arrested at an interval (si and mi, respectively). The octave of air is not at an interval, and to some extent is able to pass on even to hydrogen 6 (la 6), thus keeping our connection with higher intellectual center ("spirit") alive, although without sufficient hydrogens to vivify our sleep.

Clearly, we need to find ways to bridge the two intervals. But let us keep this in perspective: the one interval, si 12, is most commonly bridged by reproduction, where the si 12 of the man and woman unite in the ecstatic shock that is conception; the other interval, mi 12, is most mysterious, and it would seem that here especially, the very refined and powerful work on the transformation of negative emotions might occur.

And even this is just a piece of the picture of the possibilities latent in these three hydrogen 12s. It is not impossible that other uses of si 12, for example, may be involved in establishing what G. called the higher being bodies, and it is likely that the octave of air with its sol 12 and la 6 may also be strengthened. The possibilities must be very great indeed, even unimaginable, as anything we can imagine with lower hydrogens could not possibly approach the potentialities inherent in these new and unknown worlds. It is, in fact, the miraculous.

Cosmological Essays

On the Enneagram

The problem with many popular interpretations of the enneagram is that they are not based on the source teaching, but simply personal ideas of ways to use this symbol. The original teaching of the enneagram is much more exacting (and, consequently, much more powerful) in the way it is used.

A typical example of the it-is-what-I-think-it-is approach is mixing wiseacrings of modern "psychology" with the enneagram. Another way of putting this is that many fads that supposedly use the enneagram could just as well use any other nine-pointed figure. Or, for that matter, eight- or ten-pointed figures. First of all, there must be a definite distinction between the three points where the triangle touches the circle and the six points where the inner-web touches the circle. These two groups of points are different in

origin and meaning, and to speak about all nine points as aspects at the same level is an indication that the speaker does not know that significant information. Further it is necessary to realize that the six points include a seventh point, and to understand why the seventh point is not represented.

The enneagram symbolically integrates the two fundamentals of a complex universe: the threefoldness of relationship, and the sevenfoldness of sequence, or process.

With the enneagram each point has a characteristic and constant *quality*. This quality applies regardless of the scale under consideration. In human affairs, for example, each point has this quality relative to individual psychology, physical appearance, bodily development, or even digestion. And the same qualities also apply to each point if the scale is the solar system or atomic structure. Each point has a purpose, a relative and necessary position that remains the same regardless of scale. Any teaching that does not recognize the individual quality of each of these points is not really using the enneagram and, instead of using the figure to lead to a harmonization of disparate facts, is instead misleading and introducing still another subjective theory.

The symbol will always be misused, but it is possible to decipher its real purpose as well.

So what is the esoteric teaching? What are the qualities of each point? And if told, would it not cease to be an esoteric teaching? Regarding the last question, the publication of esoteric teaching is not the same as the transmission of esoteric teaching, and the reading of esoteric ideas is not the same as understanding them. It is true that some people will believe that they understand the esoteric when they do not, and also that they will cause others to believe in them, but that will always be the case, and it has always been a fundamental test, and the first step, of coming to an esoteric teaching—discerning the difference between someone who knows and someone who thinks they know.

Esoteric vs. exoteric means inner vs. outer: Inner teaching vs. outer teaching. One of the the best ways to understand this is that an esoteric idea is personally understood, that is, it has become internalized, inner to oneself. There is no such thing as words or ideas by themselves that are esoteric, it is only those words and ideas that have become a part of oneself that are esoteric for oneself. Two people, on hearing the same idea expressed may assimilate it quite differently. For one it may be "Oh yes, that is like so-and-so." For another, the same expression may penetrate and stay and open up something new, or perhaps uncover something somehow already known. For that second person, it is esoteric.

Because understanding is based on connections, relationships, it is the nature of esoteric knowledge to be "more than the parts". That is, when such knowledge is assimilated, is understood, much else is understood besides, new connections or relationships become visible: one has moved a little way further toward unity and harmony, and a little further away from multiplicity and the confusion of tongues.

So what has all this to do with the enneagram? The enneagram represents multiple relationships that are integrated in such a way as to represent a self-perfecting whole. It does not represent us as we are, but instead, represents us as we could be. Clearly, if this is true, we must understand the symbol, we must see these relationships, *in ourselves*, and see where it might lead us. This is internalizing the enneagram, this is the way to an esoteric knowledge of the symbol.

We approach this by learning what the three parts of the symbol are: How they are constructed and how they are related.

We start with a circle:

The circle represents the whole, the complete process. It is regarded as a process if followed around its circumference, and it is regarded as a phenomenon if regarded as a whole, or as a point.

Now we divide unity by three, and so add an equilateral triangle:

One is divided into three equal parts. When viewing the circle as a process, the three points of the triangle that touch the circle are the points at which something external provides what is necessary to continue the process. When viewing the symbol as an event, the triangle represents the three forces necessary for any phenomenon.

Now we divide unity by seven (1/7=.1428571...), and so add a six-pointed figure:

This figure is derived by dividing unity by seven, which produces a repeating decimal that does not contain the numbers 9 (or 0), 3 and 6. The numbers not included are the points of the triangle previously obtained by dividing unity by three, and the new numbers are then assigned the obvious points they would occupy on the circle if all points are distributed evenly.

When the new points are connected in the order of the repeating decimal (1428571...) they form an "inner web" that shows us the essential internal circulation of the cosmos.

The circle or its center represents, for the six points, the seventh point. And the six-pointed web crosses the triangle at 12 points. So: One, divided by three and one divided by seven produce two figures that intersect at 12 points and are contained in the one figure.

Twelve are below
seven are above them
and three are above the seven.
From these three
He founded His abode
and all of them depend on One.
Sefer Yetzirah

All and Everything

The Ray of Creation is the means by which the different levels of energy and matter are created in the universe, according to the fourth way. The Big Bang theory of modern cosmology, and its various related offspring, is the way the process of creation is seen by most contemporary physicists. Relating the two explanations in their most general terms is the intent of this discussion. The chief difference between the two is that the ray of creation is specifically organized in terms of scale, that is, according to practical importance from the perspective of personal possibilities. Contemporary science deals with (imagines, really) an "objective" viewpoint unrelated to scale, or at least believes in a possibility to so view things.

The big bang theories posit a "singularity" at the beginning of the universe some 10 to 20 billion years ago. While the nature of this singularity is at least currently beyond the power of modern physics to describe, the "expansion" of this singularity can be theoretically

discussed. The reason the singularity expanded is not known. It is considered possible that it was a chance occurrence, as in the "chance" that operates at subatomic levels (see A Note on Quantum Probability). It is the expansion that created the universe as we know it, through a process of cooling (dissipating energy), thereby allowing the conglomeration of ever-denser matters.

The ray of creation begins with a unity (the Absolute) as the origin of the universe. This unity, of its own will, divides itself into three conscious worlds. The three worlds then, in emulation of their creator, create three more worlds, but this time the new worlds are not conscious, so this "World 6" contains three conscious and three mechanical "worlds" or laws. This process continues, creating ever more worlds which are less and less energetic (have a lower "density of vibration") and more and more dense (have a higher "density of matter"). The process can be summarized like this:

1 - the original unity
3 - the first three worlds
6 - the first three worlds plus the three worlds they create
12 - the first three worlds plus the six worlds plus three more they create
24 - the first three, plus the six, plus the twelve, plus three they create
and so on, but not infinitely

The rest of this essay discusses each of these levels or worlds in turn. In the table at the top of this essay, these worlds are assigned their "notes" in the descending octave known as the ray of creation. Each level or world is characterized as being comprised of a smallest component (for example, atom, molecule, and so on) which corresponds to a largest level of structure (for example, star, planet, and so on). A more detailed discussion of this relation of each level's small part to its large whole structure is provided in my essay Beautiful Symmetry. Note too, that this process of creation called the Ray of Creation is an example of repetitions of one triad, which is one of the six processes, in this case the process of creation or growth, as I describe in The Six Processes.

It should be noted that when discussing universal, galactic, particle, and light scales in terms of the fourth way and modern science, the discussion is necessarily very theoretical, almost philosophical. While the associations I make seem to me convincing, the most important

point is to perceive the principle that fourth way ideas elucidate scientific discovery. The specific facts of science mentioned here may well have to be revised to keep abreast of new discoveries, but the principles that map them to fourth way ideas will apply as well (or better) to the new discoveries.

The Structure of Worlds: Part and Whole

World 1, The Universe and the Photon

To begin with, whether in ancient myth or modern science, there is light. This is the moment of birth of the universe, called in modern physics the "big bang" and followed by "inflation" in which the universe rapidly expands to a large fraction of its current size. As modern physics has nothing to say about the big bang itself (quantum physics breaks down approaching that "moment"), we will not discuss any kind of creation of world 1, and treat it only as already existing and including everything.

Know, think, and depict
that the Creator is One
there is no other
and before One
what do you count?

from the Sefer Yetzirah

In modern physics, the fundamental unit of light is recognized as the photon. The only way to picture the universe as a unity is to picture it as a whole, and the size of the universe is determined by the speed of light. It is as big as light could travel in the duration of its existence. Therefore light, the photon, determines the whole of the universe in terms of size and shape. It also determines the universe in terms of substance, because all substance is derived from the fundamental particle of light, the photon, also known as the quantum of action.

Light also determines the duration of the universe. World 1 is eternal. Eternal in the sense that it always exists. The universe, whether a singularity, a hyper-expanded heat-dead entity, or something in-

between, always exists. The photon has no life span, no theoretical exhaustion of its existence.

World 1 is the most energetic world. In the fourth way, it is described as having the highest density of vibrations and the lowest density of matter. In modern physics, attempts to theorize about this world seek a unity of forces instead of the three or four currently recognized (see A Note on Gravity). The forces are now divided, but the theory is that at an earlier time closely associated with the big bang, the energy levels were so high that the three forces were still a single force. The various attempts to quantify this idea are called Grand Unification Theories. In the fourth way, the Absolute, or World 1, is viewed as dividing into three forces by its own will.

World 1 is so rarefied that its fundamental component, the photon, has no rest mass. It is not only not matter, it is not energy. It is action, the fundamental unit or quantum of action, something unquantifiable, immeasurable, a mystery - like the universe itself.

So the universe as a whole is our World 1, and the fundamental particle of World 1 is the photon. In unity, time and space have no meaning or at least none we can understand - the universe contains all time and all space, and the photon is localizable in neither time nor space. A photon does not exist in the ordinary sense at all - you can never see it before it reaches its destination because if you see it it is gone, having reached its destination in your vision of it. A photon is not a thing, it is an action. But photons, able to carry extremely high energies, can "collide", creating the first (relatively) lower energy particles which will come to form the next world, World 3.

World 3, Galactic Structure and Particles

"Know, may God prosper you, that the [Creative] Command is essentially based on unevenness in which triplicty is implicit, since three is the first of the uneven numbers. It is from this plane that the Cosmos is created."
Ibn al 'Arabi, *the Bezels of Wisdom*

Things come in threes here: Three electrons of medium mass (electron, muon, tau); three neutrinos of vanishingly small mass (electron neutrino, muon neutrino, tau neutrino); and two families of three quarks of various mass (strange, down, and bottom; and charm, up and top) each of which come in three colors. (These particles as a

group are referred to as leptons.) Of course, the very ideas of "particle" and "color" are only convenient labels - our language and thought have no means of accurately representing this world. Regarding time and space we are not in much better shape here - time and space are the same thing, or ways of looking at the same thing, and Einstein's "space/time" is how this is commonly referred to. In world 1, time and space are meaningless. In world 3 they form space/time. They do not become separate time and space until world 6. (See also There Shall Be Time No Longer.)

"Space and time are the same thing, really. One way it looks like space, another way it looks like time."
P. D. Ouspensky, *A Further Record*

While modern physics has much to learn of this world, we can speak a little of it in terms of theory. In this regard, current excitement about neutrino investigations is interesting. Neutrinos were thought to have no mass, but recent experiments indicate clearly for the first time that neutrinos have mass, though it may be exceedingly small. But this discovery would help explain something that has puzzled physicists for a long time, namely that the number of neutrinos predicted by theory is not detected. One explanation for this (and this explanation required that neutrinos have some mass) is that the neutrinos spontaneously change into each other, so that experiments to detect a particular type of neutrino are inherently limited. This "changing into one another" seems to fit well with the idea that in World 3 the three forces are also each other.

These worlds that exist without yet having our kind of space and time may well have something to do with the well-known mystical experience, echoed down the ages and cultures as an experience of timelessness, and where all is connected, all is one. I have more to say about this in There Shall Be Time No Longer, but for now I only want to point out that the "worlds" we are talking about have a practical, psychological significance as well, and it is at this level of World 3, that we, or some of humanity anyway, may have direct experience. We know our eyes are attuned to one segment of "electromagnetic" vibrations, our ears to a specific range of compressions in the air, and so on, and in the same way we have several psychic functions, each with its own range of perceptivity. Obviously the energies we are talking about at this level are extremely refined, and the fourth way

considers them rarely if ever properly perceived except as the result of a long and disciplined and fortunate work.

The relation of the particles in this world to time in modern physics is unknown, but experimental lower limits have been set which give them a lifespan almost as great as the current age of the universe. While we may not be seeing the eternal existence we saw for world 1, it would seem to be the closest thing to it.

The world of these subatomic particles probably also explains what is called the large scale structure of the universe. This is a kind of first formation of structure after the big bang, in which extremely minor fluctuations in energy distribution in the expanding universe caused sufficient irregularities to keep matter from later being equally distributed, and so, form-less. These irregularities became, according to various theories, what are called sheets, or bubbles, which later allowed the formation of galaxies within them. Such large-scale structures are almost impossible to visualize, let alone map, because they in fact *precede form*, set the stage for formations, so to speak. An attempt to image a slice on such a scale shows fibers consisting of countless galaxies that looks like this:

These sheets, sometimes theorized to be more like the surface of inconceivable vast bubbles, somehow gave rise to the first stars and star conglomerations of some sort. Contemporary astrophysics has different theories about the organization of galaxies, and much is unknown and only guessed at at this time, so there is no point in taking one or another of these theories as support or refutation of the idea (my idea) that sub-atomic particles must determine them. We do know that stars did form, and we know the result.

The fine fluctuations in energy discussed above that seem responsible for, or closely connected with, first structure in the universe, essentially "creation", are what is called the cosmic microwave background. In recent years, scientists are finding strong evidence to support the existence of "acoustic oscillations" closely associated with this initial creation. I suppose I would alienate half of my readers if I were to suggest a correspondence with the mystical "Word" here, so let's just safely say that the correspondence is striking. "In the beginning was the Word, and the Word was with God, and the Word was God" says the mystical prologue to the *Gospel of John*. This term, Word, "logos" in the Greek, seems to me to be finely chosen. Note that

it is singular - we do not read that in the beginning were the words. It comes from unity, and leads to multiplicity.

The first stars, called first-generation stars, produced the first, lighter elements: the hydrogen, helium, and so on that begin our periodic table of the elements and lead to the formation of galaxies such as our own Milky Way.

In short, unity or light (World 1), gave rise to particles and bubbles or sheets (World 3), which give rise to the atoms and galaxies of World 6, discussed next.

Three Mothers: Alef Mem Shin
A great, mystical secret
covered and sealed with six rings
and from them emanated air, water, and fire
and from them are born Fathers
and from the Fathers, descendants

from the Sefer Yetzirah

World 6, The Milky Way and Protons

"Time holds to God the place of grandson."
Philo of Alexandria

I'll use the term "proton" to illustrate the particles called baryons - primarily protons and neutrons - which I believe comprise this level. The baryons seem to be crucially involved in the creation of galaxies, required for the growth of the black hole at the galactic core as well as the first-generation stars that begin to form around it. As we might expect, a proton (or a neutron) consists of three particles of the higher world, the leptons: in particular, they consist of three quarks.

The simplest element, so simple it might just as well be seen as the dense side of world 3 as the light side of world 6, is hydrogen. Comprised of a single proton and electron (essentially four leptons rather than the three required to form a baryon), it is the only element without a neutron in its nucleus. Progressively heavier atoms acquire additional electrons and protons, and so require neutrons in the nucleus to keep the positively charged protons from repelling each other. The next simplest atom for example, helium, has two protons

and two neutrons in its nucleus, and two negatively charged electrons surrounding it: six particles, it is the holotype of world 6 micro-structure.

First-Generation Stars

We have here, connected with the origin of galaxies, the beginning of stars. Since we are discussing the Ray of Creation, in particular *our* Ray of Creation, we must discuss the first generation stars at this point because our Sun (world 12, the next level discussed in the next section), is a second-generation star. First-generation stars, associated with baryons, form the first of the elements, the lighter elements.

Here we have for the first time structures localizable in space and time. It is possible to know the exact position and speed of an atom. Atoms can be fixed, say, in a quartz crystal. Part of the atom, part of world 6, is world 3, though, and that part cannot be fixed. Inside of the atom, you are still limited to knowing the electron's position and momentum only approximately, with the tradeoff of one for the other as quantified in Heisenberg's uncertainty principle which applies to world 3.

space begins only in World 6. Absolute and World 3 are beyond space or out of space. Space is limitation and that begins only in World P. D. Ouspensky, *In Search of the Miraculous*

Each world "adds three laws of its own", but the laws are no longer conscious but mechanical. We see this in the atom, a sort of mechanism comprised of three interacting but separate forces or particles: the active proton, the negative electron, and the neutralizing neutron. On the large scale, instead of amorphous sheets, we now have the clearly defined appearances of galaxies, with definite super-massive centers, and far-reaching arms that spawn new stars, and hence new atoms.

A single star can produce the smaller atoms - hydrogen, helium, up to carbon, maybe iron. But that is the limit of first generation stars. In order to produce ever-denser elements, stars must act in combination, and the structural combination of stars is called a galaxy. The Milky Way is said to be a typical galaxy, disk-shaped with old stars at its center, and new stars produced in its out-stretching spiral arms.

World 12, The Solar System and Atoms

Second generation stars, already containing the elements created by first generation stars now add a new level of complexity to the universe by going supernova, dying in an explosion of energy and matter that shoots the heavier elements out into the galaxy. This material may then be used in still more star-creation, and the process continues. This is the complete engine of atomic creation: the use of the fusion reactions of stars to generate ever denser elements, denser atoms, until our whole table of elements exists.

"Thus spake He. And once again into the Cup that he had used in blending and mingling the Soul of the Universe He poured the remains of the Elements He had employed, and mingled them in much the same manner; they were not, however, pure as before, but in the second and third degree."
Plato *Timaeus*

The sun in our solar system is a second or later generation star and, like other stars, produces energy by nuclear fusion, in the process creating heavier elements. At this point, our sun is young enough that it is still burning hydrogen, the lightest of elements, and it does not contribute to the 100-plus list of elements currently available on Earth. These heavier elements were already available when our solar system formed, and the planets of our solar system formed of their accretion and are rich in them. Again we can only look at theories of solar system formation, as this is far from a decided issue in modern science. A common one views the early solar system as a disk comprised of "dust and gases" - essentially the range of atoms and already simple molecules like hydrogen gas - that slowly cools, contracting to form the massive center which becomes the sun, surrounded by satellites formed of the dust and gas at distances of some sort of harmonic interval. These satellites, our solar system's planets, represent a new development, a new stage in the evolution of the universe, a new level in the ray of creation.

The sun on the planetary scale, and the atom on the particle scale, determine the possibilities of the star system, in this case our solar system. Matters cannot be created of anything but the atoms available, and planets have no energy source but the sun. But this combination is enough to produce the next step, the combination of atoms on the planets in diverse molecules, molecules with new structures, different properties, than their constituent atoms.

World 24, The Planets and Molecules

On the planets, conditions are very different from those on a star. For one thing it is much cooler, that is, less energetic, and heavier matters crystallize out, allowing the linking of atoms of like as well as unlike elements to form the complex world of molecules. The form and variety of molecular combination is controlled partly by the planet's relationship to the sun. The molecular combinations formed in the furnace heat on Mercury will vary greatly from those formed in the unimaginable cold on Pluto. But possibilities are also determined by the planet's nature which is only partly determined by its place. For example,Venus and Mars are reasonably close on the scale of the solar system, yet Venus's atmosphere affords it a kind of protection from solar and cosmic energies that the tenuous atmosphere on Mars cannot.

And it is in this very property of atmosphere that something new becomes distinguishable. One planet in this solar system, Earth, has demonstrated, on the scale of planetary time, what can only be called an intelligent atmosphere. An atmosphere no longer the sole product of planetary and molecular forces, but one that evolves based on the introduction of a new development and which in turn protects that new development, feeds it and is fed by it.

Between Worlds, Nature and the Cell

As an example as to how the fourth way can help one "put things in their place". I wanted to mention here a book I recently read called *The Cosmic Serpent*. In it, the author recalls his time with shamans from the Amazon, and in particular their use of hallucinogenic drugs. As an ethnobotanist, he got involved with the shamans primarily because whenever he would inquire of the natives of the rain forest where they got their astonishing knowledge of plants (knowledge often so sophisticated it seemed impossible to learn the various combinations by trail and error) he was invariably told that the plants themselves revealed their properties to the "ayahuascos", that is, to the shamans when they were under the influence of mixtures of the ayahuasca vine and other native plants.

Of course, an educated Westerner, he claims he didn't believe the plants told them anything, but he couldn't figure out what they meant, what they were really trying to tell him, these people that otherwise were so straightforward. His dissertation lay elsewhere, so he left the rain-forest, finished his schooling, and went to work trying to help the natives of the rain-forest protect their lands. But that answer - "we learn it from the plants" - continued to bother him.

I won't go into the whole story here, but I do recommend this book as an honest account which seems to me one of the modern works which begins to illustrate some part of what I elsewhere refer to as the new science. What I want to mention here is the astonishing conclusion he arrived at: no less than that the shamans experienced themselves and the world around them from a molecular viewpoint, literally responding to their own and the biosphere's super-saturation with DNA.

But this should come as no surprise to us: Rodney Collin speaks specifically about gaining access to molecular consciousness. I also intend to look into this a little more to see if I can't open up something else. One of the tenants of Collin's exposition is that access to a "lower" world simultaneously allows access to a "higher" world. In this case, conscious access to the molecular world should bring access to the consciousness of the planetary world. There are in fact a few mentions of perceiving the earth as a whole, and perceiving it over the time of its existence in this book, although the author had not, of course, known this theory and so had not looked for that.

In brief, how this relates to the cellular world is that DNA may well be the "bridge" for us between the world of nature and the world of the planets and solar system. The very instrument of the "shock" that bridges the fa-mi interval of the Ray of Creation.

World 48, Earth and Organics

I've used the term "organics" here to reflect the kind of matters of which the Earth, and primarily its surface, is composed. The term is intended to connote not only the products and action of living things on the surface, but the environment that makes it possible, particularly water in liquid state. Most of this has to do with the interactions and combinations of the chemical elements carbon, oxygen, nitrogen, and

hydrogen. They combine to from the amino acids, building blocks of proteins.

One way to understand this level is to contrast it with next level, the Moon. The activities of life produce an enormous surface dynamic that inter-penetrates the very mineral forms of Earth, due to the processes of erosion and sedimentation caused by wind and water, processes that are altogether absent on the Moon. Limestone mountains, ocean salinity, coral atolls, nitrogenous soils, and much more are only possible with this organic interaction.

World 96, The Moon and Minerals

The end of our ray of creation consists of mineral forms that are very rigid, having high melting points and resistance to fracture. Erosion is negligible, and water, if any, is frozen. There is no protective atmosphere, and no magnetosphere.

One of the curious ideas connected with the Ray of Creation is that it is growing, much as a tree limb grows on a tree. In this theory, a planet, for example, may one day become a star, and a satellite may one day become a planet. This is very different from the modern scientific view of the accidental collision of "lifeless balls in a dark attic".

One apparent objection to the Ray of Creation as a growing ray might be that the rocks of the Moon's surface are almost certainly about the same age as the Earth. In other words, the Moon is probably approximately the same age as the Earth. But it may be interesting to look at this in a different way: that is, the Moon is composed of the same material as the Earth was in its infancy. Common Moon rock, anorthosite for example, is rare on the Earth's surface, and in the few places it is found is estimated to be over a billion years old. While the Earth and Moon themselves are estimated at 4.5 billion (U.S. billion, i.e, thousand million) years old, very little ancient rock has survived under the dynamics of the Earth's surface. Should similar dynamics begin to occur on the Moon, one could expect some similar developments.

But what are the differences between a planet and a satellite of a planet? In general, a planet has a magnetosphere and an independent rotation. With the Moon we see a lack of magnetosphere and no

independent rotation. How rotation or magnetospheres develop is poorly understood, but I think it is interesting to reflect on the fact that the Moon, which is believed to have a nickel-iron core, passes through the Earth's magnetic field once a month, at every full Moon. It reminds me of the way you magnetize an ordinary nail: repeatedly rub the nail against a magnet in the same direction, that is, in cycles.

Among other things, a magnetosphere would begin to protect the Moon from bombardment by everything from cosmic rays to meteors, and may well be required for the formation of a stable atmosphere. If the Moon is beginning to acquire a magnetosphere, it may be seen as beginning to "grow".

Notes

Note 1- A Note on Quantum Probability
Quantum action is fundamentally different than the "chance" say of winning the lottery. We can produce equations that very accurately describe, for example, the possibility that a photon will have a certain "spin". There are certain probabilities that are well known, but we can never be sure, until we check, just what the photon's spin state is. Apparently similarly, we use probabilities, say, in insuring automobile drivers, or predicting odds of winning the lottery.

But let us take a simple "macro-world" (as opposed to quantum world) probability: I flip a penny in the air and it lands either heads or tails up. The probability of any side landing up is known to be 50%, that is, in the long run, half the time the penny lands heads-up, the other half of the time it lands heads-down. Sure, we know that.

Now consider a quantum particle that can be in a state in which it can be described as having "spin up" or "spin down". Until we measure the spin, we can't tell which state the particle is in. But when we do measure it, we find that approximately half the time it is in "spin up" state and half the time in "spin down" state. The more measurements we make, the more exactly the ratio becomes 50/50, just as with the probability of the penny landing heads-up or heads-down.

So what is the difference? This, I think is really a very powerful point, precisely because these two cases seem to be the same thing, under the same laws, only different in size or scale. But the difference between the two is about as fundamental as it can possibly be. In the

case of the penny, we flip a coin and can only give a 50% chance that it will land heads-up. Why? Because we are ignorant of all the conditions. We don't know exactly how much force is applied, what the angle of ascent is, the atmospheric density, the relative hardness of the surface it hits, its original position, and many. many other variables. In the long run these variables even out, and produce our 50/50 probability.

Conversely, in the case of the quantum spin of a particle, our inability to predict the state of a particle prior to measurement is not based on an ignorance of conditions but rather, the probability *is the condition*, that probability *is the law* and subject to no others. There are no "hidden variables". This is difficult for us to realize, trained as we are in a way of thinking to continually look for underlying causes, never trained to deal with final causes. We have to do that training ourselves.

Note 2- A Note on Gravity

Ouspensky indicates there is no such thing as gravity, it being unnecessary if the universe is a six-dimensional solid (see The Theory of Six Dimensions). It is interesting to note that while modern science posits a fundamental particle that carries gravity, called the graviton, no such particle has ever been discovered. Oddly enough, and unlike electromagnetic, strong, and weak forces, gravity remains an unproven theory.

It seems to me possible that there is no such thing, and what we call gravity is acceleration. Einstein pointed out that the effect of acceleration was indistinguishable from the effect of gravity. This would seem to make it unique - we do not correlate the other forces with derivatives of motion.

It is my guess that what is called gravity has to do with angular momentum, and this angular momentum is manifested as the revolution, rotation, and, perhaps, precession, of everything in the universe.

I should add that recent perusing of a physics news group on the Internet shows me that there is a lot of discussion about just this issue (i.e., just what the heck is this "gravity"), and I notice in a book by Roger Penrose his insistence that gravity is fundamental and not a

result of something more fundamental. The fact is, we just don't know. Newton, generally credited with "discovering" gravity, in fact only said it is "as if" there were such a force. There is a tremendous effort currently underway to detect "gravity waves" and gravitons, so perhaps we will know more in the near future.

Finally, this whole discussion of the three/four forces of Nature (electro-magnetic, strong, weak, and gravity) reminds me of nothing so much as the ancient four elements. When Gurdjieff discussed the law of three, he included a fourth condition in which a matter is taken as separate from the three. I am only musing, but I suspect there is a connection.

There Shall Be Time No Longer

Albert Einstein and Niels Bohr held a discussion over the course of many years, in person and in letters, in which they argued how to interpret the results of certain experiments in quantum physics. Bohr was adamant that the results observed demanded a new and non-classical interpretation, but Einstein was equally convinced that the strange experimental results could only be explained by accepting that the classical mechanisms that must be there had not yet been discovered. For example, the experiments showed that observation of the properties of one particle could simultaneously affect the properties of another particle separated from it by a relatively great distance, without any physical interaction between the two particles. Bohr insisted that this was telling us something fundamental about the universe, but Einstein rejected this idea, referring to it as "spooky action at a distance".

"You are not thinking. You are merely being logical." - Niels Bohr to Albert Einstein

Contemporary physics has been constructed upon the results of analyzing experiments on ever smaller constituents of matter and applying the results of those experiments to an improved understanding of the forms and processes of the universe as a whole. This is the religion of a material age, the work to understand the laws of world creation and maintenance.

Early on, matter was assumed to be "atomic", that is, to have a smallest fundamental particle of which all other matters would be conglomerates. These fundamental particles were acted on by energy to mechanically produce the entire range of universal phenomena. This picture was shaken at the very beginning of the twentieth century when Planck proposed a temporary fix to resolve certain problems this model encountered in the study of the radiation of energy. That fix was to use a discrete size for energy "particles" in the equations describing the radiation. In other words, for the sake of the equations, to define energy as consisting of packets of a definite size, disallowing energy to exist in amounts that did not fit neatly into some integer number of those packets. You couldn't for example, have an amount of energy equal to half of a packet, nor could you have 10 and one-thirds packets. To everyone's surprise, the temporary fix turned out to be the most accurate description of the actual way energy was transmitted, received, and stored. In packets. These packets are called quanta, the singular packet a quantum.

Armed with this new knowledge, Einstein soon discovered the relationship of energy and matter with his famous formula E=MC2, and Bohr was able to explain the energetic structure of the atom, where electrons moved between atomic orbits (later shells) with the reception or emission of quanta. Somehow, Bohr was able to fathom the meaning of the new knowledge and hold on to that understanding, something even the great Einstein was unable to do.

Bohr emphasized the necessary interaction of the measurement with the measured, an intrusion normally unnoticeable on a large scale, but affecting and sometimes even determining measurement at a very small scale. But even more remarkably, what Bohr was saying was that this condition was *more fundamental* than known physics. Quantum

physics was better physics. As it became clear that the previous physics, the physics of Newton and Einstein, was only descriptive (albeit highly effective) it was necessarily highlighted that even this new and more exact description might also be "only a description". Bohr had no problem with that, and in fact embraced it. It was "just a description", a better description, and we were beginning to see that our descriptions were not reality. Only approximations of reality, and it was high time to be disillusioned about logical thinking.

The inter-penetrating "worlds" of the fourth way cosmology provide a useful tool when trying to understand how to interpret contemporary particle- and astro-physics. Each finer world interleaves coarser worlds, just as air may be inside of water which may be inside of wood. When dealing with physics at the quantum level, we seem to be dealing with world 3. World 3 is within world 6 which is within world 12 and so on, and the approach of our science is to access to ever finer worlds to help explain the coarser ones. All in a mechanical, unconscious way of course—there is no recognition of the necessity of change of consciousness to actually *experience* the higher worlds.

The reason that world 3 is affected by our measurement of it is that at that level there is no distinction between observer and observed, nor is there a distinction between time and space. How can there be an observer and observed if they cannot be separated in time or space? This is stated in "that strange cipher" (as Rodney Collin called it) of the cosmological ideas in *In Search of the Miraculous* as the idea that world 3 is completely conscious, and that at this level the three forces are one whole.

Einstein's objection to Bohr's view of the quantum world was essentially that world 3 had to conform to world 6, that a world without time/space distinctions had to be subject to time/space distinctions. Bohr realized that what they had discovered was the higher law, and time/space had to bow to it. This was, and this remains, the central struggle of modern physics.

Bohr's idea of complementarity has to do with looking at phenomena from different "points of view", that is "worlds". If we want to view a world 3 phenomena, we have to bring it into our world, that is, view it from the point of view of time or space (particle or wave), yet the

phenomena itself is necessarily altered (the wave function collapses) by so doing.

When observing electrons fired individually at a screen with two holes in it, each electron passes through one or the other hole and the dots on the wall behind the screen exhibit the pattern expected of individual particles being shot at a wall with two holes in it, two scatter-shot patterns.

But when the electrons are fired in the same manner, but *not observed*, the dots on the wall exhibit a *different* pattern, the characteristic pattern of the wave form. That is, the individually fired electrons are somehow relating to each other, despite time.

It is sometimes said about the experimental results of quantum physics that "observation affects reality", or that consciousness influences the experiment. But this is not quite correct, because the interaction with the experiment may be, and typically is, a mechanical device, and it is this device that effects the phenomena observed. What is happening is that we are introducing a coarser instrument to study a finer phenomena, resulting in data that we then study. (This is the process of form acting on life to produce matter as discussed in The Process 3-1-2.)

What Bohr succeeded in realizing was that in this pursuit of ever-more fundamental building blocks we would ultimately face situations in which the complexity of our everyday world no longer applies. Einstein wanted to keep applying the old logic of everyday life to "places" it no longer belonged.

One of the great physicists contemporary with Bohr protested:

A widely accepted school of thought maintains that an objective picture of reality—in any traditional meaning of that term—cannot exist at all. Only the optimists among us (and I consider myself one of them) look upon this view as a philosophical extravagance born of despair in the face of a grave crisis.

The "widely accepted school of thought" that Shrödinger refers to is the so-called Copenhagen school, led by Niels Bohr. What they stated is so obvious and self-evident, we are only left to wonder at the almost virulent reaction of Shrödinger, Einstein, and many more. Shrödinger,

in the quote above, inserts the parenthetical phrase about reality—"in any traditional meaning of that term". Well. By "tradition", he can only mean the science that preceded quantum physics. To hold this "tradition" as inviolable evinces a lack of appreciation of anything possibly greater than the educated Western world view of the previous few hundred years. Certainly the results of experiments in quantum physics were disturbing, but we can learn to recognize such disturbances as the heralds of new knowledge, new and better ways of seeing.

Shrödinger's comments above are rife with vapors. Calling himself an optimist in his view, and the view of Bohr as a "philosophical extravagance born of despair in the face of a grave crisis" smacks for all the world of what I have elsewhere referred to as pathological thought (see Three Types of Thought). We hear, for example, a strong emotional plea claiming to expose a strong emotional plea in another. Bohr calmly (but not always clearly) referred to the evidence. Shrödinger and Einstein insisted reality must conform to their preconceptions, not what was clear and demonstrable. In one famous interchange regarding the absolute non-determinabilty of certain quantum phenomena, Einstein insisted God did not play dice with the universe. Bohr remained non-committal, but guessed it was not up to us to tell God how to run the universe.

Surely this seems arrogant, for me to argue against the likes of Shrödinger and Einstein. No doubt there is some arrogance in me to do that, but in this case I welcome and encourage it to speak out. I, and maybe you, will likely never reach either the mathematical or influential pinnacle of such figures, but that does not mean that we must not participate in the discussion. We very much *must* participate in this discussion. We do not live in the universe of Einstein, we live in our own. The world of an Einstein may tell us much or little about our own universe, but it behooves us to listen to those whom many say see their universe with such great clarity it sheds light on other's. But we get nothing out of it by simply accepting it, and we get nothing out of it by simply rejecting it. If we are going to profit by it, we have to wrestle with it, like Jacob with the Angel, or we get nothing for ourselves. We can test our minds, and test our feelings, against it.

What we face today is the possibility of thinking in a new way regarding a place in which the ordinary complexity of laws is greatly

reduced, and common divisions are united. Not to think in this way when we drive to the grocery store and buy turnips, but to think in this new way when we reflect on matters related to the very small and very large.

We must fuel our thought with the finer matters of higher worlds if we are to learn the more unified concepts of those worlds. And we *can* work on refining those matters on our way to the store to buy turnips.

There shall be time no longer. *Revelations*

The Theory of Six Dimensions

The following is based on Ouspensky's idea of the six dimensions. Some say there are three or four dimensions, some say more dimensions (10, 11, and 26 are current favorites of some physicists), some say there are an infinite number of dimensions. But Ouspensky's explanation of the six dimensions resolves that dilemma by showing how six dimensions are both all-inclusive and yet only partial.

This entire area is at best only theoretical for me, but I find it gives me a valuable point of view in dealing with ideas of dimension, space and time. Ouspensky first developed his thoughts on the six dimensions prior to meeting the fourth way, but was later struck by certain correlations between the teaching of cosmoses in the fourth way and his thoughts on dimensions. He continued to develop and refine his theory of dimensions, but I know of no final conclusion, or

even late summation of it by him. What follows is my understanding of Ouspensky's ideas on this topic.

We do not perceive our universe as it is—in six dimensions. With thought, to some extent, we can do that, and that is what this paper is about. In theory, we can develop consciousness to the extent that we are able to perceive the additional dimensions.

Common Knowledge

In geometry, we learn that a point has no dimension, but a line is one-dimensional, it has length. A plane is two dimensional—length and breadth as, for example, a triangle or circle. A solid is three-dimensional—length, breadth, and height, as for example, a tetrahedron or a sphere. It is often said that time is the fourth dimension and, while this seems true, we can no longer use a static geometric image to represent it. Take a three-dimensional object and *move* it, and you have an image of the fourth dimension. Throw a Frisbee.

Dimensions of Time

Here, I introduce a convenient "shorthand" for the discussion so far and that to come. In this phraseology, there are three dimensions of space, and three dimensions of time. What we have just done with the introduction of the fourth dimension is enter the first dimension of time. If the Frisbee is seen as a point (say from a great distance), the "Frisbee moving through the air" describes a line, the first dimension of time, or the fourth dimension of space/time.

The fifth dimension, in Ouspensky's writings as I understand them, is the fourth dimension in infinite repetition. Here we can visualize it as the fifth dimension of space/time, in which the Frisbee solid (third dimension), moving along in time (fourth dimension), is repeated, or mirrored, in flights of infinite parallel Frisbees—infinite just as each of the previous successions in dimensionality are an infinite number of the previous dimension. But where do the infinite number of Frisbees come from?

If we look at the fourth dimension of space-time as the first dimension of time—the Frisbee as a point extended to describe a

line—we now extend that line at right angles to itself to form a plane, the second dimension of time.

It seems to me that seeing the fourth dimension in this way leads easily to an idea of the fifth dimension, and one that is in line with quantum physics. If we see this tossed Frisbee as describing the fourth dimension, all other possible trajectories for the Frisbee represent the fifth dimension. This fifth dimension would then correspond to quantum physics' "superposition" in which, prior to measurement, a quantum system can be in any possible state or, rather, in all possible states simultaneously.

Finally, the sixth dimension of space-time, or the third dimension of time. The sixth dimension includes all possible expansions of the fifth dimension in space-time. Using the terminology of the three dimensions of time, the plane (second dimension), moved at right angles to itself creates a three-dimensional figure, but a figure in three dimensional time. It is actually a six-dimensional figure in space-time.

We can see the sixth dimension as the solid of the Frisbee, so to speak, that is as the point (the Frisbee) extended in time to become a line, repeated infinitely to become a plane which in turn is repeated infinitely to become a solid. This represents what Ouspensky called "all possibilities", in this case, for the Frisbee. But it is not all possibilities for an apple. An apple forms its own point, and line, and so on.

Now that summarizes the idea of the all-inclusive nature of six dimensions for any existence. But I said that this is also a partial dimensionality. This comes about because these six dimensions are *relative to the point of view of the observer*.

Back to our Frisbee, flying through space. An atom on this Frisbee could have no way of envisioning the Frisbee itself in space and time. It could, however, see itself in space and time. It could see that its continuation in time forms a line, and the infinite repetition of that line a plane, and the repetition of that plane a solid. That

solid, all possibilities for the atom, is a piece, for us a point, of Frisbee.

The Six Dimensions in Modern Physics

In modern physics and science in general, the first three dimensions are the same as those described everywhere. But then things get a little confused. The fourth dimension, which is time, is sometimes described as space-time, which is actually the fifth dimension—as Ouspensky points out, the fact that space-time is curved requires another dimension.

The sixth dimension, all possibilities, is essentially the "multiverse" or "many worlds" interpretation of modern physics. The many worlds explanation is an attempt to explain observations of quantum phenomena that have no ordinary explanation but do have a consistent, but extraordinary, explanation. It basically goes like this: At every moment when you seem to choose among multiple possibilities, you actually choose each possibility, and different universes fork off, the one you are in now is the one in which you made the choice to read this, for example. There is another universe where you chose not to read this, another where you read part way and stopped and so on.

As the theoretical physicist David Deutsch writes as he is explaining the theory of parallel universes containing their own David Deutsch's:

"Many of those Davids are at this moment writing these very words. Some are putting it better. Others have gone for a cup of tea." David Deutch, *The Fabric of Reality*

This is exactly Ouspensky's "all possibilities":

"Every moment of time contains a certain number of possibilities, at times a small number, at others a great number, but never an infinite number. It is necessary to realize that there are possibilities and impossibilities. I can take from this table and throw on the floor a piece of paper, a pencil, or an ash-tray, but I cannot take from the table and throw on the floor an orange which is not on the table.

This clearly defines the difference between possibility and impossibility. There are several combinations of possibilities in relation to things which can be thrown on the floor from this table. I can throw a pencil, or a piece of paper, or an ashtray, or else a pencil and a piece of paper, or a pencil and an ashtray, or a piece of paper and an ash-tray, or all three together, or nothing at all. There are only these possibilities. If we take as a moment of time the moment when these possibilities exist, then the next moment will be a moment of the actualization of one of these possibilities. A pencil is thrown on the floor. This is the actualization of one of the possibilities. Then a new moment comes. This moment also has a certain number of possibilities in a certain definite sense. And the moment after it will again be a moment of the actualization of one of these possibilities [...] But all the possibilities that have been created or have originated in the world must be actualized [...] The sixth dimension is the line of the actualization of all possibilities." P. D. Ouspensky, *In Search of the Miraculous*

What Deutsch is referring to as "parallel universes" is what Ouspensky referred to as the sixth dimension, or "the solid of time".

Deutsch says:

"The quantum theory of parallel universes is not the problem, it is the solution. It is not some troublesome, optional interpretation emerging from arcane theoretical considerations. It is the explanation—the only one that is tenable—of a remarkable and counter-intuitive reality."

The shell of a periwinkle as a visual representation of six-dimensionality

This section presents an analogy of six or seven dimensions—seven dimensions if the point or 0th dimension is counted as a dimension.

An analogy of dimensionality which originates in a point of existence and extends through space-time to include all possibilities for that existence:

The point at the apex of the shell represents the coming into existence. This is a point, a representative of no dimensions. The extension of this point is the first growth of the shell; it describes a series of points, i.e., a line, one dimension, extension in space. The line is next seen to curve, indicating the attribute of a next dimension which describes a plane—two dimensions, width and breadth. The curve is seen to spiral into the next dimension, indicating the three dimensions of width, breadth, and height. That this occurs over time indicates the fourth dimension, time itself. The motion over time now repeats to create the multiple spirals of the circle—repetition, the fifth dimension. The continual growth of the expanding spiral describes the ultimate shape of all possibilities for the periwinkle, analogous to the sixth dimension. –

Time and Eternity

When I consider every thing that grows
Holds in perfection but a little moment;
That this huge stage presenteth nought but Shows
Whereon the stars in secret influence comment;
When I perceive that men as plants increase,
Cheered and checked even by the self-same sky:
Vaunt in their youthful sap, at height decrease,
And wear their brave state out of memory;
Then the conceit of this inconstant stay,
Sets you most rich in youth before my sight,
Where wasteful time debateth with decay
To change your day of youth to sullied night,
And all in war with Time for love of you,
As he takes from you, I engraft you new.

Time passes and eternity remains the same. Eternity is not the infinite extension of time, it is the moment. The moment includes all of time. There has never been a time that was not in the moment. Nor will there be. But there is a connection between time and eternity.

If something persists in time, it partakes of eternity. The longer it exists in time, the more it impresses itself upon eternity. That which continues longest in time is most eternal.

Some things are forgotten and brought back—they may or may not be eternal —the eternal must persevere during time. Is an Egyptian grocery receipt eternal? Are the Nag Hammadi gospels eternal? Is one more "eternal" than the other?

With a title like "Time and Eternity", it might seem that this essay is purely speculative, of the same nature as that word play that passes for philosophy in our time. Nothing could be further from the truth. Further, it could seem that although a discussion of time might possibly have some practical value, a discussion of eternity certainly will not. In fact, it is the contemplation of things eternal that has the most value, and our misdirected association with things temporal that has the least. This is not to endorse some sort of non-involvement with the issues of our day; it is rather to see them for what they are and so bring a long history of human experience to bear on our actions.

In human affairs, there is a direct relation between the apparently opposed concepts of time and eternity. Eternity, which is sometimes confused with infinite extension of time, is actually not extension at all, but rather the moment, the eternal now. Eternity is always here now, while time is never here now, but always in the future, or in the past.

So the fact that they stand in definite relation to each other is surprising. In an obvious way, they are related in the sense that eternity divides time in two, that is, it separates the past from the

future. But that is largely theoretical for us, because our consciousness is rarely so refined as to experience eternity—instead we reflect on the past or anticipate the future.

But time and eternity also relate in a not-so-obvious way, and it is one full of significance. This form of relationship between time and eternity is that the deeper the experience of eternity is, the longer lasting the effects of that experience are in time. We can know this both personally and impersonally—personally in the sense that any experience of eternity can have an enormous impact in our life, and impersonally in the sense that we can study history and recognize long-term effects of the experience of eternity in others. The more profound the experience of eternity, the more it is felt over time.

Leaving aside for the moment the question of personal experience, let's focus on the idea that history is a record of the relative survival of that which approaches the eternal as opposed to that which does not.

I think that one way to realize this indubitably, is to see the effect such experiences have had over thousands of years. The teaching of the Buddha. The teaching of Jesus...

Thinking about the Egyptian grocery receipt, it would seem that the price of bread or the price of a cosmetic may still have some interest. But the thing only has interest because it was so long forgotten, that is, we didn't know the price of bread in such and such a Pharaoh's reign. That grocery receipt wasn't intentionally preserved for millennia, handed down generation to generation, as things of eternal value tend to be. In fact, the only reason that grocery receipt is of value is because what it represents is eternal — feeding, living...

The Nag Hammadi manuscripts present a more difficult assessment, because they too were lost for centuries. Do we have the ability to say "Yes, but they would've been handed down generation to generation if they could've been"? Maybe so, because in this case we know that related documents, even some versions of these very documents, were treated in such a manner. And we know that the manuscripts were not just forgotten, but apparently deliberately

hid—for a later time, because it was *thought they would still be of value*.

Magnetic Center and the Fourth Way

This brings us to the subject of magnetic center. Magnetic center, properly an aspect of personality in the intellectual part of the emotional center, is the very tool we use to distinguish time from eternity—until we come to school that is, and learn to also detect intellectually and practically what we had previously only intuited.

Magnetic center is a difficult topic. In my case, it was one of the first fourth way ideas I recognized, and long seemed straightforward, obvious, and esoteric. But I have come to see something more involved here, in that there is a difficulty, if not impossibility, of distinguishing magnetic center from something more. Or is it that some people "fall back" to magnetic center after having gone further with it?

My first shocking encounter with this phenomena happened long ago, on a bus to Madison, Wisconsin with three or four of us headed for a meeting of the Gurdjieff group connected with Willem Nyland. I had heart-to-heart talks with two of these older students I so respected, no doubt "bleeding my guts" to them, and they opening up to me. I was astounded to find the one only wished to learn about the fourth way to bring something back to the Hare Krishna movement to which he belonged, and the other wished to bring something to his Catholic Christianity. I realized they didn't really understand what they had touched, and their results could be no more than their expectations.

This is why fourth way school may use such difficult methods, such as being unpleasant, or expensive, apparently naiive, non-exotic, and so on, whatever. You have to see it and want it through all that; and after all that, I still believe that the greatest of teachers will have with them people that think they get it but don't, or that will lose it first chance they get, the first time the spotlight is off of them...

The fourth way will not go away. Its modern expression is the most powerful force in modern thought in the sense that the most powerful elements in human thought are those that most partake of eternity and therefore have the most effect in time. The teaching unfolds, in ways we cannot imagine, among people we will never know, but "even we here", do our part, make a contribution with every real effort.

Seems that eternity is truth, time illusory. Or, to be less formatory, eternity is more real than time, it precedes it in the ray of creation. When we move toward truth, we move toward eternity, and vice versa. The truth is eternal. Eternity is the truth. Time passes. Be here now.

Qualitative Number Theory

"What is absolute unity? This is the way in which the study of the one has a power of drawing and converting the mind to the contemplation of true being"
Plato, The Republic, Book VII

Number Theory

Strange to modern ears is the idea of qualitative number theory. This is the basic and ancient idea that number has meaning above and beyond quantity. It is this:

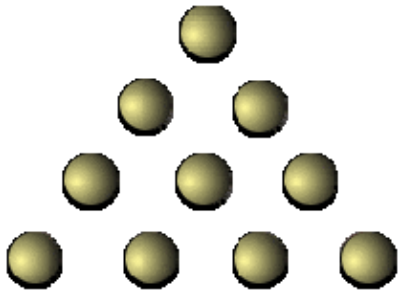
- 1=unity

- 2=duality
- 3=relationship
- 4=material existence
- 5=growth (time)
- 6=movement (space)
- 7=attainment

and so on, but that is enough for our purposes here.

My own studies have led me to the conclusion that, in terms of enneagram numbers, the number 1 is not noted (or, rather, it is the whole circle and at the same time a point in the center of it, the alpha and omega), 2 is enneagram point 5, 3 is point 7, 4 is point 1, 5 is 4, 6 is 2, and 7 is 8. This is the order of the inner circulation of the enneagram when beginning from the center and proceeding to point 5.

A beautiful (for economy of material—Henry Ford might agree) expression of this is the Pythagorean tetractys:



Visually, we see unity, a whole triangle. One, at the top of the triangle, radiating down, so to speak, into two, then three, and finally four. This is the image of creation: Unity (1) reflects (2) on itself and spawns

relationship (3) which gives rise to material existence (4). It is the basic creation myth. (The total is ten, as in the 10 sephiroth of Kaballah, or the ten points of the enneagram (0-9), or our decimal number system, and so on in qualitative number theory in general.)

In terms of the sequence of dimensions, we can see this very plainly (refer to The Theory of Six Dimensions for a related discussion). Number 1, unity, is the zeroth dimension, the point. Everything else proceeds from this. By duplication, the point becomes the line. This is 2, because 2 points describe a line, and the first dimension. At right angles to itself (or just curving out from itself), the line becomes a plane. This is 3, as three points can define a plane. Curve or extend again into the next dimension of space, the third dimension, and you have 4, as four points are minimally required to describe a three dimensional object—material existence.

At this point, space dimensionality cannot be further extended. Try drawing a four-dimensional object with five points. The fourth dimension requires time, and the fifth point may be seen as a point in the past or the future of the 3-dimensional object. The number five, associated with growth and life, requires time.

The number six is has to do with movement in space, and 6 points in our dimensionality discussion is repetition, movement over time.

Finally the number 7, or attainment, represents the six dimensions, all the possibilities for the phenomenon under discussion.

In ancient or modern theories of creation, we see the same development. Unity, 1, splits and becomes 2. Adam becomes Adam and Eve, or God is reflected on the waters, or the photon initiates pair-production, and so on. Three is relationship, the family of Adam, Eve, and Cain/Abel, or the indivisible Trinity, or the relation of fundamental particles in the atom. Material existence is the race of humanity, the world of molecules. Growth is life. And "Life is a movement and a rest." And that is everything, until we begin again, on a new scale, with a new intent.

The discussion of (and more importantly the contemplation of, or meditation on) number, begins with 1. Such contemplation is infinitely rich. Try it. See if one does not lead to two, and two to three. (And watch for that "I" that says: "What about 1 and one half?")

Contemplation, as number, progresses this way because it must, like the second stair must be after the first stair. Number does not, and cannot, proceed otherwise. The personal realization of this, founded in one's own meditations, say, in pursuing it over hours and months of insomnia, or days and years of contemplation, comes like a flash of lightning—all is number. Not like the counting we learned as children: 1, 2, 3...; but as sacred meaning: 1, 2, 3...

It is God (1), Mother (2), and Child (3), however it is put in religious and mystical teaching. All comes from one, and returns to one.

Happiness consists in knowledge of the perfection of the numbers of the soul."
Pythagoras, from Clement of Alexandria

Three and Four

"Until now, G. had spoken only of the law of three principles. But now I saw how three passed into four and understood the necessity of this division so long as the division of force and matter exists for our immediate observation."
P. D. Ouspensky, In Search of the Miraculous

In qualitative number theory, there is a curious process by which three becomes four. How one becomes two is deeply inexplicable: That is the question. But how two becomes three is more easily realized,

because there cannot be two things that are not in some kind of relationship, and when they are related, it is now a threefold subject: Two things and their relationship.

But the threefold is ideal: It does not exist here in the material world or, rather, it is made physical by fourness. Examples of this 3/4 relationship include the fourth way's carbon, oxygen, nitrogen, and then hydrogen which may be any of the previous three. More specifically, in the fourth way, the distinction between three and four is brought out as the difference between "forces" and "matters", that is, three forces and four matters. The forces are Active, Passive, and Neutralizing; the matters are Carbon, Oxygen, Nitrogen, and Hydrogen. Carbon is matter in which the active force is manifesting, Oxygen is matter manifesting the passive force, Nitrogen is matter manifesting the neutralizing force, and Hydrogen is matter taken without regard to force, or in which no force is manifesting.

Sir Arthur Eddington

I've recently been reading some of the work of the physicist Sir. Arthur Eddington. Although the science is no longer completely current - indeed the book I will refer to here was published in 1928 - Eddington had a certain facility for the very difficult new concepts that were emerging around him at the time. He is well known as the first popular expositor of Einstein's relativity, and as he was writing this particular book, quantum physics was literally making a revolution every year. In the midst of this, Eddington was trying to arrive at a more fundamental theory of the universe and he began with three (unlike sacred teachings and modern science which begin with unity and then come to three). He wrote the following:
[Eddington is beginning to "build a world"; that is, he is going to attempt a model of the universe.]
"We take as building material, *relations* and *relata*. The relations unite the relata: the relata are the meeting points of the relations. The one is unthinkable apart from the other. I do not think that a more general starting-point of structure can be conceived.

"To distinguish the relata from one another, we assign them *monomarks*. The monomarks consist of four numbers ultimately to be called 'co-ordinates'. But co-ordinates suggest space and geometry, and as yet there is no such thing in our scheme; hence for the present

we shall regard the four identification numbers as not more than an arbitrary monomark. Why *four* numbers? We use four because it turns out that ultimately structure can be brought into better order that way, but we do not know why this should be so."
Sir Arthur Eddington, *The Nature of the Physical World*

So here we have, in the words of a 20th century physicist, the very qualitative number significance to be discussed here: three is ideal, and must pass into four to be actualized.

Plato and Aristotle

Plato begins the *Timaeus*, in his offhand way:

"Socrates: One, two, three,... Where's number four Timaeus?"
Plato, Timaeus
And much of the *Timaeus* is concerned with just this same discussion of the relation of three and four that we are pursuing here. Plato supports the same number qualities we've been discussing:
"But two things cannot be rightly put together without a third; there must be some bond of union between them."

So first we have the basic necessity of three proceeding out of two. He names these three "being", and "space", and "generation" (according to one translation I have.) After speaking of being and generation and space in the creation of the universe, the narrator of the *Timaeus* says:

Of these and other things of the same kind, relating to the true and waking reality of nature, we have only this dreamlike sense, and we are unable to cast off sleep and determine the truth about them.
And shortly after he says:
"Thus have I concisely given the result of my thoughts; and my verdict is that being and space and generation, these three, existed in their three ways before the heaven;..."

And a little later:

"A man may sometimes set aside meditations about eternal things, and for recreation turn to consider the truths of generation, which are probable only; he will thus gain a pleasure not to be repented of, and secure for himself while he lives a wise and moderate pastime."

Plato, Timaeus

This is full of significance, and Plato's approach is not to explain multiplicity through the "descent" of number, but rather the reverse: to approach eternal realities by "climbing up" the qualities of number. To Plato, three is the eternal realities and four is the generated world. The study of four is interesting ("a wise and moderate pastime"), but such things are only "probable"; that is the actual creations of four are but temporary and imperfect examples of the eternal three.

And, most significantly, he says that in our sleep we cannot see the actual realities of three. We can however, consider the world generated by four, and in it see the appearance of things as representative of something higher, as a means "to cast off sleep and determine the truth".

The four that Plato is referring to are the familiar Fire, Air, Water, and Earth. In fourth way terminology, we might say that he recommends the study of the interaction of matters (Carbon, Nitrogen, Oxygen, and Hydrogen) to gain insight into the three forces (Active, Neutral, and Passive).

With Aristotle, we get something similar. Aristotle speaks of four "causes": material cause, formal cause, effective cause, and final cause. The first three map exactly with the three forces, and Aristotle throws an interesting light on number four by referring to it as final cause. That is, Aristotle proposes a "teleology", or purpose, to nature which is the reason for the existence of the phenomenon under study. For example, the final cause of the biosphere is the role of receiving influences from outside the Earth and passing them to the Earth. (Of course, there may be different "final causes" for any phenomenon, that is, it is by no means limited to a single purpose, so this reception of extra-Earth influences may be part of a further final cause, such as the continuation of a universal process, or octave.) Interesting too is Aristotle's obvious conclusion that there must, if one follows this through, be a first final cause that originates all causes and is uncaused.

Aristotle's causes map to fourth way terminology as such:

While all this may seem remote from our day-to-day lives, the idea here is that we can see this relation of the ideal three to the practical,

or actual, four in many areas. In so doing, it is hoped we move a little way toward the realization of the eternal verities and a little away from this "buzzing confusion" of multiplicity.

DNA

The structure of the human being is based on the instructions coded into our DNA. The programming language of DNA is quite simple: Each word or "codon" of the instruction set consists of three letters which are just different chemical bases. The purpose of this programming language is to list the order in which 20 amino acids are to be assembled to produce an enormous number of different proteins. Now with just three letters, you can specify 27 different entities (3 to the third power), more than enough to specify each amino acid as well as a stop sequence (an end-of-this-protein-start-of-the-next-one indicator.) But in fact, it is not implemented quite this way: Instead, *four* chemical bases, four letters, are used.

Color

Our view of color may provide another interesting example of the relation of three and four. In our eyes, we have certain light-receptive cells called "cones", and there are three types of cones: One type is sensitive to red wavelengths of light, another to blue, and a third to green. With these, we perceive all the colors in our colorful world. Not too surprising, as we can see when we experiment with colored lights (it can be easily done on personal computers with graphics programs.) By mixing various combinations of red, green, or blue lights we can create any color. In fact, though, this three-color scheme does not appear to be the way our perception of color is actually implemented. In fact, we perceive color based on *four* primary colors: red, green, blue, and yellow. These colors are (conceptually) arranged as pairs of opposites, red opposite green and blue opposite yellow.

Centers

In a general way, we can speak of the "three-storied factory" of the human being as comprising an intellectual, an emotional, and a physical story. But this always remains somewhat unsatisfactory due to the multiple nature of the "physical" story. We might say we have three "psychic" functions: the intellectual, the emotional, and the moving, but for a more complete description, we speak of *four* basic functions: the intellectual, emotional, moving, and instinctive. As four is required to implement three, so is our instinctive functioning required to support our other three functions.

Ancient Elements

Shown above, from left to right, are Plato's "perfect solids", which he correlated to the ancient elements Fire, Air, Water, and Earth. This is a stunning visual representation of the three-Ness becoming four. The first three polygons are created of the three-sided figure, the triangle. The fourth, Earth, is created of the four-sided figure, the square. Using the terminology of Ouspensky from the introductory quote, we could call the first three the forces, and fourth, matter. These should correspond to the "carbon", "nitrogen", "oxygen", and "hydrogen" terminology used in *In Search of the Miraculous*.

The Four Forces

Which brings us to modern physics' four fundamental forces. Modern physics is characterized by two approaches: the general relativity of Einstein is used to describe the enormous macro-scale physics of such things as black holes and the effect of gravity on light streaming across the universe; quantum physics is the remarkably successful but almost unwanted theory of what goes on at the very miniscule scale of individual photons, electrons, and so on. Why not just one theory of modern physics? The effects that relativity explains cannot be explained by quantum physics, and quantum physics cannot be explained by relativity. It seems that neither is complete.

And the most definite way this is seen is that all of quantum physics can be broken down into three fundamental forces, and all of relativity

into a fourth. These numbers should be sounding familiar to the reader by this time.

Curiously, the "fourth force", that relativity requires, is gravity. The force of matter, the attraction of mass. Just for completeness, I'll mention that the names of the three forces that quantum physics encounters are called "strong", "weak", and "electro-magnetic". The "theory of everything" that some modern scientists search for is the common source of these four forces or, as we might say, unity.

So: Three forces, but a fourth is here too, and with that, we have our universe.

A final note is that the four forces may also be viewed in terms of four particles:

* photons (h), carriers of the electromagnetic force;
* bosons W and Z, carriers of the weak nuclear force,
* gluons (g), carriers of the strong nuclear force;
* gravitons (G), an as yet purely theoretical particle said to be the carrier of the gravitational force.

The Food We Eat

I first seriously looked into food, that is, what we eat and why how we use it—in an attempt to follow the first stages of the food diagram. A curious thing is that there are three classes of substances that are required: proteins, carbohydrates, and fats (lipids). The proteins are used structurally, carbohydrates for energy, and fats for storage. When we eat, say, a banana, the constituent parts are broken down to small particles which are then used to build up new particles which are the proteins and so on that we can directly use. Inevitable, though, in this discussion of carbohydrates, fats, and proteins, comes an addition something like this: "these, and the necessary vitamins and minerals, give us all we need..etc.". So what are these "vitamins and minerals? "Minerals" seems to have an obvious association with what this fourth thing often is,whether it be called the element Earth or the

force gravity—the practical earth-bound ground in which the three perform. But what are these 'vitamins"?

One of the reasons I write these essays is they force me to learn more, and in this case I have to look up vitamins. Here is the first paragraph under *vitamin* in the Encyclopedia Britannica I have access to:

vitamin, any of various organic compounds that are essential in minute quantities in the diet of most animals. Vitamins act especially as coenzymes and precursors of coenzymes in the regulation of metabolic processes. Unlike the macronutrients (proteins, carbohydrates, and fats), they do not provide energy or serve as building units.

Again we have this element of making possible the other three, in this case, by assisting in their use.

I sat here writing this on a chair with four legs. Three legs are sufficient to support me on a plane, but in practice that doesn't work very well as I shift around, lean back and so on. But four works in practice. You may think all this is arbitrary and unimportant, or superstitious. But it is not that the numbers, say "3" and "4", have some sort of magic to them. It is rather that these are the symbols we apply to very fundamental principles, really to some of the very principles of world creation. Principles we can see manifest in everyday life, in everything.

Beautiful Symmetry: As Above, So Below

As the geometer who sets himself
to square the circle and who cannot find,
for all his thought, the principle he needs,

just so was I on seeing this new vision.
I wanted to see how our image fuses
into the circle and finds its place in it...

Dante : The Divine Comedy

I stand six feet tall, roughly two meters. My radius, the distance from my heart to the tip of a finger, or from my navel to a big toe, is about three feet, say one meter. This length, one meter, is intimately familiar

to us. It includes the objects within our reach, certainly within our sight, capable of being smelled, lifted, and so on.

We have greatly increased our ability to manipulate our world by creating tools that magnify this reach and our powers within it. Giant levers that mine the earth, great trains and planes that move megatons of material, even, increasingly, robots that visit distant planets or that process necessarily distant hazardous wastes.

Yet we have little familiarity with what is beyond our reach. The pictures from Mars do not familiarize us with Mars the way we are familiar with our favorite stretch of beach or forest hideaway. The medical profession's familiarity with a virus cannot compare with the more intimate knowledge that we may have of our own health. Our almost miraculous tools increasingly bring us more knowledge of the matters outside of us—and inside of us—but we don't feel a growing sense of familiarity or at-home-ness with these worlds.

We might even propose the opposite—that as we accumulate more and more knowledge of increasingly diverse and specialized matters, we feel more alienated. What does a knowledge of, say, the yeast genome contribute to plasma physics, and what do either of these really *mean* to us? We don't *feel* ourselves as in relationship to them, we don't feel their presence, appreciate their reality, except in the most theoretical way. Anyone can tell you "we're made up of atoms", but they've never seen one. It borders on faith, only faith in Science this time around, as opposed to faith in Religion.

The purpose of this essay is to explore a principle that should help us relate to the worlds around us—the very great as well as the very small—and so help us interrelate our ever-increasing knowledge to our lives: to be able to place that knowledge where it "belongs".

This is in direct opposition to any kind of modern nihilism in which knowledge is seen as worthless or worse. It is also opposed to knowledge for the sake of knowledge, as that becomes the collecting of information without a point-of-view, which is meaningless.

In our time, humanity, and in particular Western science, has chosen to organize knowledge based on a compartmentalization of disciplines. Knowledge has been divided into various sciences, such as astronomy, psychology, biology, medicine, physics, computation, and so on. But

today we see two opposing forces at work in further scientific development. On the one hand, for generations now, we have seen increasing specialization—one is not just a physicist but a nuclear physicist, or not just an astronomer but a radio astronomer and so on. And even these categories are hopelessly broad for those involved in the fields.

On the other hand, and this is relatively recent, we see an increasing amount of cross-disciplinary studies, and more and more come across such strange-sounding fields as geomicrobiology, and biomathematics. These new fields are partly a type of specialization, but they are a specialization that recognizes the validity of other disciplines and the need for multiple disciplines to work together to explain and explore new findings.

To put things plainly, barring disaster, we are not about to stop seeking and finding more and more about the infinities around us. But we need to find a way, or more probably, ways, to organize and relate to it. This essay concerns a personal attempt to do just that, and it is necessarily organized from a certain point-of-view.

The point of view I have chosen for the construction used in the following is *my* point of view. Or, more generally, the human point of view—this perceptive being (you) with a radius of one meter sees and relates to the world in specific ways that are a result of relative size. To us, the star Betelgeuse and the carbon atom are infinitely distant "points". We can, and do, collect information about them, but it cannot have the more immediate importance of my blood circulation, or the success (or lack thereof) of my onion harvest.

It is a curious fact that we see as far in as we see out. By "seeing in", I do not mean psychological insight—too often we don't see far in that sense at all—but rather, in the sense of looking inside of things, dealing with things that exist on microscopic and smaller scales. We calculate the largest possible size, the size of the universe, as roughly 10**30 meters, and the smallest possible size, the Planck length, as 10**-31. (In this essay I use ** to represent "to the power of", so an expression like 10**30 means "ten to the thirtieth power [a 1 followed by 30 zeros] which is the common "scientific notation".)

But what is even more curious, even normally inexplicable, is the *related natures* of the very large and very small, and then of the not-

so-large and not-so-small, and then of the next largest and next smallest, and so on. This may be, but does not seem to be, an absolute consequence of our perspective, the point-of-view of the human. And yet the quantities, or more correctly sizes, being related in this essay are not chosen arbitrarily, but are chosen specifically by their common distance from our point-of-view which is the one meter human radius. At 10**-13, for example, we have the atom, and at 10**13 a star system. Each characterized by a relatively permanent and massive center surrounded by orbitals of relatively insignificant size and mass.

The basic plan of this somewhat more ambitious essay is as follows:

- We see the human at the center because this is naturally our point of view,
- we live in that great biosystem called Nature, constructed of a myriad of creatures whose largest common denominator is the living cell,
- we live on a planet, Earth, constructed of the rich combinations of those largest particles of lifeless matter known as molecules,
- the planets are only a small part of our great star system, the solar system, centered on the sun and consisting chiefly of elemental matter, or matter in its atomic state.

With each larger step, we find a smaller basic building block. And this quantitative change corresponds to a qualitative change.

We will look beyond this too, to the galaxies and the subatomic particles, and even consider the universe and that universal particle, the photon, or quantum of action. While this essay can in no way be comprehensive in listing all levels of the universe, it is intended to provide a principle by which much can be understood and related: By which things may, it is hoped, be organized in such a way that the continual input of new knowledge can be integrated and so related to what we already know. Much more than a mere filing system is intended, rather the discovery or recovery of a structure that aids us in understanding each part and its relationship to each other part, to the whole, and, ultimately, to ourselves.

The easiest way I've found to illustrate this great range of sizes in the universe is to use the meter as the measuring stick, and exponential notation to mark the divisions. I draw a line with the human in the

middle, representing a radius of 1 meter. Everything to the left gets progressively smaller and everything to the right, progressively larger:

smallest <------------------------------1 meter------------------------> largest

I then mark meter measurements on the line like this:

smallest <-----+--------------+----------1 m------+------------+---------> largest
... 10**-10m (-.01m) 10 *-1m (-.1m) 10**1m (10m) 10**10m (100m) ...
and so on, up to the largest, and down to the smallest, known sizes.

What I intend to show is that the objects a certain distance larger than us—say, a planet measuring around the size 10**7m—are intricately related to corresponding particles the "same distance" smaller than us, in this case, the molecule, around 10**-7m. To represent this graphically, I'll draw semicircles that connect some of the same distances removed from us:

The sizes I'll work with are representative, and certainly specific examples can be found to fit the exact size used. But this is not as important as the principle that, say, molecules are a distinct class from atoms, and are of a larger size. And planets are a distinct class from stars, and are of a smaller size. One may not have to work too hard to find some few exceptions, but their relative rarity simply proves the rule.

Finally, what is most interesting to me is how humans relate to this enormous range of sizes they live in, literally worlds within worlds. The correspondence of the micro-world to the macro-world is also echoed in us: We are in the larger worlds as the smaller worlds are in us. So, while we are doing this exercise of mapping the universe, from greatest to smallest, our time would be best spent, I think, to use examples of the objects we are involved in and are involved in us. For example, when we discuss planets and use an example, let us take Earth, the planet that concerns us most. Similarly, a cell might be one of our blood cells, an atom one of our carbon atoms and so on. In this way we keep the subject matter as immediate as possible. And it may help us realize that the point of view this all matters from anyway is the human point of view—our point of view.

Ultimately, the most interesting aspect of these worlds within worlds is connected with the *relationship* between the smaller and the greater. The key point to realize is that *all the smaller worlds discussed are contained within us*. And if, as I propose here, those smaller worlds constitute the larger worlds, we have within us representatives of all the stuff, even of all the laws—freedoms and constraints —of the universe.

But clearly "thinking" this, or "knowing" it, is only philosophy. On the fourth way we are equally concerned with practice. So what is the connection practically? The medium between philosophy and practice is theory (I use fourth way definitions here and elsewhere of course). Theoretically, we can penetrate consciously into the smaller, finer, faster worlds within us, and these finer and finer worlds correspond to ever greater and greater worlds. This penetration into different worlds, requires us—our consciousness—to perceive *their range of time*. This is the nature and result of the refinement of hydrogens, of energies or matters. Finer more volatile hydrogens may give access to finer, more penetrating perception, greater depth of consciousness. But we have to eliminate leaks, handle the energies, refine them and produce more. This is the work of the fourth way: To master ever finer matters and so grow in conscious participation, grow in awareness and right use of ever more powerful and penetrating matters.

Ultimately what we are is neither matter nor energy, but consciousness. Consciousness that uses matter and energy. Incidentally, here's an interpretation of the famous formula:

$E = mc^2$

If c, light, is perception, then c-squared is self-perception, or self-remembering, the technique we use to transform matter (m) into finer energies (E). As we are, our essential mass is fixed - it is our body and the food we eat. Our self-consciousness is almost non-existent, hence our self-generated energies relatively low. We increase our energy, and we refine it, by increasing our consciousness. The mere matter of our food becomes higher energies, receptive and able to respond to consciousness.

"Penetration into the subhuman time of cells creates awareness of the superhuman rhythms of Nature, into the time of molecules awareness

of terrestrial time, while further penetration into electronic time implies a similar awakening to solar time."
Rodney Collin, The Theory of Celestial Influence

The Human Being

"There is a relation between the hours of our life and the centuries of time. As the air I breathe is drawn from the great repositories of nature, as the light on my book is yielded by a star a hundred millions of miles distant, as the poise of my body depends on the equilibrium of centrifugal and centripetal forces, so the hours should be instructed by the ages, and the ages explained by the hours. Of the universal mind each individual man is one more incarnation. All its properties consist in him."

Ralph Waldo Emerson

Our work starts here, is based here, and all progress is relative to this central starting point. This is like the idea that "The longest journey begins with the first step." Awareness of greater and lesser worlds begins with awareness of this world. At least, any sustained and practical awareness of other worlds starts here, now.

When properly functioning (and it does happen), this is the world of our intellect. While capable of operating with higher energies, it is a big thing to direct it to the matter at hand, and so keep it from squandering energy and developing weird connections or habits that become hard to break. A very good technique to do this, and one often employed in various teachings, is to force the mind to pay attention, whether on counting exercises, listening to something, certain meditations, and so on. The result gained is because of the reduction of wrong work—of course, all kinds of other explanations are given, depending on the teaching. The advantage of the fourth way is in an understanding of what one is doing and why. It is OK to recite the "Jesus Prayer", engage in "sacred gymnastics", perform complicated

tea rituals, and so on, but it can be much more powerful if you understand that what you are doing is controlling attention in the particular center involved, and begin to recognize the power of controlled attention. Then think about what might be possible if attention were controlled not unconsciously, that is, not for reasons that have nothing to do with the control of attention but just achieve any result that they do *from* the control of attention, and think now what it would mean if attention were controlled with a knowledge of its effects, and how they might be best applied. This is an example of how the way of understanding differs from all other ways. No faith, no exercise, without specific knowledge of the functioning being manipulated and why.

Proper use of our common intellect is the proper action at this stage. There are worlds above and below us, and they are accessible to us, not directly by intellect but directly by our physical, emotional, sexual, and higher functions. But we use our intellect as a guide, to help us put our house in order, and one way it can do so is by recognizing its limitations.

Given that, let's talk about other worlds.

On Nature and the Cell

Nature is the result of the activity of cellular life and cellular life exists within Nature. The two pictures above—of a coral atoll and some cells—are a graphic example of a similarity of structure, in which the living center is surrounded by a protective barrier.

100,000 meters is about the large end of the scale here. This is an area with a radius of about 60 miles. It is hard to specify exactly what this is, other than about the size you can go without getting a major change in some biologically-determining factor, such as elevation, latitude, annual precipitation, and so on. The Morrisons write in their book *Powers of Ten* about this size:

"This is the scale of the countryside, more comprehensive than any peak or river, yet with a kind of unity. It is the diversity of the earth which is here suggested."
Philip and Phylis Morrison, *Powers of Ten*

This large scale of effect of the cell can be seen in the size of coral reefs, coal and oil deposits, grasslands, forests, and any large natural whole.

In another sense, what we are talking about here is a *minimum* size that allows a full-scale biodiversity. This is about the size of the island of Hawaii, for example. Evolution can proceed on such a scale, and natural disasters are somewhat mitigated by the diversity of life and habitat. A little isolated sand island, on the other hand, could support only a limited variety of life, and that only temporarily—until the next tsunami or drought obliterated life's tenuous grip.

Cellular life seems intimately connected with the use of molecular energies. Indeed, it would seem that the energy source of a "world" or cosmos comes from the world or cosmos above it. Perhaps this is one meaning of Collin's statement:

"Energy comes from above, not from below. The whole thing is in that."
Rodney Collin, *The Theory of Conscious Harmony*

This "thin film of organic life" directly relates to the molecular/planetary world by forming a certain molecular atmosphere in which it lives, breathes, and dies, modifying the planetary surface that is its home. It is a transceiver, receiving certain energies and transmitting others. Ultimately this engine is driven by light as, ultimately, everything is driven in all cosmoses.

The receptivity of cells for molecular energies or matters relates to the speed of our instinctive and moving functions, how we can analyze something so complex as a fine wine within a moment, or catch a ball so much faster than we can think about it. To some extent, this speed is not too far from us, as we can, with practice, or sometimes just because of certain pressures, observe our own or other's activities operating at such a speed.

Of Planets and Molecules

Planets are composed of a wide variety of molecules. While some molecules exist outside of solar systems, it is with the planets that the

cooler conditions and relative stabilities exist that allow the countless combinations of atoms into simple molecules, and simple molecules into increasingly complex ones. We can see on the scale of our own solar system a surprising variety in planets and we have every reason to expect that variety to continue to increase as more planets in other star systems become known to us. The nature of this level, above and below us, seems to be one of a range of complexity due to a range of molecular combinations. Moonless Mercury is relatively simple compared to our Earth-Moon system, which in turn is simple compared to a gas giant, say Saturn, with its rings and large number of satellites. Similarly, there is an enormous range in the complexity of molecules due to the combinations of atoms. For example, the relatively simple water molecule compared to a protein molecule.

An aside: A discussion of planets and molecules would not be complete without mentioning the theory of "planetary" types, which relates to planets and the molecular secretions of our endocrine system. To one who has not verified the seven essence types, there is not much of interest here. But if one has verified this information, it is almost obligatory to try to face the repercussions of such knowledge. Not only is it ancient and profound, it is virtually unknown, This inevitably must lead to thoughts about the nature of esoteric knowledge. But what I want to speak of in particular here is the curious fact that for millennia the seven types were connected with the seven ancient "planets". Why this should be I don't know. Is there some means of perception by which one may verify this directly? Was an ancient knowledge of planetary positions or activities correlated with a more profound knowledge of psychology than exists today?

At any rate we are left with an accurate knowledge of human types, a very curious correlation with planets, and a modern association with the human endocrine glands. It is the minute molecular secretions of these glands which directly determine the characteristics of essence type. These secretions circulate in out blood stream, centered about our heart, as the planets circle the sun.

Suns of Atoms

The old image shown here of the atom, while simplistic, illustrates graphically the basic idea or form of this level. The vast amount of the

mass of a star system or atom is in the center, and the external particles or planets surrounding it are miniscule in comparison.

It is chiefly atoms, and their charged states, called ions, that determine stars. Conversely, it is stars that create the range of atoms known to us in our table of elements.

With the discovery of the atomic spectrums (the characteristic bands of light emitted by different atoms in an energized state), modern science began to determine not only the structure of the atom, but the atomic nature of the stars. The light from a star, emitted as an atomic spectrum, allows us to determine the type of atoms emitting that light. This has led to increasingly-refined theories of how stars radiate by atomic fusion, and how, as a result, the great range of atoms in the table of elements is created.

This is a basic feature of this idea that the lower relates to the higher—by learning some aspect of the lower world, in this case the nature of atoms, we learn something about the corresponding higher world, in this case the nature of stars. And that is in the sphere of mere knowledge. Ultimately interesting to us is the realm of understanding, or relating experience with knowledge and, for the solar and atomic scales, it must be a very rarefied experience indeed.

Galaxies and Particles(?)

Little is actually known about the origin of galaxies, so I suppose this may serve as a kind of test of this theory, as it would clearly suppose sub-atomic particles to be the defining element of them. I don't really know what else to say, maybe I'll leave it at that, and hope to expand on this section as knowledge or theories become more solid.

Sheets and Strings (?)

Understanding the behavior of the universe at large depends critically on insights about the smallest units of matter and their fundamental interactions.
Guth and Kaiser, *Science*, Feb 11, 2005
The largest scale of structure in the universe and the smallest components causing that structure are currently unknown and debates and investigations are active and interesting. Ideas of sheets or bubbles of galaxies on the large scale, and quarks, strings, and so on

on the small scale are some of the topics here, and I wait to see how this develops.

The Universe and the Photon

Strange to say, we seem to know more about the nature of the universe as a whole than we do about galaxies and sheets. Or perhaps it is more correct to say we have more developed theories of universal origins than we do of galactic origins.

Simply put, whether in modern science or ancient myth, the universe as we know it begins in light. Scientifically speaking, we can see how the "particle" of light, the photon, defines the universe. The speed of light, postulated as the maximum possible speed, defines the possible size of the universe.

Every thing is in the universe, and light is in every thing.

To return to "the matter at hand", namely our physical being, we need to search out how these cosmic levels of materiality comprise us. Clearly, the finer the matter, the more pervasive it is—electromagnetic energies ("light" or photons) are active in our atoms, the atoms that comprise our molecules, of which our cells are constructed, and ever larger hierarchical groupings of cells combine to create our physical constituents. But how do we *perceive* these things? Can we be conscious of them?

Certainly, on the scale of cellular conglomerates, we can be aware. We can sense tension in a muscle, an itch on the skin. But it should be remembered that the actual means of perception, of, say, that itch, is electro-chemical in origin, that is, signals are sent from the skin through nerve cells which relay information by electrical impulse internally and chemical (molecular) secretions externally. In that sense, there is little difference between our perception of "light" by the eyes, sound waves in molecular matter by the ears, or cellular structures by our sense of touch. In all cases, what we register is a result of the electro-chemical action of the cells of the nervous system.

But we have other means of perception than the sense-based perceptions, but we rarely think of our sex function or our emotional function as organs of perception. We are even less aware of the possibilities of perception in higher centers. It is in these functions that

we sense directly the finer materials of the universe, and by means of these functions that we are able to enter the time, or attain the speed, of such perceptivity.

Where do we begin to "climb the ladder" to these higher functions? From where we are, of course, from "Earth", but this starting point is not even at the speed or level of our sense perceptions, it is rather naturally from the slowest function we have—our ordinary intellectual center. Our everyday, but properly working, "mind". We call this H48, or true personality, and it is exceedingly slow compared with any of the other functions. We have, unwittingly, acquired some even coarser "functions", really artificial apparatuses, that "work" with lower energies, H96 or worse, but such states cannot perceive anything real at all and so are worse than worthless — worse, because they convince us of unreal things, such as our own importance, our negative emotions, our fantastic ideas about reality. So one of the first things we have to do with our ordinary minds is develop, plan, and put into action ways to end the wrong work and begin the right work of our organisms. In general, this is called the Work. Perceptions arising from higher functions will necessarily be faster and more subtle. They must be harder to "catch", and so we must learn to recognize them for what they are. And of course we must tune down the noise of wrong work to be able to do so.

The chief means of turning off the wrong work are such things as the struggle with negative emotions (finding *reasons* not to express them, this has nothing to do with suppression which is just more wrong work), and struggle with imagination, identifying, inner-considering, and so on; a whole host of practical techniques elucidated in the various teachings of the fourth way. Above all, what is required is the work on self-remembering. Self-remembering which at first seems like nothing because, indeed, there is nothing there, nobody home. If we are to become conscious of higher, faster, finer, more powerful matters, we have to be here in the first place, we have to develop our consciousness from the beginning. It is difficult because we find we have no will to start with either, and we must struggle for a long time to make what appear very modest gains. But it must be this way:

Consciousness does not develop unconsciously, nor will involuntarily.

Miscellaneous Essays

A Western Way

"Take the understanding of the East, and the knowledge of the West —and then seek."
G. I. Gurdjieff
"Evidently, he came into contact with a school that was not Eastern, and from this school he got his knowledge."
P. D. Ouspensky

While the ways of the East are not closed to Westerners, and the ways of the West are not closed to Easterners, there is much more difficulty than may be commonly realized in adopting another way.

As has been pointed out, for example, a Westerner studying an Eastern teaching like Buddhism often comes across the idea of "nothingness" as a desired state. This, of course, is ridiculous East *and* West. This word, so dutifully translated, really means "no-thing-ness". More properly translated

with a Western term such as "unity". Also, the idea in the East of, as it is translated "detachment", is better approached fresh, and is the fourth way's action of "separation", or "non-identification".

But there is an even more fundamental difference between what I am here going to call the old Eastern ways and the new Western way. This is due to the underlying culture in which ways are formed, which they shape and and in which they are shaped in organic interaction. We westerners can probably not even imagine the culture of, say, Japan one thousand years ago, read as many books as we may. We could have some chance of doing so only by being immersed in the culture of Japan today, preferably from early childhood. Because what is assumed is not taught. It may not even be recognized clearly enough to be seen as requiring reaching.

It would be equally difficult for one raised in a traditional Eastern culture to comprehend the fourth way in its stress on individual understanding as opposed to tradition and trust. A rabelaisen Gurdjieff telling tall tales of where the teaching comes from does not correspond well to the keepers of tradition in ancient monasteries. And this is not accidental—it is necessary and correct.

I intend for this essay to be mainly about the new Western way which is the fourth way, but I hope to use examples from Eastern teachings to help clarify differences and commonalities between the different approaches. In general, by Eastern ways, I am referring to the great and ancient traditions of Confucianism, Taoism, Buddhism, and that rainbow of approaches we call Hinduism. To some extent I could include older traditions of the West and near East as well, such as orthodox and catholic Christianity, Islam and Judaism, as being what I am here referring to as "Eastern". The fundamental distinction being *science*, but a new and higher science that includes and enhances modern science; that is, a new metaphysics.

The fourth way is both psychological and cosmological. It is also both ancient and modern. (It is comprehensive.) The psychological teaching of the fourth way is ancient, in that knowledge of human psychology was well established before the arrival of modern science and in fact, as Ouspensky points out, psychological knowledge may have never been as poor as it is in modern times. Psychological knowledge, perforce, has been hidden. The cosmological teachings of the fourth way begin in ancient science which in itself was *largely based on psychological knowledge*. While it was necessarily limited to investigating the external world without the tools of modern science, it had no limitation in investigating the inner world, and therefore had the possibility of harmoniously relating a profound knowledge

of human psychology in synthesis with cosmological studies, not in antithesis.

So part of our task, in addition to understanding our personal psychology (and, increasingly, human psychology in general), is to integrate the information obtained by modern science with the ancient knowledge of psychology. And ancient cosmology provides clues as to how to approach this. Psychological and cosmological knowledge must harmonize if they are both to be true. Laws are everywhere the same, and we cannot apply one set of laws to the human psyche and another to the cosmos.

When I speak of modern science, I mean the knowledge of externals—what I am calling cosmology. This includes, for example, knowledge of the atom and knowledge of the galaxy. It does not include modern psychological knowledge. There is no modern science of psychology, although occasional claims for such are made. A "science", that does not even include such basics as the distinction between instinctive, moving, and emotional functions—or between consciousness and thought—and has even become elaborated without knowledge of such fundamentals, can only be a kind of superstition, or make-believe teaching.

The investigations of modern science into the physiology of the brain and of neurons in general, however, progresses. It is understandable that in a science that has been so preoccupied with matter we find progress in the study of physical manifestations. The relation of the cerebral cortex to intellectual function and the cerebellum to moving function for example is easily determined if you know *psychology*, but it cannot be recognized if you don't. Current science should be looking for such things, and tries to, but it cannot.

One of the problems with science's physiological approach to studying functions is the incredible, probably unfathomable, complexity of neural structures. The cerebral cortex is estimated to have one hundred thousand million neurons, and the cerebellum to have about half as many. If that were the only complexity, we might hope to eventually be able to someday mimic this neurological machine with quantum computers or some such tool. But that is only the beginning. Sure, we can view a neuron in our brain much like an electrical switch, (and try to deal with the idea of billions of electrical switches) but that analogy doesn't hold outside of simple neurons. The neuron communicates with other neurons, not electrically, but through *chemical* secretions. And neurons are not just connected like a bunch of logic gates: they connect in this chemical fashion simultaneously with *multiple* other neurons—in the case of the neurons of the cerebellum, *any* neuron might connect with *80,000* other neurons through reception (via

"receptors") of these chemicals. And, a single such chemical, for example the neurotransmitter serotonin, may communicate with one or more of several types of receptors. Altogether, a set of just initially understood basic building blocks of enormous number and many more enormous potential connections cooperate and interact in unknown combinations to produce brain functions. For starters.

And remember, at this point we are still just talking about functions, not about consciousness. While it is generally not understood that there is a difference between intellect and consciousness, we learned long ago:

Functions can exist without consciousness and consciousness can exist without functions.
P. D. Ouspensky

Indeed, that was in Ouspensky's *first* lecture, already way outpacing modern psychological knowledge.

The new Western way—and I call it new because for all practical purposes it did not become publicly known and accessible until the first half of the twentieth century—is intimately related to modern Western culture. It is practiced "in life": at work, at home, on vacation, surfing the web (you, sitting there now), wherever one is in the course of a typical Western-type lifestyle. In fact, it is so much related to such a lifestyle, that it *must* take place within it, and not in, say, a monastery or cave. This is because the fourth way starts with who we are, and much of who we are is determined by our conditions, the situation we find ourselves in when we begin this work. More simply, the fourth way does not impose a new and different environment on its participants, nor does it even impose a common environment on different people. It starts with me where I am, and you where you are.

Now on a larger scale, on the scale of Western culture, the predominant influence is science, both in the results of technological accomplishments and in the philosophical atmosphere. The thought of the West has been hugely influenced by the (now discredited) 19th century mechanical universe, but is slowly turning its attention to the quantum of action, which is almost unfathomable, but simply "wrong", to the old way of thinking.

The mechanical universe of colliding billiard balls accidentally combining into life is the old, 19th century science, and it has effectively displaced religion as the explanation or meaning of the universe. In scientific circles, that explanation died in the early twentieth century. A new science, the 21st

century science, means a new explanation, and it must include much that has been swept under the rug as untidy, embarrassing, and just not possible while the old model held. This will be painful and awkward and confusing because no doubt much that *is* worthless is under that rug, as well as much that is real and important, and we need the new science to help us discriminate. The so-called new-age movement is an example of the variety—containing both worthless and valuable things—of that which is coming out from under the rug.

The new science must harmonize quantum mechanics and the theory of relativity, both of which are based on light, the most physical aspect of the Absolute. It must emphasize complementarity, and it must enforce exacting metaphorical expressions as it complements consciousness and light.

The fourth way, although apparently new, lacks nothing, partly because of the generally unknown but rich conscious Western teachings it has to draw on, and partly because it is inherently free of tradition, and can profit from the eternal anywhere, whether experienced in the lines of a sculpted Kuan-Yin or in the graceful gesture of a Leonardo angel. Where the Eastern tradition has a great body of literature and tradition to draw on (the teachings and interpretations of the sayings of the Buddha for example), the fourth way has a great reservoir of expositions and acquaintance with Gurdjieff, Ouspensky, Collin, Nichol, and more. And really more suited to our time and place, and potentially leading to at least as much.

But even if this were not enough, it is fundamental to the idea of the fourth way that one can apply it—after considerable preparation, true—anywhere. To anything. Where is the art we cannot learn something from; learn something about center of gravity perhaps, or personality? What book cannot be somewhat enlightening, whether it is about electricity or medieval literature, a mystery or an encyclopedia? Can you not see one or more of the six processes in the book's exposition, used poorly or well, consciously or mechanically? You can learn an author's or artist's type, and see new ways in which that type expresses itself. And always, you can watch how you relate to what you see—maybe learn why encyclopedias annoy you, mysteries hold your interest, or whatever. Any limitation to objects of study on the fourth way exhibits a lack of *conscious* imagination.

P. D. Ouspensky named one of his first works *Tertium Organum*. What the title implied was "this is the third instrument, or organ, of thought. The first was by Aristotle, the second by Bacon, and now I introduce this one."

Rodney Collin once said that Ouspensky took "outrageous responsibility" for what he understood, and I think the title of that book indicates it well. I see the life work of Ouspensky to be at least at the level of those sages. But really, much greater. We are very naive. We don't realize what we've been offered.

"It's a brave new world that has such men in it"
William Shakespeare, *The Tempest*
As I understand it, they ask us to wake up, to participate consciously in the new beginning, and try try try to get past our petty selves. There is a new way, and it is high time to work, time to be.

The Circle of Life

The enneagram is comprised of three distinct parts: the circle, the triangle, and the six-pointed web, which together represent a cosmos, or self-perfecting whole. The circle represents the lifetime or growth of the cosmos, the web represents the circulation within the cosmos, and the points of the triangle represent the points where the cosmos connects to the world outside of it. Put another way, they represent the body, soul, and spirit of a cosmos, respectively. Each of these parts relates to a different way of viewing a cosmos. A true cosmos is said to consist of these three parts working in harmony to form a living whole.

This essay deals with one cosmos—a human being—and mainly only one part of that cosmos, represented by the circle of the enneagram (although the triangle will be used too.) In other words, we will talk

about development along the circle in terms of the years of a human life, relating stages of natural development to knowledge of the fourth way.

The Circle

The circle represents a lifetime, the pre-determined, natural unfolding of development of a cosmos, and in this case the cosmos under study is the human being, so this unfolding is the life of the human being. We will talk about the beginning, the development, the attainment, and the death, which is our life. This must be analogous to the same stages of the circle in the life of any other cosmos, or we are in error.

Here is the circle:

The nine points are the familiar nine points and the numbering used when discussing the enneagram. The points 1, 2, 4, 5, 7, and 8, are associated with particular endocrine glands and their corresponding functions, and it will be seen that the function of the gland becomes predominant at approximately the age assigned to each of those points, although it functions throughout our life. The points 0, 3, and 6, correspond to the external influences which are the food, breath, and light of a cosmos, and will be seen here to correspond to birth, speech, and sex, respectively.

Leonardo of Pisa

An additional source of structure which we will be employing is provided by the so-called "Fibonacci Sequence". Fibonacci was the nickname of the great 13th century Italian mathematician Leonardo of Pisa. Although he is responsible for no less than introducing the Hindu-Arabic place-valued decimal system as well as the use of Arabic numerals into Europe, he is best remembered for a curious mathematical sequence he introduced in an apparently simple story problem in one of his books. It goes like this:

How many pairs of rabbits will be produced in a year, beginning with a single pair, if in every month each pair bears a new pair which becomes productive from the second month on?

The answer is a numeric sequence that unfolds like this:

1, 1, 2, 3, 5, 8, 13, 21, 34, 55...
and so on, each new number being the addition of the two previous ones. Among other features of this sequence is that the ratio of any two adjacent numbers approximates the golden mean with ever-greater exactness as the numbers get larger. So, for example, 13/8 = 1.625, while 21/13 = 1.615, where the result increasingly approaches the golden mean. This occurs in any numeric sequence in which the next number is created by adding the two previous numbers. In the Fibonacci sequence, the quantities themselves appear in the growth of various natural organisms, for example, a sunflower may have 21 left and 34 right whorls.

It is well beyond my intent for this essay to go into any detail regarding the golden mean and the Fibonacci sequence. The use I want to make of this sequence here is in the first 10 numbers. As a sequence of natural growth, it must, of course, refer to human growth as well.

The Circle and the Fibonacci Sequence

I'll combine the enneagram and the Fibonacci sequence to describe the stages of human development. In particular, I apply the Fibonacci numbers from 1 through 55 to the nine points of the enneagram. What is remarkable, and surely not coincidental, is how the stages of human growth may be best structured by dividing them into exactly the intervals described by the Fibonacci numbers. And the stages resulting from applying the Fibonacci sequence on the enneagram appear exactly where the human function corresponding to the same points should come into play.

Why this should be so is hard to say. Aside from making still another demonstration that both the enneagram and the Fibonacci sequence are meaningful, it seems to me to mean that human development is

timed by years. That is, the Earth's revolution around the Sun, corresponding to our solar year, must synchronize the biological basis used to determine when a new human capacity should emerge. This is not to say there is not some degree of individual variation—one individual reaching a stage before or after another. But, in general and to a remarkable degree, the Fibonacci numbers correspond to the development of stages expected by enneagram knowledge.

Modern science has recently determined that individual cells and more complicated structures of life have "biological clocks". The clocks under study—the ones I know of at any rate—are diurnal, that is, they time the length of the day. In general, if the cells under study are placed in certain artificial circumstances such as continual light or continual darkness, the clocks do not reset themselves accurately and may produce, for example, a 25 hour oscillation. But under normal conditions, and apparently profiting from a great deal of redundancy, the clocks correctly compensate for deviations and so continue to accurately time our days.

This has a range of practical uses which we are only beginning to guess. Certainly various endocrine secretions in our blood vary depending on the time of day and so on. What I propose is that we also have some sort of clock that is timing the year—the year, the month, and the day all being natural rhythms the body is subject to.

We know a little about the monthly rhythm, for example a woman's menstrual cycle corresponds to this length, but in general the monthly rhythms remain uninvestigated and any mention of such possibilities is dismissed as "superstition". But we become less frantic when discussing, say, fish, and no one seems bothered that the grunion times its breeding cycles to correspond to the periods of the new and full moon. And regarding the full moon at least, there are many such examples. The new moon, however, is much less investigated, mainly because it is invisible (I suspect that the new moon is Gurdjieff's "Anulios".) No "psychologist" will tell you that the moon affects human behavior, but any cop will.

Annual rhythms have a similar obvious external nature and an unexamined internal nature. We know well the change of seasons,

say, but only very recently has modern science related them to human psychology, for example in the relation of moods or emotion and the length of exposure to sunlight. This is essentially a whole new area of investigation, and promises to be interesting.

In the following paragraphs, I'll give a complete overview of this theory that relates the enneagram and Fibonacci sequence to our lifetime. Here is the figure I'll be discussing:

The Stages of Life

The figure is divided into three parts by the triangle, and these correspond to definite emphases in our life. The first third of the circle (moving clockwise from the top), concerns birth through the age of three. The emphasis here is on the development and basic use of our physical capabilities, ranging from getting the most simple motor control in order to eat, through walking, and finally talking. The development of speech becomes the means of entering the second third of our life, represented as the second third of the circle from the ages of 3 to 13 years. This is a time of the development of our basic set of social skills, our personality. It provides the necessary groundwork for the third stage of our life, here shown as the last third of the circle beginning at age 13. I have called this last third the age of self-development. It begins with the emergence of adult sexuality and proceeds from there. More on all of this when we talk about the nine groups of years next.

The Development of the Body

The two glands particularly associated with this phase of our life are the pancreas and thyroid, both of which "are derived from cells that arise in the embryonic digestive system" (Encyclopedia Brittanica).

One to One

Much as the Fibonacci sequence starts with two "1"s, the first point at the top of the circle may be taken to be both conception and

birth. Interesting to note (as this is the point that corresponds to the moon astronomically and the lunar type in humans) that at this point—and this point only—time is told in lunations: birth being 10 moons after conception. After this, all our measures will be in solar years. I've called this first stage *manifestation* because that evokes it well for me—everything from wetting diapers and crying to the first exhibition of individual characteristics—a "quiet baby", or a "cry-baby", a "big-boned" baby, brown eyes, her Mother's nose, and so on. ("Eating, sleeping, and waking up in the middle of the night" might be another way to label this stage but it is a bit unwieldy.) "Eating" or "Digestion" might not be bad names for this stage. In general, it is the process of growth.

The endocrine gland associated with 1 year is the pancreas, responsible for producing most of our digestive enzymes as well as a natural bicarbonate to neutralize any indigestion due to acidity. It is responsible for regulating the use of glucose, an important component of a mother's milk. Basically, the baby's job is to eat. Following the Fibonacci sequence, this stage would end at the age of one year.

One to Two

The second stage is the age of *independence*, in which the child is able to eat foods other than mother's milk, able to play on its own, assert its will when denied, and so on. This independence, or willfullness, as it becomes combined with more sophisticated use of movement, inevitably leads to the next stage of life.

The point designated by the age of two corresponds to the thyroid gland, the endocrine gland chiefly involved with metabolism and oxygen consumption. In other words, the thyroid is responsible for the proper burning of the fuel of our digested food, generating heat and other energies for our use. Overproduction of its chief secretion, thyroxin, produces excessive movement.

Two to Three

The next stage, *movement*, is characterized by the child's "getting into everything". This goes well beyond the "toddler" who has learned to walk, to the child who exhibits a relative mastery of external movement to explore the world. This also manifests in an

exploration, or testing, of limits, of "do's" and "don'ts". Children quickly learn how far they can go in some novel area, and this limit is pushed, played with. Thus a new and creative world of relationships begins to develop, a world which will come into full being with the functional use of language at the next stage.

And so the first "third" of life, infancy, is accomplished. It may seem strange here and throughout this essay to see these apparently unequal divisions called equivalent stages, but I take my cue from Rodney Collin, who pointed out the vast difference in time perception that occurs as we grow older. (Collin used a different scale, a logarithmic scale based on 10 lunations, to plot human development around the enneagram circle.) Everyone knows that common adult expression "time flies", but it doesn't fly for the child. The stages, as we move along the circle, enclose progressively more years yet contain an equivalency in experience and change.

The Development of Personality

The basic idea to be discussed for this "third" of our life is the development of the personality, strictly speaking false personality, which is the socialization of the individual in our society. It is a necessary but not very pleasant accretion. This is normally the age of the fastest development of our emotional abilities. False personality develops as the result of our emotional sensitivities—we become so able to convey our emotions and perceive the emotions of others that we inevitably get hurt, and unconsciously find ways to protect ourself.

Three to Five

The development of personality begins with what I have called *speech* but is more generally communication, and includes interaction with others directly or indirectly (this of course does not exclude the deaf using sign language, for example). The influence of mass media and pop culture in general has an enormous influence. One must understand the language and be able to use it. We learn what to say and what not to say, and who to say it to.

In this period is the age of five years and the endocrine gland spotlighted is the parathyroid (actually four closely-spaced glands). Parathyroid hormone encourages the use of calcium and phosphorus for bone growth in combination with the thyroid. Bone growth is an obvious necessity during these years of relatively rapid growth of the body. Developmentally, both the thyroid gland and the parathyroid gland develop out of bronchial pouches (associated with lung development—this point is associated with breathing in the food diagram. Two of the four parathyroid glands as well as another gland, the thymus, both come from what is called the third bronchial pouch.

An aside: There is some association of the parathyroid with speech in that the thyroid/parathyroid interaction regulates the quickness of speech. My personal suspicion is that the thymus, the gland of pre-sexuality in general, is connected with the astonishing ability of children to learn language, but I find no support for this in the literature. But the thymus is clearly implicated in learning of another kind—the ability of our immune system to recognize viruses, once it has seen them, and this ability is "possibly related to other processes whereby cells acquire new phenotypes based on external input." An abstract of a very technical article is here. It is admittedly a reach, but I believe the thymus is implicated in learning in general. Curiously, or perhaps appropriately, in humans, the thymus type (solar) relative to all other types is naive. This seems contradictory, but it is interesting to me that *learning* is the central feature, or variable. Further thought leads me to believe that a certain naivete *is* implicated in learning in that a jaded "been there done that" kind of attitude is more closed to new possibilities than a naive openness and willingness to try something new. (See also Note 1 for more on the thymus and immune-system learning.) I mention the thymus even though it does not appear as a point on the enneagram circle—just as the solar type does not appear on the enneagram circle—because it is "the gland of childhood", decreasing in influence and even physical mass as we grow older.

Five to Eight

Childhood, roughly the ages five to eight, is a magical time, or should be. A time in which we are still strongly influenced by our essence, our own real likes and dislikes, and to whatever extent

possible we pursue those activities and relationships that we prefer. This is the time of greatest independent *play*. Only too soon this is constrained and re-directed by our schooling, whether of a religious or secular nature.

The next two stages surround the point of the triangle I've associated with sex, the age of 13. The two points on either side of the point of sex are the ages of 8 and 21, associated with the adrenal glands and the posterior pituitary gland, respectively. The adrenal gland (actually two glands) is particularly associated with male sexual activity through the androgen hormones, an overproduction of which causes the condition known as virilism. The posterior pituitary produces oxytocin, a hormone responsible for the uterine contractions of childbirth and milk ejection during lactation.

Eight to Thirteen

The stage of *education* I've placed at the years 8 to 13, a period of preparation for better or worse for the tumultuous times to come. Formal education is only a part of what I mean here—of greater importance are the general socialization skills acquired in group situations. This is really a special kind of education, because the force of circumstances requires groups to contain a complete mixture of children with different types and centers of gravity. Ever afterward, it becomes increasingly possible for the individual to (unconsciously) restrict such wide-ranging interactions to the types and centers of gravity that one mechanically prefers. In fact, the next stage is characterized by just such exclusions.

The end of the second third of life is notable for the diminishing in size of the gland of childhood, the thymus, and the powerful emergence of sex. The particular glands associated with the point assigned "8" years here are the adrenal glands. These glands have multiple functions, including secretion of hormones to help deal with stress, and others related to sexuality, and are involved with the development of pubic hair and other early sexual characteristics in both males and females during the period just prior to puberty.

In addition, the adrenal cortex can synthesize the steroid hormones, including the progestogens and estrogens associated with female sexuality and the androgens associated with male sexuality. In

general, girls bodies start to change from the age of eight and later and boys bodies from the age of eleven and later. This is the beginning of puberty, leading us to the last third of the circle.

Self-Development

This third of our life, which I've called self-development, is characterized by our determining with varying levels of success who we are and what we want to be. The work of growth, for which the pituitary glands are primarily responsible, slows to completion in this period.

Thirteen to Twenty-One

The first stage of this period of self-mastery represents the emergence of the powerful endocrine secretions of the adrenal and sex glands. Both glands tend to produce a certain split or division: In the case of the adrenals, we tend to acquire an "us and them" kind of outlook, hanging out with our own crowd, or even isolating ourselves when we make "them" out to be everybody else. This tendency becomes most pronounced after puberty and up to the age of 21 or so. In the case of the sex glands, the division is roughly male and female, each of us acquiring some combination of the two and becoming profoundly aware of our complements.

This stage corresponds quite closely with the developmental psychologist Erik Erikson's stage of "Adolescence", in which he discusses such ideas as "role confusion" and "identity crisis". The basic task here is determining who we are, what we want, and so on. Partly we do this by struggling against anything that would cast us in some role—no more "Momma's little boy"—and partly by aligning ourselves with interests and with others to whom we feel some affinity. Erikson considers the ideal result of this stage to be the arrival at a strong personal identity, the term I use to label the next stage. The next two stages might be summarized as "parental". The two glands involved—the posterior pituitary and the anterior pituitary—are often simply referred to as "the pituitary" in the literature, but they really have very different functions.

Twenty-One to Thirty-Four

The next stage, identity, has to do with becoming a full-fledged adult in a complicated society. In the West, it is not unusual that the age of 21 determines the transfer of full rights of belonging. This is the time too, that some resolution of the tumultuous divisions of the previous period may be reconciled and harmonized by a more permanent pair-bonding, often marriage and the creation of a family.

The gland associated with the age of 21 is the posterior part of the pituitary. People in whom this gland is the predominant gland (i.e, people of this "type") tend to exhibit a strong sense of personal identity, and are easily offended, for example, if you forget their name.

In general, the type and its associated gland promote harmony between opposites.

Thirty-Four to Fifty-Five

The final stage of this circle I've called mastery, and mean to indicate by that a certain facility with the issues of one's life, and a certain degree of accomplishment or contribution in relationship to society. What is an accomplishment or contribution in the eyes of one individual versus another individual may, of course, vary tremendously.

Physically, we're not going to get any better than this. The endocrine gland associated with the point assigned the age of thirty-four is the anterior pituitary. It is sometimes called the "master gland" because most of its endocrine secretions influence other endocrine glands, rather than acting directly on cells. Because of our very arrival at this stage, the master gland has been successful in accomplishing our proper development through the endocrine system.

The anterior pituitary is, roughly speaking, a male counterpart to the more feminine functions of its partner, the posterior pituitary. For parents, the attitude shifts from the parental mothering of the previous stage to the more aloof paternal pattern (the children having become more independent and typically entering into the

years associated with the adrenal and sex glands). Normal sexual desire gradually decreases as one of the anterior pituitary hormones (prolactin, the "parenting hormone") reduces testosterone production in men and has been implicated in loss of sexual desire and ability to conceive in women. For people who have become identified with their sexuality, this is an unnerving development.

Fifty-Five to Eighty-Nine

And then comes something new. In certain traditional teachings of India, this is the time that, having fulfilled life's obligations, one withdraws from life to contemplate the eternal. In our modern, more shallow times, it is time to lay on the beach or some other empty pursuit which, ironically, is referred to as "re-creation". In the same way that the development of speech was related to the two points on each side of the point I've labeled speech, and the development of sex was related to the two points on each side of the point I labeled sex, this coming into the fullness and completion of our life around the point I labeled birth may well indicate the possibility of a new birth, just as an octave completes by sounding the same note, but at a higher level.

Physically, our bodies are in decline. There are losses in hearing and vision, and in bone strength. While studies indicate our various endocrine glands remain capable of full production of their associated hormones, the fact is their secretions decrease. The cause or causes of this are not currently understood. One theory to account for this is that a decrease in secretions of the anterior pituitary, the master gland, would necessarily reduce the secretions of the glands it influences, but the miniscule quantity of anterior pituitary secretions makes this hard to determine, and in any case would not explain why the anterior pituitary itself has a diminished function.

Psychologically, we should continue to gain in wisdom, but that must be distinguished from a gain in knowledge. As, for example, scientific knowledge or cultural focus continues to change, we may be less and less aware of it, or interested in it. What becomes most important now is the quality of what we learned that has to do with

eternal principles, rather than how much information we have accumulated about some temporal fascinations. More than knowledge now, what we need is *being*, and the profound integration of knowledge and being, which is understanding.

"Avoid studies that die with the student." Leonardo da Vinci, *Notebooks*

On the circle of life, we have come full-circle, returning to the point called birth. Time to be born again, time for re-birth.

Note 1 - Learning and Naivete The inextricable link between learning and naivete is well-illustrated by the function of the thymus gland, and even by the terminology scientists use to describe it. The thymus produces a hormone called thymosin, which causes the thymus's "immature" thymocytes (immune cells) to "mature". These cells (called T-cells) then go through "a remarkable maturation process sometimes referred to as thymic education" (see this site), in which they are selected for desirable behaviors. They are then released into the blood stream, where they are again referred to as "naive T cells" until they have encountered the specific target for which they were "educated". T-cells that encounter their targets and survive are called "memory" cells, able to respond to immune threats more quickly as a result of their experience.

The Theory of Process and The Law of Seven

Introduction

This is a brief summary relating some of the ideas of P. D. Ouspensky and G. I. Gurdjieff with some of the ideas of Arthur M. Young. Such a summary must necessarily be simplistic. That does not mean the actual correlation of these ideas is not profound and broadly-based. It

does mean that the expansion of the correlation will not be done here. This will be a sketch, an outline.

One of Arthur M. Young's ideas is a theory of "process". One of the ideas of Gurdjieff and Ouspensky is a fundamental law called the "Law of Seven", which is also a theory of process. This brief paper attempts to establish the common identity of these apparently independent expressions.

Ideally, you are familiar with both of the theories mentioned above. More realistically, I hope you are familiar with at least one or the other of these authors, or it is likely that you would not have read this far. In any case, I assume a deep interest in the subjects addressed by these books in the rest of this discussion.

Both Young and Ouspensky were strongly influenced by ancient tradition and modern science. Both arrived at expressions, both practical and theoretical, of a correlation of these two seemingly diverse influences. Both arrived at remarkably similar conclusions which appear unrelated at first glance.

I say their respective theories "appear unrelated" even though there is the obvious similarity that both have theories of process based on the number seven. That is, both theories claim that process proceeds by seven steps from beginning to end. So much for superficialities. To understand the remarkable parallels between these two theories, we must now look more closely at each.

1.1 The Theory of ProcessArthur M. Young states in *The Reflexive Universe* that process follows a seven-step pattern which can be seen diagrammatically as a "V" shaped arc, descending through four steps and then ascending back though three steps as so:

Such an apparently simple figure has multiple implications. One implication (the arrow) is that there is a direction in time to process. Process requires time. Also, that process has (seven) distinct steps—that is, it is not a homogeneous continuum from beginning to end but is composed of discrete sections, differentiated portions.

What is most important and what makes this a theory and not an arbitrary division of process, is that the steps are qualifiable and not arbitrary—the second step does not occur before the fourth and never will, for example. The distinctive characteristics and relative positions of each step remain, even when examining enormously different processes.

1.2 The Law of Seven

To begin an examination of the "Law of Seven", I'll here re-introduce what has become a somewhat popular figure in recent years, this is the figure known as the enneagram:

What concerns us in this article in particular is the inner web-like design that connects the points 1-4-2-8-5-7-1, the repeating decimal created by dividing one by seven. It is this part of the enneagram which is specifically related to the seven steps of process. The six numbers represent specific steps or points corresponding to specific qualities or characteristics which proceed in the order given. A seventh point is implied or "potential" and for reasons we will discuss not shown localized in the web pattern.

In order to discuss the Law of Seven with examples as concrete at each step as those afforded by Young's book, I'll use the exposition of it developed by Ouspensky's pupil Rodney Collin in his book *The Theory of Celestial Influence*. In particular I'll focus on aspects of each step which are not dealt with specifically in Young—the organization of our solar system, the properties of human endocrine glands, and the six processes (see The Six Processes). If there is indeed a correlation between the seven stages of Young's theory of process and the Law of Seven, that should become apparent despite the vast differences in the scale and nature of what is being compared.

One final reminder before we begin. My purpose here is to correlate these theories, not explain the theories themselves. For details concerning the ideas discussed here, see *The Reflexive Universe* by Arthur M. Young, and *The Theory of Celestial Influence* by Rodney Collin.

2 The Seven Stages

In this section, we discuss each stage in sequence, so there are seven subsections.

The topics of each subsection look like this:

2.1 Young's Stage 1—Enneagram Position (potential)
2.2 Young's Stage 2—Enneagram Position 5
2.3 Young's Stage 3—Enneagram Position 7
2.4 Young's Stage 4—Enneagram Position 1
2.5 Young's Stage 5—Enneagram Position 4
2.6 Young's Stage 6—Enneagram Position 2
2.7 Young's Stage 7—Enneagram Position 8

So the following discussion (section 2.1) starts with stage 1 in Young's sequence, and correlates that stage to the "potential" position in the enneagram, the next section proceeds to map Young's stage 2 to the enneagram number 5, and so on. It can be seen that this mapping then follows both Young's sequence and the order of the web-like pattern in the enneagram. We discuss each row of this mapping now in turn.

2.1 Young's Stage 1, Enneagram Position (potential)

In which the photon of light is related to the Sun.

2.1.1 Stage 1

In Young, this stage is assigned the power of "potential". It contains within it the seed of that which is to come, as light is matter in potential, or as the simple unicellular bacterium promises the amazing diversity of the plant kingdom. It is interesting to note here that in Young's vast scale of creation in which the seven stages of the arc describe the entire universe as seven "kingdoms", the name of this kingdom is "light". Unlike the next six kingdoms, it is rather oddly placed in the sequence of process because, being of light, it does not in fact exist in time, and so in that sense does not occupy a specific

stage in a temporal process. But from it comes the rest, so, from the point-of-view of time (our point-of-view after all), light can be seen as at the beginning.

2.1.2 Position (potential)

We said that this position on the enneagram is in potential, or not specifically represented on the web which connects the six points, and this can best be explained by example. When we use the solar system as our example, each point corresponds to one of the ancient "planets"—the bodies of the solar system visible to the unaided eye—the Moon, Venus, Mercury, Saturn, Mars, Jupiter, and the Sun. Each of these is assigned one of the points (as we will see in the coming sections), but *this* point, the point of potential which is not localized on the web, is not assigned a point, and corresponds to the Sun. This is reasonable enough in the sense of the solar system in which the Sun is of a different nature than the planetary bodies circling it. To relate the Sun to Young's stage 1, it is believed, for example, that the Sun is the source of the planets and that in one way or another, perhaps by the agency of another passing star, the bodies of the solar system have originated in the Sun. In this way, the Sun represents the planets in potential. Indeed, as we will see, the Sun also represents the potential of the planets.

In addition, the Sun can be said to represent "light", for us, to a superlative degree. In terms of the theory of six processes, this process is the seventh. It represents a higher level which may be seen as the goal of the level in which the six processes are being considered. In the so-called seventh process, all three forces are said to act simultaneously. The symbol that I use to illustrate the six processes (see The Six Processes), when illustrated with colors of light (see A New Symbol), shows this central point as white light.

"Potential", and "light"—characteristics of Young's first stage, seem to relate well to this position in the enneagram.

2.2 Young's Stage 2, Enneagram Position 5

In which the electron and proton are related to the "fight and flight" of the adrenal glands.

2.2.1 Stage 2

Young labels his second stage "substance", and in his arc of creation it is occupied by nuclear particles—the elemental particles that come into being after light, the first stage. This stage is characterized by the attractive and repulsive forces of the primary particles of the atomic nucleus, the proton and electron. The particles themselves possess no unique identity, in that one proton is like any other proton, and one electron like any other electron. The difference between protons and electrons, of course, is huge, if not best described as opposite in everything from size to properties.

The other term Young uses to describe this stage is "binding", which seems to represent only one side of the coin. I think a better term would be something like "attraction/repulsion", or "opposites", or simply "force". With protons and electrons we see the repulsion of identical charges (electrons repel electrons and protons repel protons) and the attraction of opposites (electrons and protons attract each other).

"...the photon's creation of the first so-called particles, or protons (called pair creation) also creates an enormous force 10**39 times gravity. This force is so great that nothing can exist until it neutralizes itself in the joining of positive and negative "particles" (proton and electron) in atoms that do exist."
A. M. Young, *The Four Levels of Process*

What was characteristic of the previous stage was light, the photon. What is characteristic of this stage is these elemental particles in an unbound state due to the tremendous force liberated.

2.2.2 Position 5

Collin's type associated with this stage, the Martial, has powerful likes and dislikes. If you are the friend of a Martial, they will be tremendously loyal. If you are their enemy, they make it clear.

While it is hard to relate Young's stage 2 to the planet Mars which occupies this position in the enneagram, it is more clearly seen in the endocrine gland associated with this position, the adrenal glands. The characteristic fight or flight reaction produced by the adrenaline

(epinephrine) from this gland is known to us all, and seems to echo the concept of attractive and repulsive forces among the nuclear particles.

In addition, the very structure of the adrenals is curiously evocative of the nuclear particles. The two adrenal glands within us are "virtually identical" [Encyc Brit], that is, they possess no unique identity or function of their own. They are, however, each comprised of two parts which could hardly be more different from one another—an outer cortex and an inner medulla. The cortex comprises about 90% of the gland and secretes male hormones. The small inner medulla secretes the adrenaline and noradrenaline (or epinephrine and norepinephrine) which are nearly identical substances with nearly identical effects. So between the two adrenal glands and the two substances of the adrenal medulla we see those attributes of both lack of identity and existence of polarity which characterize this step.

In terms of the six processes, this is the process 1-3-2, or the process of destruction. It is characterized by the splitting, the division, of a previous whole. Simple examples are the breaking of eggs prior to cooking, or the breaking of rocks for gravel.

2.3 Young's Stage 3, Enneagram Position 7

In which "identity" is related to the Jovian system.

2.3.1 Stage 3

Young's third stage is characterized by "identity". Note that in Young's progression through the seven stages of process, each new stage adds a characteristic lacking in a previous stage. It is the new quality of each stage that tends to distinguish it, as the lack of identity of the subjects of the previous stage are superseded by subjects with identity in this stage. This stage corresponds to the kingdom of atoms, which are the same faceless electrons and protons now combined in such a way as to create unique identities for over 100 different atoms. Young describes other characteristics of this stage as "acquiring its own center" as an atom possesses a nucleus surrounded by electron "shells", or "orbits".

2.3.2 Position 7

The seventh position on the enneagram is assigned to Jupiter. Jupiter is the first planet (going out from the Sun) that clearly represents a solar system in miniature, as it is encircled by a large array of planet-like satellites, appears to be composed largely of hydrogen and helium in proportions very similar to the Sun, and even radiates more energy than it receives. So, we can see the beginning, or at least a simulation of, a new system with an identity independent of the Sun.

In brief, the endocrine gland associated with position 7 is the posterior pituitary which is responsible for the uterine contractions which give birth to the new individual. This also seems to reflect the kind of mother-child relationship we see between the Sun and Jupiter, but I don't mean this to be convincing to reason, only evocative to intuition.

Of the six processes, the process 2-1-3, or refinement, is indicated here.

2.4 Young's Stage 4, Enneagram Position 1

In which the kingdom of molecules is compared to the moon.

2.4.1 Stage 4

Young shows stage 4 at the bottom of his arc, at the turning point as it were between the matter and the life of creation. He labels this kingdom "Molecular" and characterizes it by "complex combination". This kingdom is the most deterministic and constrained of all of Young's kingdoms.

2.4.2 Position 1

When the enneagram is used as a model of the solar system, position 1 (here associated with Young's stage 4) is occupied by the Moon and, when the enneagram is used to model the human endocrine system, the position is occupied by the pancreas.

The "complex combination" Young describes for this stage may be seen in the peculiar compound exocrine and endocrine functions of the

pancreas. The exocrine functions are involved in the digestion (breakdown of complex structures) of fats, carbohydrates, and proteins. The endocrine functions are concerned with secreting hormones such as insulin which regulate blood metabolism. It is interesting to note that the cells involved with secreting the digestive enzymes are grouped in such a way as to be given the name "acinar cells" from the Latin word for grapes to describe their combined appearance. I'd only add here that there seems to be another way of expressing this stage/position as something like "peculiar" or "extreme identity" to relate it to the previous stage as more of a further or extreme development of unique identity.

I don't see how the moon, per se, relates to complex combination or the molecular attributes of this stage, although it is possible that all matter on the moon is molecular, i.e., nothing is in elemental form as, say, gold may be on Earth. Perhaps the "uniqueness" of our moon may be seen in its strangely close position relative in size to its planetary host as compared to other planet's satellites.

Of the six processes, this is the process of growth. Growth can be seen in the molecular kingdom as simple addition of atoms, an addition which can create relatively enormous molecules. In the fourth way's ray of creation, the Moon is the growing end of the ray.

[More clear connections between this stage and the corresponding position on the enneagram can be seen by looking at other aspects of these theories, such as the degrees of freedom discussed by Young and the role of the moon as discussed by Collin but that is beyond the scope of this article. I only mention it as a pointer for those already well-versed in these ideas.]

2.5 Young's Stage 5, Enneagram Position 4

In which health and plants are related to Venus.

2.5.1 Stage 5

Young's kingdom here is "Plants", and the power associated with this kingdom is "organization". This organization is demonstrated in

negative-entropy, that is, the storage of energy, and in hierarchical structures, that is, the purposeful organization of self-contained functions. It is at this stage in Young's arc that the turn has been taken—what was the arrow of process descending ever deeper into matter now becomes ascending and "life" is introduced.

2.5.2 Position 4

On the enneagram, this point is represented by the planet Venus, and by the endocrine function of the parathyroids. The parathyroid is responsible for regulating blood calcium and phosphorus. Phosphorus is "one of the most important minerals for cellular activity" Also, "calcium phosphate is the principal inorganic constituent of teeth and bones"—arguably, our most plant-like parts. And, "[phosphorus] is indispensable to life, being intimately involved in energy transfer and in the passage of deoxyribonucleic acid (DNA) of all cells." [Quotes are from the Encyclopedia Britannica.]

The most obvious thing about Venus is, of course, the heavy cloud cover that surrounds the planet (which produces an exaggerated "greenhouse effect"). This position, proceeding to the next position, crosses by the point of the triangle associated with breath in the human body and atmosphere on planets. While there seems no possibility of plant life on Venus, there is no denying the profound interrelationship of atmosphere and the plant kingdom on our planet.

Of the six processes, the triad 2-3-1, or healing, belongs here.

2.6 Young's Stage 6, Enneagram Position 2

In which the motility of animals is related to that wanderer Mercury.

2.6.1 Stage 6

This stage is represented by the kingdom "Animals" and has the power of "mobility".

2.6.2 Position 2

This is the position corresponding to the thyroid gland and the planet Mercury. Mobility of Mercury can be seen in its rapid revolution around the Sun and, from our point of view on earth, its rapid and erratic movement in the night skies. Closer to home, the thyroid gland is responsible for much movement, and over-stimulation of this gland leads to increased motor activity, such as restlessness, facial twitches, excessive gesturing, and so on.

Of the six processes, the triad 3-1-2, or corruption, is the triad in which the lower attacks the higher to reduce it to matter. This is the very nature of the animal kingdom, the kingdom that must kill to feed.

2.7 Young's Stage 7, Enneagram Position 8

In which the dominion of humanity is related to Saturn and the "master gland".

2.7.1 Stage 7

In Young's theory, this stage is represented as the power of "dominion" and the kingdom of "man". ("Man" is shown literally in parenthesis in his discussion to denote the unfinished nature of this kingdom - very much like G's "man in quotation marks".)

Dominion in this case is perhaps an obvious name, as with tools and wits humans have acquired a vast dominion over (and responsibility for) their world. We can see this dominion applied with ever greater efficacy to all the other kingdoms of Young's arc.

2.7.2 Position 8

This position corresponds to the planet Saturn and the anterior pituitary endocrine gland. The anterior pituitary is sometimes referred to as the "master" gland because of the role it plays in secreting the hormones that control much of endocrine activity.

This triad in the six processes is 3-2-1, or regeneration.

For those familiar with the type information, a few interesting symmetries may be observed when the types are mapped to the arc:

The four active types are in the two red rows at the top, and the three passive types are in the two blue rows at the bottom. A different symmetry can be seen for the positive-negative duality of types (indicated by + and -): in this case, positive and negative type alternate between rows, so that, for example, Level I has two positive types, Level II two negative types.

I have no idea how familiar Arthur M. Young was with the ideas of the fourth way. The more I study his writings, the more I am struck by the common ground, but at least part of this similarity may be due to the common intent - to divine, as it were, the structures and processes of the universe without beginning with implicit acceptance of modern western thought on the matter. As far as I know, Mr. Young never acknowledged the fourth way as one of his inspirations, and I believe he would not have hesitated to do so if it was.

I should add that I view Young (and everything else for that matter) from the point of view of the fourth way, and I consider his life work supportive but not crucial to this view. In particular, I find his "cosmology" fruitful, but not his ideas on human psychology. Fourth way psychology begins with several basics, and the inability of every other approach to realize even one of these basics indicates the state of other "psychologies".

3 So What?

The question ("So what?"), in this context, has two meanings. One, so what if this is true? The other, so what good is this hazy "correlation"?

The latter first: I don't pretend to convince with what I've written. Reading it over again and again I realize how insufficient it is in itself, to anyone trained in scientific thought and unversed in the theories themselves. Yet to someone familiar with both of these theories I suspect that I have struck a chord. To someone well-versed in one or the other, I do not doubt that this will lead to further investigations. To myself, I feel like my hands have been tied in writing this—I could not possibly, without fully describing each theory (and I certainly could not do that as well as the authors mentioned above), point out all the

similarities which have finally and firmly created in me the conviction that they are parallel expressions.

But then to address the first objection: What good is this even if it is true? To that I can only refer to the scope, the nature, of what it is we are talking about. Nothing less than fundamental law. It is as if we are like the early cave-dwellers, some kind of pre- or early-Homo sapiens, who, looking around them at the mystery of this world, just could not quite grasp laws that seemed everywhere apparent and yet elusive, laws that led their successors to discover the control of fire, the creation of tools, the prediction of the seasons.

I don't see any reason to believe we are at the end point, or even nearly so, of final understanding. It seems to me much more likely that we, just like every age of humanity that we know about, only mistakenly believe that we know just about everything, but are in fact, like those cave-dwellers, just beginning to somehow intuit new laws, new ways of perceiving this world.

I think that is what these theories are about. They do not, in any way, "throw out the baby with the bath water", but instead fully intend to comprehend and include the stunning achievements of modern science in their world view. If that world view does not mesh with what we know in other ways, it is suspect. But if that new view so includes modern physics as to propose a true new metaphysics, we must certainly be interested. Really, I think we somehow know and expect that this is coming.

Perhaps obviously, I do not think that these are just additional theories, additional "contenders for the throne". I do think that a new understanding is coming of just these very theories and the body of ideas related to each. It has been my intention here to bring these two theories together to bring their ponderers together. Each has much to offer the other.

Signature Pieces

On the Human Hologram, the Mirror of Mercury, Wandering Gypsies, DNA and Fate

G. I. Gurdjieff said something to the effect that with a fragment of an ancient statue built according to exact laws, one could, with knowledge of those laws, reconstruct the entire statue. Today, this idea that a part of a whole contains complete information about the whole is known as a hologram.

More generally known is the three-dimensional effect of a hologram—we have seen images captured with the use of laser light that allow us to view them from different viewpoints as a three-dimensional object in space. Somewhat less well known is the fact that with only a piece of that hologram, you can do the same thing, still seeing the whole image (from the point-of-view of that piece). With smaller and smaller pieces the image degrades until finally it becomes unrecognizable. There is a limit, but the principle of the part containing information on the whole is maintained to the extent possible.

The Mirror of Mercury

"All cosmoses, as we already saw, are divided into three parts and possess six or potentially seven functions. In the same way the head, as mirror of the whole body, is also divided into three parts:
(a) upper part of head, including brain, mirror of the head itself, as seat of the intellect;
(b) middle part of the head, including cerebellum, mirror of the chest, as seat of the emotions;
(c) lower part of head, mirror of the belly, as seat of the physical functions."

Rodney Collin, *The Theory of Celestial Influence*

Based on much more extensive scientific knowledge of the brain than Rodney Collin had available in his day, it may be more correct to associate the cerebellum with the physical portion (in particular the moving function), and associate the limbic system with the emotional function in the brain. Indeed, a quick look at some reference material indicates this new association is right and, most relevant to this essay, this complies well with the principle developed in the quote, as the cerebrum, associated with the intellectual function is on the top of the inside of the skull, below it lies the limbic system, and below that, the cerebellum. The three story factory as represented within the head.

In the section entitled "The Mirror of Mercury" in his book, Rodney Collin goes on to divide the face according to the same principle,

and to divide each of the three parts of the face into three in the same way. Again, this is a reflection of our three centers or functions, which are in turn divided into three parts. In theory, we may be able to learn a lot about the essence construction of ourselves and others by learning how to study faces.

Wandering Gypsies

"**Gypsy**, also called Gipsy, Romany ROM, any member of a dark caucasoid people originating in northern India [...] It is generally agreed that Gypsy groups left India in repeated migrations and that they were in Persia by the 11th century, in southeastern Europe by the beginning of the 14th, and in western Europe by the 15th century."

Encyclopedia Britannica

Exactly where the Gypsies got their knowledge, and the actual extent of it, is very hard to determine. In the first place, how many people even realize that the Gypsies have any real knowledge? Aren't these the fortune tellers, the beggars, the tricksters one may have encountered?

While I will return to this theme of a part containing the whole—and the particular aspect of "the part" that I am developing here has to do with the three-story factory, or our threefold nature—I could equally well have discussed this principle from the point of view of our sevenfold nature, or our endocrine system. But I only want to bring up one aspect of that seven-ness here as a demonstration of another type of ancient knowledge that some Gypsys have, at least partially, preserved. Then I'll proceed on with the knowledge of a three-part nature that they have also preserved, however imperfectly.

A Digression on the Theory of Essence Types

It is more than a little interesting to note that the Gypsies have preserved large parts of the ancient knowledge of the seven

essence types, as well as the division into intellectual, emotional, and physical that we are eventually going to discuss. It is clear that the Gypsies derive from India in historical times, but not clear what they took from there and what they acquired along the way, especially as the way included such stops as Persia. At least one researcher suggests that their knowledge is of Chaldean (Babylonian) origin. At any rate, their descriptions of type use the names of the Roman gods, even more so than the usage in this growing (returning) body of knowledge does today. It appears their knowledge did not include the relationships between types—I see no indication that they knew the order in which types "circulate", so almost certainly they had no enneagram to apply it to. Much else is hard to say. The language of the Gypsy, deriving from Sanskrit, does not have a written script. Only that which has been verbally passed on and finally, in the last century or so, written down in other languages, can be assessed.

Of course, one can find certain correlations between the types and their namesakes, the Roman gods, that are not accidental, and it perhaps goes without saying that the Roman gods are often derived from the Greek, and the Greek assimilated their Gods from apparently a wide portion of earlier cultures that they were exposed to.

I stumbled on a reference to the theory of types while studying the ancient Kaballistic text *Sefer Yetzirah*. In particular, in a book by Aryeh Kaplan called simply *Sefer Yetzirah* which includes his extensive discussion on the various versions of the Sefer Yetzirah, he has the following table which he states is "according to the Torah":

Planet	Quality
Sun	Independence, openness
Venus	Wealth, lechery
Mercury	Intellect, memory
Moon	Dependence, secretiveness, manic-depressiveness
Saturn	Inaction, vulnerability

Jupiter Generosity
Mars Blood

This is clearly in harmony with the essence type information, but quite subjective. Only negative aspects are given for a few of the types, and it is probably safe to say that the author or authors of these descriptions was not one of those types!

As I've frequently alluded to it and not given any more information, here is a diagram that contains, among other things (see the notes below) basic type arrangements on the enneagram:

Notes:
1: These are the seven ancient "planets" associated with the enneagram points. The planetary nomenclature is usually retained for type names as the next note discusses.
2: I've used the Gypsy terminology for the type names (in parenthesis). Collin introduces some useful changes as the terms lunatic and venereal have become associated with extremes of their respective types over the ages, so lunatic is better referred to as lunar, and venereal as venusian. Also, the apollo type is now usually referred to as the solar type. In general, the ancient names entered the English language in the Middle Ages, and a few clues to the type characteristics can be found in any English dictionary. The same is true for other European languages.
3: The blue labels list the endocrine gland most active in the associated type. Turn of the 19/20th century endocrinology books are particularly useful for basic descriptions of the features associated with these glands.
4: These are the evolutionary stages of the universe as proposed in the writings of Arthur M. Young. The associations to fourth way knowledge are my own as I've described elsewhere (see The Theory of Process and The Law of Seven).

Gurdjieff referred to the theory of types on several occasions. His chief character in *Beelzebub's Tales to His Grandson* is "exiled to the planet Mars", and G. himself was of the martial type.

Interesting too is his characterization of the inhabitants of the planet Saturn as scientist/astronomers that look like crows, an artistic summary that alludes to Saturnine strengths and appearance. In Ouspensky's *In Search of the Miraculous*, G says "Fate is the result of planetary influences which correspond to a man's type."

But the transmitted Gypsy knowledge of type is much more pronounced than these mere indications. It would not be difficult for a person with a knowledge of modern endocrinology to make the connection between the endocrine gland and the Gypsy's type. The fourth way knowledge of type, however, is a result of a *threefold* synthesis: ancient knowledge of type, modern knowledge of endocrinology, and the enneagram. This was apparently accomplished in Ouspensky's school: I find a reference in one of Kenneth Walker's books, published in 1942, in which type is associated with gland, although only very approximately, and of course in Collin's work published after Ouspensky's death, the connection is "full blown". But that is enough on "type".

Well, OK, one more thing. The question naturally arises: "Do the planets then determine our type?" I don't know, and I don't think that necessarily follows, even from the above discussion. It seems to me the more important principle here is the idea of "cosmos", where cosmoses are constructed according to the same laws regardless of their scale. In this view, in some way a particular endocrine gland in our body performs a function for us analogous to that performed for the solar system by the corresponding planet. It may or may not be the case that because of the analogous function there is a receptivity, perhaps some sort of harmonic sensitivity. But I don't know how to determine that.

Note: For more on the theory of type in ancient knowledge, refer to my essay on Seven.

Now, back to our discussion of our essence being encoded in three portions of our physical appearance, we see, for example, in a modern Gypsy palm-reading book, something familiar:

"Another simple division of the hand is made by separating the palm into thirds. This is one of the oldest methods used in palmistry and is still very useful today. These three divisions give distinction to three important areas of expression—the physical, the material, and the mental.

[...] The fingers and pads of flesh below them, known as mounts, comprise the mental world.

[...] The middle zone of the hand represents the material world and social behavior.

[...] The lower third of the hand represents the physical side of the person."

And a few pages later:
"The fingers are divided into three joints by their knuckles. Each division is called a *phalange* by palmists. Apply the Three Worlds of Palmistry to each of these phalanges. The first phalanges are the fingertips, and represent the mental world. The middle zone represents the practical world. And the lower, or third, represents the instinctual world."

M. La Roux, The Practice of Classical Palmistry

So again, we see the three story factory of the human being represented in one of its parts, and then further subdivided into three, much as the three parts of each story.

Now I'm not advocating going to a fortune teller and having your palm read, I have little confidence in it myself. These things may have been preserved by rote. But the principle is clearly the same as that stated by Gurdjieff and Collin—by knowledge of a part of the human organism you can determine a great deal about the whole.

DNA

The beginning of a new millennium finds us loaded with a different kind of knowledge, perhaps it is more an accumulation of

information than knowledge, as it threatens to out-pace our ability to make good use of it. But modern science has confirmed in its own way a spectacular case of the human hologram. We now know that not only every finger, or "phalange" contains information about us, but that every one of our microscopic cells contains a complete blueprint of our essence. Even to the most jaded materialist, it is no longer nonsense to state that it may be possible to reconstruct the appearance of a human being from a part of that human being that is so small as to be invisible to the most powerful optical microscopes. DNA is the blueprint of the machine or, more exactly, it is the computer code that is read to construct the machine down to the finest details.

This pre-determined nature that we are born with (which may not be entirely hereditary as DNA seems to be to some extent sensitive to other influences such as endocrine secretions in the parents and who knows what else), is what Ouspensky described as our essence or our "fate". Our essence is our fate, as it includes such things as our type and center of gravity. Somewhere, in that DNA, these things are encoded.

Our essence, or fate, should not be confused with what is sometimes called "destiny", that is, with "what is to become of us". While destiny is strongly affected by our essence in that our essence gives us a strong predisposition to behave in certain ways and prefer certain things, destiny is not necessarily determined by our essence. For example, magnetic center is not a development of essence. True personality is intentionally designed to "fit" our essence, but that configuration is determined by true personality—essence cannot do it. As for false personality, it is hard to say. False personality is such a mess that just about anything is possible, from complete denial of essence to absolute worship of it. But that is determined by others, by our education, our culture, our peers, and so on. It is neither destiny nor fate, but accident.

Essence has a very strong role to play, if it is allowed to do so. False personality may strangle essence, suffocate it, and the person becomes, from the point of view of possibilities, dead. On the other hand, some people still live in more natural surroundings

with little input from culture, from civilization, and in those cases, essence may be quite alive and by far the dominant aspect of the self. But there is little possibility of development there either, although the people are by no means "dead". The lack of possibility is due to the difficulty in acquiring a true personality, which is a discriminating, sensitive instrument or tool specifically designed to develop higher possibilities from our essence, and it is *learned in an artificial environment*.

Our fate is in our DNA. Our destiny, ultimately, is determined by whether we work or not. The work that we must do is necessarily related to our individual essence. One begins with, and continues to return to, general work—obligatory for all, such work as self-remembering, non-expression of negative emotions, external considering, and so on, that comprise the teaching as handed down in fourth way books. Over time, we begin to see our essence more clearly—if we can see through the false personality that obscures it. Then our work can be aided by a more personal work, tailored by experienced practitioners and designed in terms of our own essential strengths and weaknesses, developing the former and struggling with the latter, as long as we continually verify this new direction in light of the basic teaching. We must find people who know, who can apply the teaching to us *personally*.

It is ironic that we find modern thinkers debating the relative freedom vs. mechanicality of the human being when, relative to those conceptions, the fourth way teaches both—and to extremes. We are much more mechanical than the "behaviorists" or the geneticists realize, although the latter begin to glimpse some of the horror of our extreme determination by our DNA. And yet by realizing our mechanicality, by seeing it, we find its "Achilles heel", that is, we can begin to see the way out of it, begin to see what would not be mechanical. Our mechanicality is our prison, and consciousness brings freedom. A freedom unknown and unimaginable to those who think they are free.

Note:

I recently looked at a microfilm of a sixteenth century book translated into English as *The book of palmestry and physiognomy* in the seventeenth century, to see what it had to say about types. The knowledge was generally accurate, but, as is often the case when one finds description in the literature, it was degenerate, and by that I mean it was no longer esoteric, it was no longer based on an *understanding* of the larger picture. This can be easily seen by the author's *value judgments* about types—some types were better than others. This is done by taking the positive aspects of the preferred types and the negative aspects of the less preferred types and presenting them as the nature of the individual types. To some extent, one could determine the author's type by the author's preference, but this is only of relative value as the author may be only repeating a corrupt tradition. But it was interesting to see many basically correct attributions of qualities to type. One thing that struck me here again, though, is how the solar type (in this work called Apollonian), is poorly understood. Really not seen at all. If it were possible to determine if someone has an esoteric knowledge of type, it would be in their recognition of the most difficult one to see, the solar type. In the same sense, it is, or would be, possible to determine another's understanding of the law of six/seven by their ability to distinguish the seventh from the six.

Symbol

Several years ago I was troubled by my inability to relate the law of three to the law of seven. In particular I wanted to see how they related in the enneagram, how the triangle and web figure interacted. It was troubling me to the extent that I felt a need to go take a walk and think about it, hoping some insight might come from that sort of concentration on the subject. To save you any suspense, no such insight occurred, and the walk would be long forgotten were it not for an incident that I've long remembered.

In a way I cannot describe but that had proved profoundly fruitful some years before, I attempted to "follow my muse" and eventually arrived at a favorite spot near a pine on some cliffs overlooking the Pacific. Somewhat distracted, I noticed an old matchbook lying on the ground and picked it up out of some idle curiosity or other. It had

printing in an oriental language on it which I could not read, but it also had a symbol or perhaps the emblem of some company on it, which looked something like this:

And beneath the symbol, in the only English anywhere on it were these words:

Link Triad Brand

I found it curious enough to pocket, but thought little about it at the time. I emptied the contents of my pockets on a table in the hall of my home, and when I later walked through the hall my eyes were attracted by some effect of the sunshine that displayed a rainbow across the matchbook lying on the table. I must have been in a superstitious mood that day, because I recall writing down which colors fell on which parts of the symbol. I may still have those notes somewhere, but my point now is that the symbol stuck and, over the next few months, I began to think more about it.

When next I gave it my full attention, it developed quickly. First, I straightened out the triangles, so that just the angles touched. Now it looked like this:

Then, seeing that the triangles formed one large equilateral triangle, I put a circle around it to form the enneagram symbol without the inner-web but with the inner triangles:

And, later, I put circles around the three "upright" triangles as well:

This, then, is the "symbol" I want to write about here.

One of the first things I tried is to put colors on the symbol. The most obvious approach seemed to be to make the whole circle white light and then assign red, green, and blue to the three smaller circles (three primary colors that can be combined in light to create all others), and this is what I got:

One noticeable feature is the way that white light, broken into the three primary colors, produces three more colors where the primaries overlap. Less noticeable but also observable is that the overlap of the three secondary colors then produces white light once again at the very center of the image. This is something that is often forgotten in the prism experiments of Isaac Newton: White light not only breaks down into colors, but the colors recombine to produce white light. More immediately for me, what I saw was a way that the law of three relates to the law of seven, just what I had set out to find originally: The three colors produced three others, making six. And these six colors originated from, and recombined into, the seventh, white light. In this diagram, white light is "Do"—the alpha and omega of an octave, the octave of visible light. [1]

I was reading about "sacred geometry" recently, and noticed that this:

represents the "perfect solid" called the tetrahedron on a two-dimensional plane: simply cut out the image, fold at the lines and attach the edges. The encompassing circle of the two-dimensional figure may be seen as representing the sphere that exactly encloses this as well as any of the perfect solids.

Another way to view this symbol is in terms of the ancient "Four Elements":

One of the nice things about this is that it shows the relationship between three and four, as I discussed in an earlier essay (see Three and Four). In the symbol, the three are the three upright triangles, and

Earth, four, is the downward pointing triangle. This could be done, of course, with other three-four relationships as well.

I bought a book for very little in a catalog sale to see what I could find out about the cover art, that looked like this:

Note the point in the middle. This again expresses the seventh. (The book, incidentally, was *The Hymns of Hermes*, written by G. R. S. Mead, who clearly had a profound understanding of Gnostic/Hermetic ideas.) I have no more information about the source of the cover art at this time.

But now I find this as a "frontispiece" of a book by Jacob Boehm, the German religious mystic of the 16th-17th centuries:

While considerably more elaborate, this includes the triangle with the reverse included in the center, but inverted. Seven explicitly with the seven circles.

One of the more interesting things about this symbol is that it may repeat, that is, what we have shown so far is just the first iteration of it. The inner, upside-down triangle contains within it a right-side-up triangle, and the sequence continues for the duration of whatever is being discussed. When viewed as the Ray of Creation for example, many "inner" triangles are involved as the representation proceeds further down the Ray. The symbol below, for example, represents world 48:

We can view this symbol from "above" or "below", so to speak. Viewed from above, we see how insignificant world 48 appears from world 3. Or, viewed from below, we see how distant world 3 appears from world 48. The latter, for example, gives a visual representation of the small part the laws of world 3 play in world 48.

The triangles in the symbol are similar to the old Star of David or Solomon's Seal:

I was surprised to see the circles all over Europe. This is the trefoil of Gothic architecture (shown above the doorways in the following image):

Then there are what are called "Borromean Rings". Three rings that link together in such a way that no individual circle links only with any other. (See also http://www.liv.ac.uk/~spmr02/rings/trinity.html.) Removing any one ring disconnects the others:

If instead of three rings we were to take a single string and make three loops, we would have what is called a torus knot. (See, for example: http://www-sfb288.math.tu-berlin.de/vgp/vgp/curve/torusknot/PaTorusKnot.html.) This is called the 2-3 torus knot, the simplest of the torus knots, and is also known as the trefoil knot.

The trefoil knot loops through the center of the torus three times, and the torus itself requires seven colors for mapping (http://www.hypersphere.com/hs/abouths.html#fn). So here again we seem to see the three/seven relationship.

Quantum Chromodynamics

Here, curiously enough, is the "color table of quantum chromodynamics":

Notes

- **[1]** The octave of visible light extends from the invisible ultraviolet to the invisible infrared. This is a range of wavelengths

from roughly 400 nm to 700 nm. The numbers are approximate because individual perceptual abilities differ, and a group of individuals may be able to see an entire octave (doubling of frequency).

The Six Processes

What Are the Six Processes?

I'll use Rodney Collin's terminology here. (At different times, Ouspensky used the terms "actions" and "activities" and "triads".) The theory is that there are six fundamentally different kinds of processes (developments over time) and that all developments in time are therefore one of, or a combination of, these six basic processes.

In world 3 three there are no processes, because there is no time. In world 6 and on down, there are six processes. But where do they come from? How do they appear as fundamental aspects of this world which we are told consists of two basic laws: the law of three and the law of seven?

The six processes and the world above them *are* the law of seven. Relative to any particular level, the seventh process is the world that is higher than the world in which the six processes are being considered. (Higher and lower: In terms of the law of octaves, the seventh process is Do.)

As I've discussed elsewhere (see All and Everything), world 6 is derived from world 3. One way of viewing it is like this:

But world 3 is of a much different nature than world 6. The three laws operating in world 3 are in the same space/time, that is, there is no distinction between them in the ordinary way. From the point of view of lower worlds (and, relative to world 3, world 6 is a lower world) the three appear as one event. So seven processes might be viewed like this:

In world 6, time and space are distinct, and we first encounter process, or sequence, which requires time and space to be separately perceived. In fact, we encounter six possible sequences. World 6 is the three forces of world 3 ordered in time and space. If we assign a number to each of the three laws of world three, say "1", "2" and "3", we can combine them sequentially in only six possible orders:

1 - 2 - 3
2 - 3 - 1
3 - 1 - 2
1 - 3 - 2
3 - 2 - 1
2 - 1 - 3

These six processes are the six points of the enneagram (those points on the circle that are not points of the triangle). These six points represent the law of seven, the notes of the octave, the seventh point or note being the "seventh process", or the way the higher world appears to the one below it. In the octave, for example, the first and last note are the same note, which is the alpha and omega of the octave, containing the six possible notes or processes within it. (0)

Six Processes

We can study these processes in our own lives—our social interactions, our bodily functions, and so on. We can also study them at other scales—say the atomic scale—but the real point of such studies is as an aid to self-understanding.

Here I have to keep to theory and leave it to our personal work to learn more about the practical nature of this idea. In the main, I'll continue to use Rodney Collin's terminology and refer to the individual components of the processes— the "1", "2", and "3", mentioned above —as "life", "matter", and "form", respectively. (The terms may well have originated with Mr. O as no doubt much of Rodney Collin's *The Theory of Celestial Influence* did, but it is in Collin's written work that these terms are first published.)

As we know from *In Search of the Miraculous*, matters are differentiated by their densities—density of vibration, or its inverse, density of matter. Active force, here called "life" has, relatively, the highest density of vibrations and lowest density of matter; passive force, here called "matter", has the lowest density of vibration and highest density of matter; and neutralizing force, "form", is intermediate between life and matter in density of both matter and energy.

So recalling the listing above of the possible processes (1-2-3, 2-3-1, and so on,), we can use that as a shorthand and say life=1, matter=2, and form=3. So 1-2-3 means life-matter-form, or, "life acting on matter to produce form". An example of this particular process is a potter making a pot: The potter (in this case life), takes the clay (matter), and shapes it into a bowl (form). Life-matter-form. 1-2-3. This does not define any object as forever acting as that force: in different processes the potter or the pot may, for example, be the "matter".

Mr O. often cautioned his students to only accept those instances as valid which were unmistakable. With this, as with other ideas of the fourth way, there is nothing to be gained and much to be lost by forcing an interpretation on an event. Let it be. Think about it, yes, but when the time comes, you will *know* which process something is without the need for anything but the simplest reflection.

Three factors, in time, can combine in six ways. These six processes, six combinations of the Three, have distinct and unique qualitative properties, which are best defined in any given situation, but some generalization is possible if we do not get too tangled in the words themselves but recognize the principles.

The Triads

The basic image of a triad is an equilateral triangle, and for the purposes of this discussion we name the points "1", "2", and "3" in a clockwise fashion:

The six triangles below the triangle with the numbered points represent the six processes—the label of each gives the sequence in which the forces act (and this is shown graphically with the directional arrows.)

Two Great Triads

In A New Symbol I introduced a symbol, one that seems to illustrate, among other things, the relationships between triads. In the use of that symbol here, the six processes are divided into two triads, the triads being formed by the direction of process.

One triad contains the clockwise triads 1->2->3, 2->3->1, 3->1->2; and the other contains the counterclockwise triads 1->3->2, 3->2->1, 2->1->3:

Combined into the single symbol, it looks like this:

In the image above, we see the 1-2-3 or clockwise triad as the large, inclusive triangle, and the inner inverted triangle is the 1-3-2 or counterclockwise triangle. (We could just as well have drawn this with the counterclockwise triangle as the large triangle and the clockwise triangle as the inner central triangle.) In this case, we see that the way we have drawn it also illustrates the three processes (shown as the

three corner triangles) that form the "great triads" of the outer triangle. I'll have more to say about these two great triads below.

If instead of "my" symbol we plotted the triads on the enneagram, they correspond to these points:

Here the left half of the diagram contains one of the great triads, the right half the other great triad. Opposites are across from each other (e.g., 1-2-3 across from 3-2-1) and the enneagram triangle itself represents the "seventh process", in which all forces act simultaneously.

A few things are immediately apparent regarding the essence types on this diagram. Maximum attractions correspond to processes with exactly opposite sequences (for example, 1-2-3 with 3-2-1). Also, positive types correspond to ascending sequences (ascending octaves where the end matter is finer than the initial matter), and negative types have descending sequences.

In the following I'll briefly discuss each of the six processes in the order in which they occur around the enneagram starting at the top right and moving clockwise. After the basic information of the six processes is discussed, I'll conclude with how these six processes operate in the two great triads.

The Process 123

Life, acting on matter, produces a form.

Building a house. I (life) take bricks (matter) to build the walls (form). A snail takes minerals to build a shell.

Life acts on matter to create a new form, a form which is active relative to some coarser matter and so acts on it to create a new form, etc. The result is a progressively less energetic activity.

A pendulum is a good example of the way this triad tends to spawn new triads while continuing to lose energy: Each swing of the pendulum from one side to the other is a triad, starting at the highest

and most energetic point, passing through the lowest, and ending up at a point between the two. The point it ends up at is then the high point of the next triad. and so on:

The Process 312

Form, applied to life, results in matter.

The classic example here is the virus. Not life itself, but a form that acts on life, ultimately reducing life to matter. In human affairs, an example is a repressive government, such as the former Soviet system, that applied a form restricting the livelihood of citizens, ultimately destroying the source on which it fed. On a more psychological level, formatory mind acts with this triad: Form is applied to a new idea and the new idea is killed. (I have more to say about this triad in The Process 3-1-2.)

The Process 231

Matter, aided by form, is restored to life.

An estranged couple who have marriage counseling and find their marriage subsequently revitalized. A broken bone aligned with a splint grows back into its proper functioning. An infected tissue treated with an antibiotic is restored to health. The type here is the loving Venusian, a high percentage of our nurses.

The Process 132

Life (1), acting on form (3), produces matter (2).

I smash the pot. Life, that is active force, is applied to a form, resulting in the destruction of that form into constituent matter. The type is Mars, the gland is the adrenal, the characteristics of this stage are bonding/splitting (what I've elsewhere called "affinities".) This is a "descending octave", because we begin with life and end with matter. Interesting to note that this stage always proceeds any real

development, which should make it clear to us that "descending octave" is not a value judgment, and descending octaves are right action in the proper place.

The Process 213

Matter, acted on by life, becomes a form.

The food diagram is the pre-eminent representation of this triad in the human being. Pre-eminent because it includes all levels of matter refined or possibly refined within us, and shows it in a form which is simply an anthropomorphized enneagram. Regarding food, for example, the triad often begins outside of us: We first cook the potatoes or beans (potato - 2; fire - 1; cooked potato - 3), then chew it (cooked potato - 2; chewing - 1; masticated potato - 3); and so on. Or we receive a neutral visual impression - 2; we divide our attention, energizing that impression - 1; a finer hydrogen results - 3, to be wasted, used, or further refined.

The Process 321

Right form applied to matter brings it to life.

A Shakespeare uses mere words to create something that moves and informs people for centuries. A Leonardo mixes mere pigments and creates art capable of transmitting objective knowledge across 500 years. An anonymous Chinese sculptor forms a Buddha out of local stone that inspires receptive viewers through millennia.

A teacher brings to life a form in the presence of students. The students imitate the form first, apply it in their lives, and, if successful, create new life by the use of it. This enables them to pass on the example of the use of form on matter to create life.

The fourth way is just such a form designed to bring life. The matter it is applied to is the student. We study the system, practice the ideas, apply it to ourselves, and gradually convert it from an external set of ideas to a living teaching by living it.

The Seventh Process

This process is the source process of the six processes, it contains them all in that it is not ordered one way or another, but all forces act in the same place at the same time. White light is an example of the seventh process, in which relatively high, low, and intermediate frequencies of visible light combine simultaneously to produce white light. Or, white light, broken down, produces the various frequencies of color that we see. Alpha and Omega.

The Six Processes and the Great Triads

The six processes divide neatly into two great triads, which are mirror images of each other:

The way that processes, or triads, proceed depends on whether they are descending or ascending processes. A descending process begins at a higher energy level than it ends at, and an ascending process ends at a higher energy level than it begins at. An example of a series of descending triads is given by the Ray of Creation, where a sequence of triads of the process of growth (123) ultimately produce molecular matter from high energy particles.

In a descending process, the energy or effort required to initiate the process occurs at the beginning, and the process then proceeds mechanically. For example, the process of destruction, 132, may be exemplified by burning down a house: the active force, fire in this case, is applied to the structure, and then the triad proceeds until there is no more it can destroy.

In an ascending process, energy or effort must be supplied continually, or at repeating intervals until the process is complete. Healing a wound (213), for example, may require frequent changes of the dressing, application of antibiotics, and so on, all the while the body is patiently making repairs cell-by-cell.

When I first began to work with the six processes, I tried to find a more mnemonic form or structure to put them in so that I could better recall them without having to return to the books all the time. I tried,

for example, to create a short poem I could memorize that would summarize each process in association with its sequence of forces . One result of this was that I came across the fact that the order of the processes may be seen as two different cycles, one going in a clockwise and the other in a counterclockwise direction. (Incidentally, this little story, in which I just described how I came to the two great triads that I am discussing here, is another illustration of the triad 123, the process of the growth of an idea in this case, in which I applied some effort to the matter of these processes and came out with a form or structure that I could use.)

I don't know how much significance this division of the six processes into two great triads has, but it is probably significant that they represent the left and right sides of the ennagram. But I have noticed a few things I want to mention in closing this essay. The great clockwise triad has seemed to me to have a lot to do with the processes of living things: how they grow, get ill, and get healed to grow again. This is the sequence of triads 123, 312, 231, shown as the clockwise triad or the left side of the enneagram in my drawings above.

The other great triad, the one that moves counterclockwise on the triangle, seems to me to represent necessary stages in the Work. There is destruction, there is refinement, and there is regeneration, the ultimate goal of rebirth. As I pondered this sequence, I suddenly remembered a quote from Gurdjieff, at the beginning of his *Life is real only then, when "I am"* in which he described his intentions with each of his three series of books:

> First Series: To destroy, mercilessly, without any compromises whatsoever, in the mentations and feelings of the reader, the beliefs and views, by centuries rooted in him, about everything existing in the world.
>
> Second Series: To acquaint the reader with the material required for a new creation and to prove the soundness and good quality of it.
>
> Third Series: To assist the arising, in the mentation and in the feelings of the reader, of a veritable, nonfantastic representation not of that illusory world which he now

perceives, but of the world existing in reality.

This sequence seems to closely resemble the sequence of the counterclockwise triads: destruction, refinement, regeneration. I think these three stages, in this order, are required to progress in this work. We have to remove and destroy a lot of the old wrong work, allowing for the presence and development of new work, ultimately to achieve something personal and real. In a certain way, I think the historical figures of Gurdjieff, Ouspensky, and Collin illustrate this sequence. While each had, of course, to go through all stages, their relation in time and their unique expressions of this work in their lives again seems to show this very sequence of destruction, refinement, and the new perception. I cannot quite accept it as coincidence that the three processes of this great triad, in that order, are also the processes that map to each of these three great men's essence type.

Note 0- Relative to the octave, each note represents the specific, named process. Within the octave, each note passes to the next by means of a process, the process depending on the octave. In the octave of digestion or refinement seen in the food diagram, for example, it is the same process between each note.

Note 1-
A good example of the process 1-2-3 occurs in a recent discovery regarding photosynthesis. In order for photosynthesis to take place, a particular light-sensitive molecule called a phytochrome responds to red light, but not the less-energetic (longer wavelength) far-red light which is required to control photosynthesis. In the early morning, far-red light arrives first but is ignored. When red light of a more intense energy appears, the phytochrome sensitive to red light produces another phytochrome, this time one sensitive to far-red light. Photosynthesis can now take place, and continues until dusk, when once again red light reception drops off and all that is finally received is far-red light, so the red light sensitive phytochrome that produces that far-red light sensitive phytochrome is turned off and no more far-right sensitive phytochrome is produced.

1=red light
2=red-light sensitive phytochrome
3=far-red light sensitive phytochrome

1=far-red light sensitive phytochrome
2=?
3=?

The next stages are not currently known for certain, but it is known that a protein, nucleoside diphosphate kinase, responds to the far-red light sensitive phytochrome, and one theory is that the protein then activates genes in the plant's cell nucleus, thus enabling global cellular activities. At any rate, a cascade is started from the energy of red light, to the lower energy of far-red light, to the increasingly slower energies of proteins, DNA, and finally cells. This "cascade" would be a series of 1-2-3 triads, where the 3 of the previous triad is the 1 of the new triad. This is the same sequence of triads in the ray of creation.

The Sefer Yezirah

In this essay I discuss the Sefer Yetzirah in light of some fourth way ideas. The exposition here is by no means exhaustive, but represents an approach to the Sefer Yetzirah—an approach that I believe is productive.

The Sefer Yetzirah (meaning "Book of Formation" or "Book of Creation") is a text written down almost 2000 years ago that is generally considered the first of those texts that came from the pervasive influence known as Kaballah. Kaballah itself cannot be defined, as it surfaced in Jewish, Islamic, Christian, alchemical, astrological, and other traditions, always interpreted in light of the particular manifestation.

Because of the wide range of kaballistic texts, it is tempting to "return to the source"; tempting, but at least in the case of texts, not possible. The Sefer Yetzirah itself may be the oldest text, but even it exists in multiple, often contradictory versions. There is a short version, a long version, and others, although none are more than about ten pages. I was torn between using the shortest version, the "Short" version, and the oldest known version, the "Saadia" version. The shortest version because it seems to me that often ancient texts get added to over time so the short version may be the most accurate. That is not a certain thing because things can be taken out or lost as well. So the Saadia version tempts me, but seems sometimes too long, as if later commentary is being included. So I used the Short version, but referred to the Saadia version when the Short version seemed garbled. (I'll point out those few cases when I take something from the Saadia version.) I'll occasionally use another translation of the Short version, that by Knut Stenring, when I feel it can throw light on a diffcult passage.

As a general summary, the Sefer Yetzirah introduces the idea of "ten sefirot", and the term "sefirot" (plural sefirah) itself is variously translated as text, number, or none of the above.

Fundamental to the Sefer Yetzirah is number, and number in three particular groupings: three, seven, and twelve. Together these quantities sum to 22, the number of letters in the Hebrew alphabet, which is used throughout the text to explain properties of the groupings. Hebrew, like other sacred languages, assigns numerical values to letters, so number and letter are intimately related. This inevitably leads to "numerology", where the numeric value of a word, for example a name, is considered significant. It also leads to complete lunacy if one is not careful, and I choose to use number values of letters very little in the way of explanation.

That Gurdjieff was knowledgeable about Kaballah is known. But as you already must realize, there is Kaballah and there is Kaballah, and getting to the heart of the matter is not trivial. The fourth way is not Kaballah, although it may be that at certain times Kaballah was an expression of the fourth way. If we recognize the fourth way as alive, ancient texts that relate to it may be seen as signposts along the way, signposts that may be decipherable with fourth way knowledge and may, in turn, lead to new insights.

The Book of Creation

The versions of the Sefer Yetzirah to be discussed here are the "Short Version" and, occasionally, the "Saadia" version. As non-identical copies of each of these versions exist, bracketed text [] indicates additional text from another copy of the same version. Text from the Sefer Yetzirah is in white text. My comments are placed throughout the book and displayed in turquoise text.

Contents

Chapter 1

(The Ten Numbers)

The discussion of "32" occurs only at the beginning of this book. Otherwise, this book speaks about the three, the seven, and the twelve, each one generating the next in turn from the original One which is "God, faithful King". Three, seven, and twelve combined equal 22, the number of letters of the Hebrew alphabet, the alphabet used throughout the text in explanation of the properties of the three, seven, and twelve. So where does this 32 come from? Clearly 10 + 22 as the second verse tells us. These are the basic 10 numerals and 22 letters used to form all numbers and words. But the nature of the 10 will not become clear until the 22 are further expounded.

wise with Understanding. Examine with them and probe them, make a thing stand on its essence, and make the Creator sit on his base. Understanding and wisdom are emphasized to be distinct here, and the imperative of the translation seems to demand mental activity on our part, as opposed to passive acceptance.

Most importantly, the Sefer Yetzirah begins with number. In particular, ten numbers, one through ten. Thus we have here, at the foundation of Jewish mysticism, the same number theory deeply rooted in the Greek civilization, and it was these two great lines that were to merge into Western civilization.

It begins with One. Whether the Greek Monad or the singular Master, it begins with One. And, it ends with One, is all contained in One, because multiplicity is division, not multiplication—He has no second. The One divides to make two possible, which necessitates three, that creates four, and so the thing is set in motion.

This seems to refer to the control of behavior (speech and thought), and especially attention (running and returning). A useful reminder to be present, to control attention, to remember oneself while studying the ideas.

At this point in his commentary on the "Gra" version of the Sefer Yetzirah, Aryeh Kaplan says "According to some critical studies, this line is the end of the most ancient part of the text." While I don't have access to those critical studies, I find this very interesting because, in my interpretation, this point marks the fundamental division in the discussion. Thus far we have been discussing the 10 ineffable sefirot. From now on, we will discuss the Creation of the cosmos. As you can see, the point we are at is given no special emphasis by the structuring of the text—it is simply near the end of a chapter. The significance of where we are now will be drawn out soon. But note that now we are going to begin to count, One, two, and so on...

We are now going to follow the descent of the ray of creation where One acts on two to create three and so on, or the triad carbon-oxygen-nitrogen which is the process of creation, or growth.

The mention of "Breath" seems odd here. As we will see when we study this text further, the ancient elements of Fire, Water, and Air (Breath), are used in a manner consistent with the fourth way terminology active, passive, neutral, respectively (or carbon, oxygen, nitrogen). Consistent except here. Here we are told that the neutral force (Breath or Air or "nitrogen") is initiating the triad of creation, when it should clearly be Fire (active force or "carbon"). While the author (Kaplan) I am using translates this word as breath, another translation (Stenring) has the following text for this passage:

Elsewhere, where Kaplan translates to "Breath", Stenring consistently uses "Air", which makes me suspect that Kaplan's use of Breath in this passage is incorrect. With Stenring's translation of "Spirit", we get an active force at the beginning of the triad we are now discussing, which must be correct, as the process of growth begins with the active force (1-2-3).

Two: Breath from Breath. With it engrave and carve twenty-two foundation letters - three, Mothers, seven Doubles Elementals - and one Breath is from them.Two in order of density, but three in order of creation. This is Air, between Water and Fire. This is neutralizing, the resultant. Collin's "Form".

More on this after the next verse. (This is going to be very confusing for a moment!)

Three: Water from Breath. With it engrave and carve chaos and void, mire and clay. Engrave them carve them like a them like a ceiling. This is Water, the fathomless void, passive force.

Thus the first triad has been created.

This first triad is World 3 in the ray of creation. Now the ray of creation proceeds by the process of creation or growth, in the order 1-2-3, or active-passive-neutral, or carbon-oxygen-nitrogen, or fire-water-air, or whatever terminology we use (and we are about to be introduced to still another terminology using letters of the Hebrew alphabet). Yet, in the discussion we have the sequence Spirit-Breath-Water, instead of Spirit-Water-Breath. The order used here, for the first triad, World 3, is not temporal sequence but rather order of density. This is quite correct because temporal sequence makes no sense in World 3 where there is no time. In World 6, which we will be discussing shortly, time is of the essence, but here the only distinction between forces is something more fundamental, its basic property or relative "density".

Four: Fire from water. With it engrave and carve the Throne of Glory, Seraphim, and Ministering Angels. From the three establish His dwelling, as it is written, "He makes His angels of breaths, His ministers from flaming fire" (Psalms 104:4).

So the first triad is complete and now the next one begins. The first triad supplies the active principle (correctly labelled Fire now) to the world below. Now this next world, created by the first world (the first triad or World 3), is going to be World 6, and here we will see a whole new order of laws, because time and space enter in world 6.

Note: It would seem that this step should read "Four: Fire from Air", not "Four: Fire from Water". This relates to the following discussion in In Search of the Miraculous:

C, O, N retain their numbers 1, 2, 3. 'Carbon' is always 1, 'oxygen' is always 2, 'nitrogen' is always 3.
But being more active than 'oxygen', 'nitrogen' enters as the active principle in the next triad which it enters with a density of 2. In other words 'nitrogen' has a density of 2 and 'oxygen' a density of 3.

Since "nirogen enters as the active principle in the next triad", the Sefer Yetzirah should read "Fire from Air", yet it reads "Fire from Water". It is

unclear why this is so. It is possible that the names Air and Water have a different correspondence thus far than they will in the rest of text, specifically that Water is neutralizing and Air is passive. This would make the preceding discussion of Spirit-Air-Water identical to the sequence 1-2-3, which is the triad of creation, and my comments regarding density as being most important would be out of place. The trouble with this is, as I say, the rest of the document specifically equates the forces fire, water, and air as active, passive, and neutralizing respectively (see for example Chapter 3 verse 3).

One possibility is that there is something unusual, even illegitimate about this case in which the next triad is generated by water instead of air as it should be. This is evocative of many Gnostic traditions in which at precisely this point, Sophia, for example, begets creation in error, out of ignorance.

This is remarkable. Here, where the six processes should be, we see exactly the way the six processes are generated from the Three. Sequential ordering of the three forces in time create six possibilities:

If, for example, we take "Y" to represent active force, "H" to represent passive force, and "V" to represent neutral force, we have the six different possible orders of the three forces. These are the six laws of World 6.

It is probably unwise to pursue this even further at this point because of the many different versions of the Sefer Yetzirah: Later in this text, there will be an explicit assignment of each of the three forces to a letter of the process (Chapter 3, verse 8) and so we will be able to exactly associate each of the six processes with a letter sequence.

Despite the very economical presentation of this chapter so far, we have a far-reaching explication of the first three worlds of the ray of creation. Point four above, described as Fire (the "seventh" process), comes from the previous triad (World 3), and then the six processes are listed. As I've pointed out elsewhere, the so-called seventh process is the manifestation of world three in world six, or more generally the manifestation of a higher world in a lower one. In the planetary representation, for example, the higher world, the seventh "planet", is the Sun.

And we can now see how the original ten sefirot of Chapter 1 are generated: the first triad (1, 2, and 3) generates 4 which is "fire", or the highest part of the following world which includes the next six for a total of seven. The triad plus the seven is the ten.

water, and the extremities], up, down, east, west, north and south.

These are the ten ineffable Sephiroth: one—the Spirit of the living Elohim; two—Air form Spirit; three—Water from Air; four—Fire from Water; Height, Depth, East, West, North and South.

So not only are all ten Sephirot summarized, but "Spirit" is correctly translated where Kaplan uses "Breath".

(You may be wondering, at this point, why I just don't use Stenring's translation instead of Kaplan's. I may do so at some point but, disregarding for the moment the time required to replace it, in many ways the Kaplan translation is more "friendly", using for example "God" rather than "Elohim" etc.)

Chapter 2

(The Twenty-two Letters)

Twenty-two foundation letters: They are set in a circle as 231 Gates. And this is the sign: There is no good higher than delight (ONG), and there is no evil lower than plague (NGO)If O=passive, N=neutralizing (this exact association with the O and N Oxygen and Nitrogen terminology of the fourth way is not accidental), and G=active, then the first trigram, ONG is the process of healing (here described as delight), and the second trigram, NGO, is the process of corruption, (here described as plague).

(Note that the G in Hebrew (as in Greek) is the third letter of the alphabet, our "C". This assignment of the same forces to the same letters also holds if, and this will be my only excursion into numerology here, we relate the higher numeric value of the letter assigned in Hebrew to a greater density where O=70, N=50, G=3.)

In his book, Kaplan at this point goes into a long discussion on the subject of creating a "golem", an artificial life form that the great Kabbalistic masters were said to be able to create. But the whole subject of creation of a Golem is nonsense, based on a misunderstanding of a biblical passage in which Abraham and some of those with him were said to take with them "the souls that they had made" (Genesis 12:5). Students of the fourth way should have no trouble understanding the idea of creating a soul and it has nothing to do with golems.

This idea of 22 letters, 231 gates, and transposing, transforming, permuting and so on, the letters has led to elaborate figures of circles of letters and much discussion and argument about their relative value. It may be a more simple permutation is meant here. It is the permuting of the three forces

(three Mothers) that creates the six/seven processes (seven Doubles), as, for example, 2-3-1.

How? Weigh them and transpose them, Aleph with each one, and each one with Aleph; Bet with e The idea being that a few fundamental elements can create the infinite variety of the world. But once again, three letters, in this case the first three letters of the Hebrew alphabet, are used as an example.

a all words with one Name. And a sign of this: Twenty-two objects in a single body.

This seems to refer to the idea of cosmos, any and every cosmos being constructed of the 22 elements represented here as letters of the Hebrew alphabet divided into groups of three, seven, and twelve. This is represented by the ennegram as the triangle, the web figure, and the 12 crossings they make. One gives rise to three which leads to all, represented by 22. Here again we will deal with three forces, in this case designated as the Hebrew letters A, M, and Sh, representing neutralizing, passive, and active respectively (the triad of regeneration). These three forces were historically referred to as the "elements" air, water, and fire, again respectively. (I put "elements" in quotes because I once again ran across somebody's benighted understanding in an article I was reading the other day in which the author pitied the poor ignorant ancients who thought there were only four elements and today we know there are over 100! This is a good example of formatory thinking: In that case, the author equated the ancient elements with the modern elements because we use the same word for each.)

The usage of "three Mothers" and "three Fathers" here is interesting, and would seem to contradict a statement a few chapters later that states "Three Mothers which are three Fathers". Both are true, depending on the point of view. In this case, they are called "Mothers" as opposed to their source, the Father, and as their offspring generate the rest of the world. The actual means of the creation is the six processes, that is the three laws of world 3 and the three additional laws of world 6. Once world 6 exists, creation can proceed mechanically. The six rings that conceal the three Mothers are the six processes.

Fire, associated with the male, is the active force and water, associated with the female, is the passive force.

Three Mothers, A the fire and the water.

Heaven is active, earth passive, air neutral.

temperate from breath decides between them.

Hot is active, cold passive, temperate neutral.

the belly is created from water, and the chest, created from breath, decides between them.

Head is active, belly passive, chest neutral.

Alef (A) is associated with the neutral elements. When permuting the three letters, two sequences (A M Sh and A Sh M) begin with A.

Mem (M) is associated with the passive elements. When permuting the three letters, two sequences (M A Sh and M Sh A) begin with M.

Make Shin king over fire, bind a crown to it, and combine one with another. And with them seal heaven in the Universe, the hot in the year, and the head in the Soul, the male [M A].

Shin (Sh) is associated with the active elements. When permuting the three letters, two sequences (Sh A M and Sh M A) begin with Sh.

This completes the introduction of the three forces and their association with the six processes. This is accomplished using a 3x2 matrix as such:

A M Sh	M A Sh	Sh A M
A Sh M	M Sh A	Sh M A

The order in which they are introduced is Alef, Mem, and Shin. That is, the two permutations beginning with Alef are given first, then the two that begin with Mem, then the two that begin with Shin. In addition, Alef isassociated with Breath (Air), Mem with Water, and Shin with Fire. In fourth way terminology, this is the order Nitrogen, Oxygen, Carbon, or neutralizing, passive, active. This is also the way the first triad given is ordered (A M Sh). This triad is the process of regeneration.

In addition, the triads of forces (processes) are related to "male" and "female" as in the statement "the male with A M Sh, and the female with A Sh M", in other words, keeping the same starting force and swapping the next two forces:

A M Sh - neutral, passive, active - male

A Sh M - neutral, active, passive - female

To summarize, we have:

A M Sh - neutral, passive, active - male (This is the process of regeneration, 3-2-1.)
A Sh M - neutral, active, passive - female (This is the process of corruption, 3-1-2.)
M A Sh - passive, neutral, active-male(This is the process of healing, 2-3-1.)
M Sh A - passive, active, neutral - female (This is the process of refinement, 2-1-3.)
Sh A M - active, neutral, passive - male (This is the process of destruction, 1-3-2.)
Sh M A - active, passive, neutral - female (This is the process of growth, 1-2-3.)

Chapter 4

(The Seven) Seven Doubles, BGD KPRT: Their foundation is life, peace, wisdom, wealth, graceThe seven letters discussed here have two pronunciations, making each of them a "double".

Seven Doubles, BGD KPRT: Seven and not six, seven and not eight. Examine with them and probe from them, make each thing stand on its own essence, and make the Creator sit on His Seven Doubles, BGD KPRT, parallel the seven extremities. These are the six extremities: up, down, east, west, north, south. And the Holy Palace precisely in the middle upholds them allHere we see the basic relationship of six and seven, or the six processes to the law of seven, where the seventh is indicated by a point in the middle of the six around it. This is the same arrangement as in many symbols including the tetractys, enneagram, Hopi altar, tree of life, and so on.

BGD KPRT: Engrave them, carve them, combine them, as planets in the Universe, days in the Year, and gates in the Soul. From them engrave seven firmaments, seven weeks. Seven is therefore beloved under all heavens. Examples of the seven "in the universe" are introduced here and specified in the next seven sentences.bind a crown to it, and with it depict the Moon in the Universe, the Sabbath in the Year, Note that this does not correspond to the way we usually associate planets with days of the week. For example, our Saturday is associated with Saturn, our Sunday, with the Sun. It is hard to understand why the Sefer Yetzirah makes the associations between planets and days that are given here. But the order of the planets is traditional. It is the way the ancient planetary spheres were ordered (outermost to innermost) as shown here:

The Seven Doubles, how does one permute them? Two stones build two houses, three build six houses, four build 24 houses, five build 120 houses, six build 720 houses, and seven build 5040 houses. From there on go out and calculate that which the mouth cannot speak and the ear cannot hear. Again, a few elements can be permuted to make many combinations. I have

not spent much time with the twelve. Here or elsewhere. It may be that a knowledge of the 12 months of the Jewish year and the 12 letters of the Hebrew alphabet here related to the astrological signs has some meaning but I have seen so much nonsense connected with zodiacal astrology that I skip it, at least for now. The main point to be made here is we are discussing world 12, which is as far as this book's descent of the ray of creation takes us.

Three Mothers which are three Fathers, from which emanate fire, breath and water. Three Mothers, seven Doubles, and twelve Elementals. Here we see the basic difference between the three and seven:

- Three are indivisible, known to be three only by their results. It makes no more sense to call them Mothers than Fathers.
- Seven are doubles, that is they contain their opposites.
- Twelve—the term "elementals" is translated by Stenring as "Simple" and seems to imply they are fixed at whatever they are. It is not impossible they are the six (seven minus the one in the middle), split.

So we have: Three, which are simultaneously male and female as well as each other; Seven, which can be male or female; and Twelve, of which six are male, six female. This is expressed by the author using the Hebrew alphabet as follows:

- The twelve elementals are always paired as such: HV ZCh TY LN SO TzQ;
- The Seven each have two sounds: B-Bh, G-Gh, D-Dh, K-Kh, P-Ph, R-Rh, T-Th. "A structure of soft and hard, a structure of strong and weak, double because they are transposes."
- And the three, A M Sh.

Incidentally, this entire discussion of three, six/seven, and twelve illustrates the chief difference between worlds six and twelve. World six, created consciously, is directly influenced by the world above it (world 3), which acts as another law in it, so we have seven. But world twelve, generated mechanically from world six (as all further worlds will be generated), does not have the direct participation of the higher world in it, so it is twelve and not thirteen.

This text, with its "seven doubles" first alerted me to the dual nature of the seven, and I have since found it mentioned frequently in ancient texts. An example of such references is in Macrobius's commentary on The Dream of Scipio, in which he describes how the soul being born descends downward through the seven (ancient) planetary spheres, acquiring each planet's

characteristic for a positive seven; and at death the soul ascends in reverse fashion through the spheres, dropping each characteristic in turn, for a negative seven. In gnostic writings, we find frequent mention of both the positive and negative aspects of the planets - sometimes only one or the other. In the gnostic creation myth of the Corpus Hermeticum, we find first the creation of the seven essence types which is then followed by the division into two sexes. In architecture, for example at the Temple of Luxor in Egypt, we find seven pairs of pillars. This, like so much "pagan" knowledge, was adopted by the Christians, and the seven pairs of pillars in the cathedral were said to represent the fourteen stages of the cross.

These are the twenty-two letters which are founded by the Blessed Holy One [Yah, YHVH of Hosts, God of Israel, the Living God, high and exalted] dwelling in eternity, whose name is Holy, exalted and Holy is He.

Chapter 6

(Summary)

Three are the fathers and their offspring, seven are the planets and their hosts, and twelve are the diagonal boundaries. And the proof of this, true witnesses, are the Universe, the Year, and the Soul. He decreed Twelve, (Ten), Seven and Three and He appointed them in above, water below, and breath, the decree that decides between them. A sign of this is that fire upholds water that decides between them.

The twelve diagonals are said to be the 12 diagonal lines on the tree of life. Perhaps also the 12 diagonal lines formed when all the points of the tetractys are connected. And the twelve crossings of the enneagram's web with the triangle.
I'll insert one "tree of life" diagram here. This is from the Gra version and appeals to me because of its relative simplicity: For reference, here is a tetractys (and one drawn with connecting lines)

and an enneagram and a teractys with ennegram connections illustrated:

The following diagram shows some simple symbol transformations initiated by connecting the same six points of the tetractys in two different ways to generate a Star of David and an enneagram web. Again we see how the seventh point, although not shown in either the Star of David or the enneagram, would be in the center ("three opposite three, with a decree deciding between them" as we will soon read): lThree: Each one stands

alone. Seven are divided, three opposite three, with a decree deciding between them. Twelve stand in war: three who love, three who hate, three who that love are the heart, the ears and the mouth; the three that hate are gall bladder, and the tongue. And God, the faithful King dominates them all. One over three, three over seven, and seven over twelve, and all of them are bound, one to another. "Three: each one stands alone"—the triangle. "Seven are divided, three opposite three, with a decree deciding between them"—this is the standard way the seven are illustrated in the enneagram, although the seventh is typically invisible. ("Three opposite three" is well illustrated by the theory of essence types where the maximum attractions, which do not combine, are opposite each other, left and right, and "a decree deciding between them" - the solar type in the middle, which may combine with any of the other six, on the enneagram.) So "One over three"— the circle over the triangle; "three over seven"—the triangle over the web and its center; seven over 12—the web crossing the triangle at 12 points (here shown on the scale of the solar system):

and depicted, and he was successful. And the Master of all, Blessed be He, revealed Himself to him, and took him in His bosom, [kissed him on the head, and called him, "my Beloved"]. He made a covenant with him between the ten toes of his feet-this is the covenant of circumcision-and between the ten fingers of his hand-this is the covenant of the tongue. He bound the twenty-two letters to his tongue and revealed their foundation. He drew them in water, burned. And, finally, the point of the whole thing. This knowledge is intended to be used to grow in being, and so create higher understanding.

Seven

"All men, whether Hellenes or not, count up to ten, and, when they reach it, revert again to unity."
Aetius, in Cornford's *From Religion to Philosophy*

The fourth way states that there are two fundamental laws: the law of three and the law of seven, in that order. One could hardly pursue the fourth way without investigating this idea.

But what is this three and seven? Why not four and eleven? Two and eight? Why any numbers at all? Number is fundamental. More fundamental than gravity or culture. Certain numbers, three and seven, determine the existence and maintenance of a living whole, a cosmos.

This essay is mainly about the knowledge of seven in antiquity, and even then only about a few aspects of this ancient knowledge. That this knowledge is ancient is indicated by the fact that, considering even only the West, it is traceable as far back as the teacher of Pythagoras, one Pherecydes, who, it is known, wrote on the threefold and also wrote a book called *Heptamychos*, translated as "The Seven-Chambered Cosmos. (I am unable at present to find out more about this.) And we will find many indications of this knowledge in the Greek writings of later centuries. In that other great tradition that spawned the modern West, the Hebraic, there are very many references to the sevenfold, both in the Hebrew bible and the Christian New Testament. Threeness, of course, becomes the very essence of the Christian teaching. Yet in the mainstream Judaeo/Christian tradition, any exact knowledge of laws concerning three and seven seems muddied, and we will have to look to their more esoteric counterparts. Finally, there was a "West" that was west before our current western civilization, and here too, we will find the seven, and the three.

For a number of reasons, it is difficult to read ancient texts and understand what they are talking about. An example of a problem encountered by the translators and commentators—and one of which they are unaware—is conveying the significance of three and seven as intended by the ancient authors. The significance of the three is sometimes understood, but the significance of the seven almost never. Consider this analogy: A 12th century monastery has somehow got hold of a 21st century computer operations manual (I don't know, a space-time wormhole or something). After much work, the monks are able to understand the language as some strange version of old English, and begin to translate it. They will necessarily come across words that have no meaning to them—hardware, software—and others that have meaning to them but a different meaning to the author of the text—boot, power, program. In an effort to make a translation readable for their time and understanding, the meaning will naturally

be altered. And the intent of the text could hardly be correctly guessed. This is not at all remote from the kind of difficulty we are in with regard to the handing down and translation of ancient esoteric texts. The best one can hope for is a translator with a working knowledge of the esoteric issues, and such translators, say a Thomas Taylor or G. R. S. Mead, are few and far between. And, of course, we are rarely so lucky and must deal for the most part with mainstream academic interpretations based on contemporary worldviews of ancient knowledge.

That said, we do have one great advantage, and that is a knowledge of the fourth way. This is the living tradition that has surfaced at various times in the past, and its monuments—the texts, architectures, and so forth—are ancient expressions of the same teaching. Even in the cases where the text (for example) is only an indirect transmission of school, enough may be preserved to be recognizable.

Here is an excerpt from Epictetus:

As then it was fit to be so, that which is best of all and supreme over all is the only thing which the gods have placed in our power, the right use of appearances; but all other things they have not placed in our power."
Discourses of Epictetus, George Long translation
I have no problem with the translation. I think it conveys something very powerful, but we almost already have to know what we are looking for. The translator discusses the meaning of the Greek word he has translated as "appearances": "The Stoics gave the name of appearances (phantasia) to all impressions received by the senses, and to all emotions caused by external things." What Epictetus is talking about is what on the fourth way we refer to as "impressions". This "right use" of impressions he describes as a power "best of all and supreme over all", and it is our only ability, because "all other things they have not placed in our power." This is our mechanicality. This is the world of accidents and forces that we do not directly control. We control one thing only, but it is the most important of all: we can control and use our own impressions. The work on impressions forms a big part of the work of the fourth way. Self-remembering is our way into this work. In order to control, or have power over, our impressions, something has to be there to meet them on the way in.

In that way we can be selective as to which impressions we take in, and that consciousness of them in itself increases their potential.

Of course, in general it is believed that Epictetus is recommending a sort of aloofness of mind and a fatalistic outlook on life. On the contrary, what he is talking about is an active living psychology, feeding and transforming our life. Working where we can and not where we can't.

So, with the difficulty of translation in mind, let's look at some ancient expressions of the fundamental laws of the fourth way.

Three

In fourth way terms, one is active, two is receptive, and three is harmonizing. This is the nature, too, of the first three numbers, these are the numbers of the law of three.

In ancient knowledge, the three is so sacred that it is usually capitalized, and always has multiple names. Cosmically, the three is: One, nameless in the highest teachings; two, perhaps called Sophia or Wisdom; and three, maybe the Logos, Hermes, Horus, Christ.

Psychologically, there are the "three stories" of the human factory, or the three functions—intellectual, emotional, and physical. In Plato's *Republic*, they are referred to as the "reasoning", "spirited", and "desiring" elements.

In an ancient fragment of Stoebius, we read "Of things existing, some are in bodies, some in forms, some in activities." This is the passive-neutral-active of the fourth way, or Collin's matter-form-life. Several hundred years ago, Medieval alchemy expressed the law of three as salt, mercury, and sulphur.

Plutarch writes of the three parts of the human being as hyle, psyche, and nous. Interestingly enough he adds that at death, hyle stays with the Earth, psyche and nous go to the Moon where psyche (soul) stays, and nous goes on to the Sun. Plutarch's Greek terminology is similar to the early Christian and Gnostic teaching of hyle, psyche, and pneuma (body, soul, and spirit), a threefoldness that was later reduced to body and soul by the Church.

The tripartite human soul in Kaballah consists of nefesh, ruash, and neshamah. And, interestingly, we read

"Later Kaballists...added two other levels of soul. These are hayyah and yehidah, and are considered to represent still higher stages of spiritual attainment, present only in the most select figures." Lawrence Fine, "The Art of Metoscopy", in *Essential Papers on Kaballah* They may well have had the idea of the fourth way's higher emotional and higher intellectual centers.

Seven

This section begins with a discussion of the law of seven in the fourth way, and proceeds to a discussion of one aspect of sevenness that is pervasive in ancient literature, using numerous examples in the hope that the distinctive nature of each of the seven qualities can be seen despite difficulties of translation as well as sometimes contradictory and inconsistent wording.

A Different Astrology—Seven in the Fourth Way

Gurdjieff introduced the law of seven, or law of octaves, shortly after introducing the law of three. He called the law of octaves the next fundamental law of the universe, after the law of three. The following discusses one aspect of the law of seven.

P. D. Ouspensky relates a talk of Gurdjieff in which several of them were walking in a park. G. dropped his walking stick, someone picked it up, and G. asked them about what had just occurred. This walk had been preceded by questions about astrology, and G. had responded in general about planetary influences. After the incident of the stick he said: "This is astrology. In the same situation, one man sees and does one thing, another, another thing, a third, a third thing, and so on. And each acted according to his type. Observe people and yourselves in this way, and then perhaps we will afterwards talk of a different astrology." (P. D. Ouspensky, *In Search of the Miraculous*.)

The astrology we will speak of here is planetary astrology as opposed to zodiacal astrology. It has reference to the seven ancient planets which we'll go into more in the next section, Seven in Ancient Knowledge. We are not concerned with cosmic arrangements at the

time of birth nor prediction. What we need to consider here is the very idea of "cosmos".

"Cosmos" is a Greek word meaning something like "world order", and is used more exactly in the fourth way to refer to a self-perfecting whole. Seven cosmoses are specifically mentioned, ranging from the largest, the Protocosmos, to smaller cosmoses, with names such as Deuterocosmos, Tritocosmos, and Microcosmos. The human being is said to be one of these cosmoses, but, an unfinished one: a cosmos capable of completion or perfection but not completed without personal efforts of a certain kind.

In this view, the Sun itself forms a cosmos, called the Deuterocosmos, and the planets of our solar system form another cosmos, called the Mesocosmos. "Man" forms another cosmos, called variously Microcosmos or Tritocosmos. The question is, what does "Man" refer to? Is it the human being, or humanity as a whole? It seems to me that it refers to both. As we will see as we explore the nature of the Law of Seven, humanity incorporates this cosmic sevenness as does the individual.

The enneagram represents a cosmos, and the following enneagram shows the seven of the Mesocosmos,

with the higher cosmos, the Sun or Deuterocosmos, in the center, representing its origin or birth.

In terms of basic essence types, which are named after the ancient planets, the seven in the enneagram looks like this:

Note that we now have transposed the planetary cosmos to the level of humanity as a whole.

In terms of the individual human being, the enneagram seven look like this:

And now we have the cosmic seven on a personal scale.

The reality of human type and its association with particular endocrine glands is not hard to see if one has worked in a school in which types are known. Through such work we begin to see our own type and the manifestations of various glands. What does not necessarily follow is the association of this sevenness with the seven ancient planets. Could it not be that when sevenness was recognized in ancient times it was just naturally assumed to associate with the seven known wandering heavenly bodies?

It may be, but I suspect there is more to it than that, for a few reasons. One reason is that there is a surprising apparent correspondence between the characteristics of each solar system object with the characteristics of the corresponding human type. Another reason for doubting that the association of ancient planets with these seven cosmic functions is arbitrary is the surprising consistency in which ancient teachings ascribed similar properties to the planets. That is, across many different and very diverse teachings over thousands of years, the qualities assigned to each planet are remarkably consistent. That is not to say it is not often difficult to see the correspondences and, in fact, I seriously wonder how much I can convey here, and how much one already has to know about the seven in order to see these correspondences. Nevertheless, "fools rush in where angels fear to tread", and I intend to make as clear as possible the importance of knowledge of the seven (really the three and the seven) in any study of ancient knowledge with the following. A third reason why there may be a definite correspondence between planets and types (or human endocrine glands), is implicit in the very idea of cosmos. If each cosmos is built on the same pattern of three and seven, the three and the seven must correspond in some way across cosmoses, including the cosmoses of planets and humans.

Harmony of the Spheres—Seven in Ancient Knowledge

In ancient knowledge, the law of seven was often introduced in the discussion of the seven ancient planets. In this usage, the term planet had a somewhat different meaning than it does today in that it included the Sun and Moon. The word planet meant wanderer, and there are seven objects in the sky, as seen by the naked eye, that wander against the background of the fixed stars of our galaxy. These

seven ancient wanderers are the Sun, Moon, Mars, Venus, Mercury, Jupiter, and Saturn.

In general, but not always, the seven planets were arranged in the order: Moon, Mercury, Venus, Sun, Mars, Jupiter, Saturn, going out from the Earth. This is the same as the clockwise circulation on the enneagram we saw above, with the crucial addition that the Sun is seen as lying between Venus and Mars. The planetary paths were imagined as taking place on great spheres, included one within the other, so the seven planets were often called the seven spheres, and references to an eighth sphere, for example, referred to the level above the planetary domain, the sphere of the fixed stars.

In most ancient texts that I have read, the seven refer to human essence, and essence is "fate". That is, it is the conditions of our birth—the time and place, our strengths and weaknesses, such things as our type and center of gravity—all this is our fate. Fate is often mistaken to be destiny, or the end of one's life, but this is not fate. In fact, fate was seen as something to rise above, to recognize and so transcend.

In gnostic mythology, the planets are often referred to as the rulers of fate, or various synonyms for rulers such as administrators, "archons", and so on. The key idea here was that the laws of fate were associated with the idea of seven qualities. In more degenerate, later gnostic teachings, only the negative side of the seven qualities was considered and the planets were seen more as malicious prison guards. Nonetheless, the idea then and now is to transcend our fate, to rise above our natural limits, to "overcome the archons" and "attain to the eighth sphere".

It seems to have been a general teaching that the human soul at birth descended to the Earth from beyond the seven spheres, acquiring the qualities associated with each sphere in turn as it approached Earth. At death, the soul took the reverse trip, shedding the qualities of each sphere in turn until it emerged free of the planetary world and fate. So at death the soul went to the Moon first, then Mercury, and so on.

But what are the qualities ascribed to these planetary spheres in ancient writing? One way we can determine them is to find the descriptions of the various qualities of each planetary sphere as these

qualities are acquired or dropped by the descending or ascending soul. One description of the descent of the soul goes like this:

In the sphere of Saturn it obtains reason and understanding, called *logistikon* and *theoretikon*; in Jupiter's sphere, the power to act, called *praktikon*; in Mars' sphere, a bold spirit or *thymikon*; in the sun's sphere, sense-perception and imagination, *aesthetikon* and *phantastikon*; in Venus's sphere, the impulse of passion, *epithymetikon*; in Mercury's sphere, the ability to speak and interpret, *hermeneutikon*; and in the lunar sphere, the function of molding and increasing bodies, *phytikon*.
Macrobius, *Commentary on the Dream of Scipio*

And one description of the ascent of the soul goes like this:

Thus a man starts to rise up through the harmony of the cosmos. To the first plane he surrenders the activity of growth and dimunition; to the second the means of evil, trickery now being inactive; to the third covetous deceit, now inactive, and to the fourth the eminence pertaining to a ruler, being now without avarice; to the fifth impious daring and reckless audacity and to the sixth evil impulses for wealth, all of these being now inactive, and to the seventh plane the falsehood which waits in ambush.
Corpus Hermeticum, Book I

It is interesting to note in the examples given here that the soul acquires the positive characteristics of the spheres in its descent, and drops the negative characteristics on its ascent. To summarize the characteristics we've encountered so far:

	Positive Attributes	Negative Attributes
Moon	molding and increasing bodies	growth and dimunition
Mercury	ability to speak, interpret	evil, trickery
Venus	impulse of passion	covetous deceit
Sun	sense–perception, imagination	eminence, avarice
Mars	bold spirit	impious daring, reckless audacity
Jupiter	power to act	evil impulses for wealth
Saturn	reason, understanding	falsehood in ambush

In the classic works attributed to Hermes Trismegistus, collected under the title *Corpus Hermeticum*, we come across a creation myth in which the seven types of humanity are created with respect to the seven planets:

Poimandres said: "This is the mystery which has been kept secret until this day. For Nature, united with Man, has brought forth a wonder of wonders. Man, as I told you, was of the Father and of spirit and had the nature of harmony of the seven spheres. So Nature did not wait, but immediately brought forth seven men corresponding to the natures of the seven powers, beyond gender and sublime."
But Plato is more practical, and speaks of the sevenness of the planets in terms of human psychology:
"Let us rather declare that the cause and purpose of this supreme good is this: the god invented sight and gave it to us so that we might observe the orbits of intelligence in the heavens and apply them to the revolutions of our own understanding. For there is a kinship between them, even though our revolutions are disturbed, whereas the universal orbits are undisturbed. So once we have come to know them and to share in the ability to make correct calculations according to nature, we should stabilize the straying revolutions within ourselves by

imitating the completely unstraying revolutions of the god." Plato, *Timaeus*

A curious episode in the *Acts of the Apostles*, seems to indicate that Paul was a Mercury, Barnabas a Jovial, and that the people encountered had a general knowledge of type at that time, although the author of *Acts* either didn't know it or was deliberately disguising his knowledge:

And when the people saw what Paul had done, they lifted up their voices, saying in the speech of Lycaonia, The gods are come down to us in the likeness of men.
And they called Barnabas, Jupiter; and Paul, Mercurius, because he was the chief speaker.
Acts 14:12

And disguise it he would have to. The orthodox Church father Ephraim made one of his three main accusations against the Gnostic Bardaisan that he taught that there were seven essences. Bardaisan stated that the knowledge of fortune (fate) being related to the seven "stars" was Chaldean in origin.

This from my related discussion in Signature Pieces:

I stumbled on another reference to the theory of types while studying the ancient Kaballistic text "Sefer Yetzirah". In particular, in a book by Aryeh Kaplan called Sefer Yetzirah which includes his extensive discussion of the various versions of the Sefer Yetzirah, he has the following table which he states is "according to the Torah":

Planet	Quality
Sun	Independence, openness
Venus	Wealth, lechery
Mercury	Intellect, memory
Moon	Dependence, secretiveness, manic-depressiveness
Saturn	Inaction, vulnerability
Jupiter	Generosity
Mars	Blood

The Gnostic (Valentinian) *Gospel of Truth* has an interesting passage that discusses the Three and the Seven:

"While his wisdom mediates on the logos, and since his teaching expresses it, his knowledge has been revealed. His honor is a crown upon it. Since his joy agrees with it, his glory exalted it. It has revealed his image. It has obtained his rest. His love took bodily form around it. His trust embraced it." http://www.gnosis.org/naghamm/got.html.

The first sentence is the three. This threesome in Gnostic thought is often the Father, Sophia (Greek for "wisdom"), and the Cosmic Christ. In Kaballah, it is Crown, Wisdom, and Understanding. The Judaeo-Christian religions seem to often have a hard time with the feminine, and in later Kaballah Wisdom is declared to be male, and in Christianity, that position is occupied by the neutered Holy Spirit. In practice though, Roman Catholicism essentially makes the trinity: Father, Mary, Jesus.

The sevenness mentioned, and how I map it to the seven, is this:

Planet	Quality
Saturn	honor is a crown
Jupiter	joy agrees with
Mars	glory exalted
Sun	revealed his image
Venus	obtained his rest
Mercury	love took bodily form
Moon	trust embraced

Another translation (Attridge/MacCrae) uses sometimes different words for the qualities:

Planet	Quality
Saturn	forbearance is a crown
Jupiter	gladness is in harmony
Mars	glory has exalted
Sun	image has revealed
Venus	repose has received it
Mercury	love has made a body

Moon fidelity embraced

In the text following this emanation sequence, is a more loosely defined return, but one that ends clearly in the trinity Father/Mother/Jesus.

Note that this ancient arrangement of the "planets" has the Sun as "his image". It is a commonplace in ancient teachings that the Sun is the representative or image of a higher god. (The Sun in the center as representative of the higher also reminds me of "my" symbol, where the six colors surround the point of white light, and where the whole arrangement is surrounded by the white light from which it originated—see Symbol.) (For an additional discussion of the six/seven relationship, see A Note On The Seven Cities of Cibola at the end of this essay.)

Here is a discussion of the seven qualities from Proclus:

Further still according to another division, the agricultural tribe of the city is analogous to the Moon, which comprehends the sacred laws of nature, the cause of generation. But the inspective guardian of the common marriages, is analogous to Venus, who is the cause of all harmony, and of the union of the male with the female, and of form with matter. That which providentially attends to elegant allotments, is analogous to Hermes, on account of the lots of which the God is the guardian, and also on account of the fraud which they contain. But that which is disciplinative and judicial in the city, is analogous to the Sun, with whom, according to theologists, the mundane Dice, *the elevator and the sevenfold* reside. And that which is belligerent, is analogous to the order proceeding from Mars, which governs all the contrarieties of the world, and the diversity of the universe. That which is royal, is analogous to Jupiter, who is the supplier of ruling, prudence, and of the practical and adorning intellect. But that which is philosophic, is analogous to Saturn, so far as he is an intellectual God, and ascends as far as to the first cause." Proclus, *Commentary on the Timaeus of Plato*

The selection from Proclus is arranged in an ascending order of Platonic qualities. The order of Venus and Mercury are switched, for some reason, but the qualities are rightly assigned. This passage is interesting for its clear association of the Moon with generation, and

Mercury (Hermes) with a tendency to fraud, and also its indication that the Sun is a higher world serving one function in the planetary world but containing all seven in itself.

Seven and Duality

There is a prevalence in ancient thought of the twoness of the seven. This is variously described as 14 of something, or as the two sides of each of the seven somethings. For example, in a Gnostic myth we read:

"And he united the seven powers in his thought with the authorities which were with him. And when he spoke it happened. And he named each power beginning with the highest: the first is goodness with the first (authority), Athoth; the second is foreknowledge with the second one, Eloaio; and the third is divinity with the third one, Astraphaio); the fourth is lordship with the fourth one, Yao; the fifth is kingdom with the fifth one, Sabaoth; the sixth is envy with the sixth one, Adonein; the seventh is understanding with the seventh one, Sabbateon. And these have a firmament corresponding to each aeon-heaven. They were given names according to the glory which belongs to heaven for the destruction of the powers. And in the names which were given to them by their Originator there was power. But the names which were given them according to the glory which belongs to heaven mean for them destruction and powerlessness. Thus they have two names.

The Apocryphon of John

That is, they have a positive side and a negative side. Another way this was illustrated was in the descent and ascent of the soul at birth and death, in which the soul was encumbered by a quality from each sphere as it descended, and freed of the negative traits of that sphere on its ascent through each one.

So we have seen several things about the seven in ancient knowledge. One is that it is associated with fate, another that it is associated with the soul, another that it is associated with type, and another is that it is associated with duality.

Our type is our fate, and our soul is our bloodstream, the circulation of the glandular secretions and their corresponding effects. Our soul is subject to our fate, and to rise above our fate we must master our soul. That which is above the seven is the three. Above soul is spirit, and above fate is freedom.

A Note On The Seven Cities of Cibola

Of interest to a discussion of the six and seven is the organization of the secret or esoteric religious societies of the Zuñi Indians of the American southwest. In fact, it may be that the entire organization of Zuñi life has been based on six and seven. For the Zuñi, there are six directions: north, south, east, west, up, and down, each with its own characteristics (exactly what we find in the Sefer Yetzirah). Characteristics for each direction include a particular element, color, and so on. For example, north, from which comes the most difficult weather, is associated with warlike properties, the element air, and the color yellow. But in addition to these six directions, special significance is given to the middle, which serves as a sort of catch-all, or connection and summation of the six.

An interesting account of Zuñi organizational structure is given by the nineteenth century anthropologist Frank Cushing in his *Outline of Zuni Creation Myths*. Cushing was no less than an initiated member of Zuñi secret societies, and a most interesting and colorful character to boot. Here is what he says:

"The Zuñi of today [Cushing is writing in 1892] number scarcely 1,700 and, as is well known, they inhabit only a single large pueblo—single in more senses than one, for it is not a village of separate houses, but a village of six or seven separate parts in which the houses are mere apartments or divisions, so to say. This pueblo, however, is divided, not always clearly to the eye, but very clearly in the estimation of the people themselves, into seven parts, corresponding, not perhaps in arrangement topographically, but in sequence, to their subdivisions of the 'worlds' or world-quarters of this world.[...]

By reference to the early Spanish history of the pueblo it may be seen that when discovered, the Ãshiwi or Zuñi were living in seven quite widely separated towns, the celebrated Seven Cities of Cibola [Cushing was the first to recognize that the Spanish names for the fabled Seven Cities in fact corresponded to the names of existing pueblos], and that this theoretic subdivision of the only one of these towns now remaining is in some measure a survival of the original subdivision of the tribe into seven subtribes inhabiting as many separate towns. It is evident that in both cases, however, the arrangement was, and is, if

we may call it such, a mythic organization, hence my use of the term the mytho-sociologic organization of the tribe. At any rate, this is the key to their sociology as well as to their mythic conceptions of space and the universe."

It is interesting to note that today there is some uncertainty as to whether there were in fact seven or only six "cities", a confusion that underscores this relationship of six and seven.

The extent of this "mytho-sociologic organization" of the Zuñi is astonishing. Later in the same paper Cushing says:

"By this arrangement of the world into great quarters, or rather as the Zuñi conceive it, into several worlds corresponding to the four quarters and the zenith and the nadir, and by this grouping of the towns, or later of the wards (so to call them) in the town, according to such mythical division of the world, and finally the grouping of the totems in turn within the divisions thus made, not only the ceremonial life of the people, but all their governmental arrangements as well, are completely systemized."

Regarding the esoteric societies in particular, Cushing says:

"It may be seen of these mytho-sociologic organizations that they are a system within a system, and that it contains also systems within systems, all founded on this classification according to the six-fold division of things, and in turn the six-fold division of each of these divisions of things. To such an extent, indeed, is carried this tendency to classify according to the number of the six regions with its seventh synthesis of them all (the latter sometimes apparent, sometimes nonappearing) that not only are the subdivisions of the societies also again subdivided according to this arrangement, but each clan is subdivided both according to such a six-fold arrangement and according to the subsidiary relations of the six parts of its totem."

And the seventh part is by no means trivial:

"Be that as it may, this notion of the 'middle' and its relation to the rest has become the central fact indeed of Zuñi organization. It has given rise to the septuarchy I have so often alluded to [...]"

In general, the study of a society such as that of the Zuñi gives an interesting view of the role of esoteric knowledge in sacred societies.

The Zuñi, like the Hopi and no doubt other Indian cultures, was organized around mythological dramas publicly acted out in the streets and plazas of the city itself. People were exposed to the "mystery plays" from childhood, and could grow into later initiation and participation to the degree to which they were suited.

An Altar of the Hopi

Some final comments that may be of interest concern the Hopi. This first piece of information comes from *The Book of the Hopi* by Frank Waters. In a structure very similar to the structure of worlds such as that employed by the Gnostics and other ancient peoples, the Hopi posited a nine-tiered universe consisting of "the seven successive universes through which they will travel on their evolutionary journey, the domain of S_ who helped to establish them, and the realm of the Creator, T_, who rules over them all." In this case, S_ and T_ have an Uncle-Nephew relationship, similar to the Father-Son of Christianity. With certain Gnostics, the goal was to consciously pass though the seven spheres and into the spheres of the eighth and ninth within this life (see for example The Discourse on the Eighth and Ninth).

Perhaps even more startling is the report of an observation of the construction of a Hopi altar on November 10, 1891 by Alexander Stephen at Walpi, the Hopi village on First Mesa in the North American southwest. Not only is the organization of the alter interesting in its combining of 1, 3, and 6/7, but in this case the *order* in which the alter was constructed was witnessed, and it exactly follows, for example, the order of the exposition in the book of creation as I discuss in A Cipher on the Sefer Yetzirah.

In the following, I'm quoting from *Skywatchers, Shamans & Kings*, by E. C. Krupp. At about noon, Stephen saw a member of the Agave society begin to construct the altar or sand painting:

He scattered brown sand into a circle centered on the sipapu, a cavity in the kiva floor...
Here we have the circle representing the whole, or unity, just as it does in the enneagram and countless other symbols. The relationship of the circle and its center (the sipapu in this case) is the "alpha and omega" as I've discussed in Qualitative Number Theory.

As work on the directions altar continued, three lines were drawn across the floor in white cornmeal. They intersected at the sipapu, on which was placed a bowl.
First came one, now three. Next:
An ear of corn, feathers, and other talismans are placed on each directional ray, and each direction has its own color of corn and plumage.
That is, an ear of corn is placed at both ends of each of three lines, so six ears of corn are now on the outside of the diagram. Finally:
During construction of the alter, the Hopi officers sang, and after the second song a quartz crystal was brought out and carried up the kiva ladder to the ceiling entrance. With it one of the men caught the sunlight and bounced the beam of it into the bowl at the center of the alter. The quartz was then placed in the bowl along with the pollen already sprinkled there. This manipulation of sunlight reinforced the sun's role in the directions alter and injected the sun's power into the most highly charged element of the arrangement—its center.
This association of light with the center of the 1,3,6/7 symbol is the same as I show, for example, for the enneagram shown on the home page of these essays, and when treating of the enneagram on the scale of the human and solar cosmoses, it represents the solar type and the sun, respectively.

The finished altar looked something like this:

Another good example from a culture that could hardly be further removed from these comes from the ancient Zoroastrian teaching, in which there are six Amesha Spentas, or Holy Immortals, with a seventh, Ahura Mazda, who is the central divinity. Overall, such correspondences between widely separated esoteric teachings seems to me to indicate the mystical nature of the source of such knowledge, and common attempts to derive all such similarities of belief from a single original invention and the subsequent copying and modifying of the same are suspect.

Consciousness teaches.

About The Soul

In many great teachings, in one form or another, the idea of three worlds is presented. These three "worlds" may be called the body, the soul, and the spirit. The term "body" in this case includes what we normally think of as our body, but also our emotions and thoughts -- to the extent that they are driven by sensory inputs. It is who and what we are, as we are. It is a miracle, but we have much greater possibilities, and these are our "soul" and our "spirit". And each of these is a much greater miracle than the body.

Practically everything that we do, we do with the body, and with that we are more or less familiar. But we are not familiar with the soul, and we are not familiar with the spirit. It may be said that we lack soul, but it cannot be said that we lack spirit. How can we lack the infinite? What we lack is our connection to the infinite, our connection to spirit, and that connection is the soul.

In some teachings, the world of the soul corresponds to what is called "imagination" (on the fourth way, the term imagination refers instead to uncontrolled mind activity). It is that which "images" the influences of spirit, the inspiration, for presentation to the sense-based body. It may also be called the astral body, the higher emotional center, the ruah (kaballah), and so on. In addition to the different names for the soul between different teachings, it can be confusing because the same term used for soul may be used for our emotional function, just as spirit may have the same or a similar term to our intellectual function. This apparent confusion exists because there is a correspondence between the emotions and the soul, and between the intellect and the spirit. In fact, our emotions and intellect may be seen as something like imitations, or symbols, for the soul and spirit. An example of this confusion of terminology occurs when we read translations of ancient Greek ideas about "Nous", translated as Mind, or Intellect. Better terms might be Spirit, or Consciousness.

Basic Functions	**Higher Functions**
Intellect	Higher Mind, "Spirit", *Nous*
Emotions, "Heart"	Higher Emotions, "Soul", *Logos*
Body, physical functions	Higher Bodies, e.g, "astral", "causal", etc.

-- moving and instinctive functions	(See also Fig. 1 in *In Search of the Miraculous* for a similar but not identical naming scheme.)

Just as the soul images spirit, so does the emotional function present images to us in dreams. In the latter case, the role of spirit is played by the intellectual part of the emotional center, which seems to draw on instinctive, moving, emotional, and intellectual images to creatively "speak" to us. The intellectual part of the emotional center is our "Shakespeare", and is capable of putting a lot of symbolic meaning into the image plays of our dreams.

Traditionally, the soul is represented as feminine and the spirit as masculine. The soul is seen as passive or receptive to an active function, which may be the body's desires on the one hand or the spirit on the other.

Regarding the soul, in many ancient teachings we come across the idea of the whore and the virgin, and the whore becoming the virgin. Another ancient image is the idea of the bridal chamber, or the marriage of the soul to the spirit.

For example, in gnostic Christianity, we read:

For when the soul leaves her perfect husband because of the treachery of Aphrodite, who exists here in the act of begetting, then she will suffer harm. But if she sighs and repents, she will be restored to her house.
The Exegesis on the Soul, Nag Hammadi Library

The soul's "perfect husband" is the spirit. The soul is distracted or seduced by the world of the body—this is the "treachery of Aphrodite"—but the possibility exists to understand this situation and "repent", to turn the attention of the soul from the body to the spirit.

In the orthodox Christian Gospel of John we find:

But whosoever drinketh of the water that I shall give him shall never thirst; but the water that I shall give him shall be in him a well of water springing up into everlasting life.

The woman saith unto him, Sir, give me this water, that I thirst not, neither come hither to draw.

Jesus saith unto her, Go, call thy husband, and come hither.

The woman answered and said, I have no husband.

Jesus said unto her, Thou hast well said, I have no husband: For thou hast had five husbands; and he whom thou now hast is not thy husband: in that saidst thou truly.

The woman at the well is the soul, Jesus is the spirit, and the "five husbands" represent the five senses (mesoteric interpretation), or the five lower functions (esoteric). Jesus, spirit, is telling the soul to turn her attention from the body to the spirit. The attractions of the body are represented as temporary and ultimately unsatisfying, while with the "water" of the spirit, one will never thirst.

Plato quotes Socrates as saying:

And were we not saying long ago that the soul when using the body as an instrument of perception, that is to say, when using the sense of sight or hearing or some other sense (for the meaning of perceiving through the body is perceiving through the senses) -- were we not saying that the soul too is then dragged by the body into the region of the changeable, and wanders and is confused; the world spins round her, and she is like a drunkard when under their influence?

But when returning into herself she reflects; then she passes into the realm of purity, and eternity, and immortality, and unchangeableness, which are her kindred, and with them she ever lives, when she is by herself and is not let or hindered; then she ceases from her erring ways, and being in communion with the unchanging is unchanging. And this state of the soul is called wisdom?

Phaedo, Plato [translated by Benjamin Jowett]

The soul may be represented by the Roman god Janus, the god with two faces, mediating between the world of spirit and the world of body-based sensation:

A more complete image is suggested by the alchemical design shown at the top of this page. The bird on the top, holding its own tail, is complete, self-sufficient, spirit. The two birds at the bottom are the soul and the body. The soul, touching spirit, faces and is connected to the body. The body, faces up toward the soul. This would represent a right relationship of the three worlds in us.

The soul needs to be fed just like the body needs to be fed—the only difference being that the soul feeds on finer matters, higher hydrogens. We take in and refine these matters through divided attention, watching ourself as we perceive the world through our senses (consciously look through your eyes. Try to watch yourself reading this). The energy of attention splits the perceived matter. This is the "division of the atom" for us, the digestion of a certain energy and its consequent refinement. In fact, it is the division of molecules in our blood, the "parting of the red sea". The two-faced Janus is divided attention, the attempt to initiate the activity of the soul.

Self-remembering is a more complete "soul-action": in its full achievement, it *is* the activity of the soul, monitoring the sensations and receptive to spirit simultaneously.

The soul is our birthright—we are born with it functioning properly, but we lose it, we forget it, we fall asleep. Something has gone wrong.

Our attention, which is the very matter of the soul, is pulled away from the soul by our identifications. Whether we are identified with external or internal matters, we suffer an imbalance and loss of the stuff of attention unless we are dividing our attention, balancing the work of centers by conscious intent, the proper role of soul.

With the graphic above, I've tried to show something about the imbalance of centers when we are identified. The arrows are something like a vector arrow in physics, showing direction and force, in this case the direction and force of attention. The diagram is

simplistic, though, and may even be misleading if taken too literally. The *object* of our attention is not as significant as whether or not we are aware of ourselves observing it. For example, we can have divided attention on purely internal functions, such as observing our emotional and instinctive centers simultaneously. Similarly, we can divide our attention between externals, maintaining awareness of our hearing and looking simultaneously. And, in higher moments of consciousness, we can be aware of all of these and more. Even just to maintain awareness of, say, ourselves listening to music, requires divided attention, because we will lose our self-awareness unless we continually monitor it. It requires an act of will, and will belongs to the soul.

It may be that language itself originally derives from the communication of spirit in images to the soul, a process properly called inspiration. Words are symbols, and we have seen how symbols mediate between the world of spirit and the world of senses. The classic example of such language is sacred scripture, for example, the Quran of Islam and the Torah of Judaism, which are both seen as the word of God. Such texts are studied at many levels including the literal interpretation, and it is believed that ever deeper study leads to ever more profound meanings. In short, the language is symbolic, above and beyond the fact of the symbolic nature of language. An example of such interpretation or "exegesis" of scripture is given above in the discussion of the woman at the well in the Gospel of John.

Soul and the emotional center present symbols, or forms representing something else. The world of spirit may be seen symbolically through the forms of the world by soul. This is when the world becomes alive with meaning, every thing representing something more profound, its "final" cause in the Aristotelian sense.

The enneagram is a symbol that images the three worlds: the circle is the body; the inner circulation of the enneagram—the web-like figure—shows the circulation of the blood; and the triangle is the nervous system. In terms of body, soul and spirit, the circle is the body, the web is "the path of the soul" (as Rodney Collin put it), and the triangle is the spirit.

The nervous system speaks to our body through the endocrine gland secretions in our blood. We tend to be more aware of this when the hormones in question are such obvious ones as testosterone or adrenaline, and less aware of the more subtle secretions of of the anterior pituitary which controls these other secretions. The anterior pituitary in turn is controlled by the nervous system, being in immediate contact with the hypothalamus, a portion of the human brain. Balanced functioning requires intentional control of the nervous system, and therefore leads to control of the endocrine system. This process of acquiring control of the contents of the bloodstream by intentional behavior is analogous to and a precursor of control of the soul by the spirit.

We can look at the three worlds "cosmogonically", that is, in respect to the creation. Take the opening of the Gospel of John:

In the beginning was the Word, and the Word was with God, and the Word was God. The same was in the beginning with God. All things were made by him, and without him was not anything made that was made.

Here we have the three worlds: the world of spirit (God), the world of body (things), and the world of the soul (Word). When we view the creation as God -> Word -> things, (spirit -> soul -> matter) we can see how the idea of "Maya" arises. The middle world, the world of soul, represents the world of spirit through images. On the scale of creation, these images are the world we see.

"All things are metaphors."

Goethe

Seen as the living Word, these images are windows to the spirit. Seen as self-existing things, the images are dead matter.

One of the characteristics of the world of spirit is *meaning*, and it is meaning that is communicated by images: images that we are able to assimilate for better or worse, until we can see in the world of spirit directly.

Now. To return to practical ideas of the fourth way. Spirit is higher intellectual center ("this system comes from higher mind"), soul is higher emotional center, and body is our ordinary state. To grow spiritually, we need to have a soul that transmits spirit, and we need to be able to understand the images that are transmitted. Our soul is the missing link in conscious evolution.

"And so it is written, The first man Adam was made a living soul; the last Adam was made a quickening spirit."

1 Corinthians 45

According to some, we do not have a soul and have to create one. Others say we have a soul but it is asleep, or nascent. Regardless, we have to know what to "do". People with a superficial knowledge of the fourth way say "we cannot *do*". While this is true regarding many of the abilities we ascribe to ourself, the whole idea of the fourth way is to find out exactly those areas in which we can "do", and *work* on them.

The work of the fourth way is precisely to activate the soul. The soul requires finer matters, finer energies, which are produced from the same foods that our body requires. We need to both produce more of these matters and reduce the waste of those we do produce. This practice of refining and increasing matters is sometimes called "alchemy".

All of the practical ideas of the fourth way are practical alchemy. We try to remember ourselves, externally consider, observe ourselves, find reasons for not expressing negative emotions, struggle with identification, and so on, to increase and conserve finer "hydrogens".

If we are able to increase our finer energies, we begin to quicken our soul. This is naturally an uncomfortable process, at least as long as we are full of wrong working of functions as we are, but this discomfort is the friction that produces the very energy that enables us to see the wrong work and struggle with it.

And these in truth are the so-called trials, which the sacred stories say Hercules underwent and any other hero who valiantly strives for freedom, until they succeed in raising up the spirit [soul] to a height where the hands of nature cannot reach it.

On Visions, Synesius [Mead translation]

We need to vibrate at a much higher rate to resonate with higher influences. A higher rate of vibration resolves lower functions into a harmony, much as a large enough divisor in arithmetic may relate different numbers. This higher rate of vibration is nothing less than inner life, and is the chief difference between people on Earth. It separates the quick from the dead.

"Perhaps our mistake is that we want peace in the wrong place. People ask for peace in their souls—they should ask for turmoil in their souls, so that they may find real peace in their spirits."

The Theory of Conscious Harmony, Rodney Collin

The neo-Platonic tradition, for one, emphasizes that the soul is characterized by *motion*. Spirit is timeless, so motion does not apply, and body is essentially inert, animated only by soul. Soul is itself moved in one of two ways. In one of its motions, the soul is moved by externals—it is controlled from without. We simply react, as machines. In this case the soul is manipulated, used, and such a condition corresponds to the "whore" of certain teachings. But in the second case, the soul is *self-motive*, the soul controls and sustains its own motion. It is controlled by our will. This is the "virgin". (These two motions of the soul may be expressed in another way by the two "great triads" as discussed in The Six Processes.)

With the knowledge from the neo-Platonic tradtion, then, we are able to resolve an apparent contradiction in fourth way teachings in which the soul is said sometimes to be asleep, at other times is said to not exist. The soul is asleep in the sense it is not will-ing; it does not exist in the sense that the true motion of the soul, self-motion, is lacking. The two motions of the soul are in opposite directions, and the change in direction of the motion of the soul, from accidental to willed, is termed "metanoia" in the Greek, or "repentance" in esoteric Christianity.

We work directly on creating or energizing our soul with our nervous system. By an act of will, we both resist the external forces that do with our soul what they will and try instead to will a new, intended,

motion. We call this "attempting to self-remember". This effort introduces consciousness to our functioning. Remember that consciousness varies in three ways: by frequency, duration, and depth. Frequency is how often we try to remember ourselves, duration is for how long we are able to maintain self-remembering, and depth is the penetration of this self awareness, the extent to which we are aware of ourselves in our surroundings. In higher consciousness, these three variations merge to become one self-sustained state. We have the necessary information to begin work on our souls.

The Process 3-1-2

The process 3-1-2 means the triad in which the third force comes first, followed by first force, resulting in second force. In Rodney Collin's useful terminology, it is described as the sequence form-life-matter: Form, applied to life, reduces it to matter. In its negative aspect, this is sometimes called the process of crime, or the process of corruption. An example is the work of a virus. The virus represents form, or the third force, and it acts on life, the first force, reducing it to matter, the second force. Third force always stands between second and first force in its "density of vibrations", or intelligence. The virus is not alive, but hijacks the living, leaving dead matter in its wake [1].

Another example of the negative side of this process 3-1-2 is formatory thinking. Formatory thinking occurs when a pre-existing thought-form is applied to thought, essentially destroying the living process of thinking by forcing it to fit into the pre-existing form, which results in some lifeless result, for example, a slogan. In technical language, formatory thought occurs when the mechanical part of the intellectual center overrides the work of the intellectual part of the intellectual center. This is wrong work of centers, in this case, parts of centers. Right work of the mechanical part of the intellectual center is to return stored data, such as the response to the question "What is 2 + 2?". It should not respond to questions such as "What do you think of this idea?", or anything that one should think about.

One of the strange things about this process is the mythical nature of Mercury/Hermes which, on the one hand agrees quite well with a description such as "crime" when Mercury has the attributes of the thief, but at first does not seem to agree with the "messenger of the gods" role of Mercury/Hermes. But there are reasons why this is a good fit.

The first reason I think the messenger of the gods is associated with 3-1-2 has to do with still another mapping I supply in The Theory of Process and the Law of Seven. There, Mercury is associated with the 6th stage of Young's evolutionary arc, a stage that has the characteristic of movement. Movement has also been historically associated with the planet Mercury due to its relatively rapid movement in the night sky relative to the other planets. So it is not surprising that the messenger of the gods, the god with winged feet, is associated with this process.

But the second reason I think the messenger of the gods is associated with 3-1-2 came after some thought and appears to me to be very fruitful. The idea of the messenger of the gods is, of course, that the messenger is relaying information from the gods to humanity. This has been Mercury/Hermes role in many ancient myths. The god-knowledge here is clearly of the highest order and active, and so is assigned "1". The receiver, humanity, is assigned the passive or receptive force, "2". And Mercury/Hermes is the mediator, connecting humanity with the knowledge of the gods, and is assigned "3" as mediating or harmonizing force.

The Greeks were quick to recognize the identity of Hermes with Thoth, the Egyptian god responsible for bringing writing and knowledge in general to humanity. Thoth was deemed the source of divine wisdom, spoken through the high priests, and this role was later identified with the mythical individual Hermes Trismegistus, who was really any individual conveying divine wisdom, possessed, so to speak, by the god.

This really touches on so much about the very nature of knowledge. Human knowledge, say a theory, is necessarily a form, that is, it is not alive. It must reduce the living to something dead in order to be communicable. Truth is alive and not expressed in intellectual forms, it can only be symbolized, pointed to, hinted at. It can, and must be experienced directly. Any attempt to convey that experience takes the life out of it.

We have here, for an example, an excerpt from a book review published in *Science* magazine. The book reviewed is about the study of the human brain, and the author discussed the two primary approaches to doing this: studying brain operations in an intact brain in a living human being, or studying the brain in terms of building blocks isolated surgically. The reviewer comments:

"What is the best method to reveal the mechanisms and content of these oscillations [brain-wave cycles]? This question is not trivial because the brain rhythms appear to be as complex as the brain itself. The usual approach to dealing with complexity is to simplify, but Steriade opts to leave the brain intact. His noble choice, however, inevitably allows uncertainty to remain in the explanation of observations. As a result, critical details must be neglected to create communicable theories.

Another choice is to compromise the brain's hardware. The in vitro slice preparation represents such an approach. Although the author acknowledges the large amount of information accumulated by the work on brain slices, he advises us that the conclusions derived from these preparations are often extended too far. Admittedly, the in vitro model of oscillations cannot truly represent the actual phenomenon, and hypotheses

generated in simplified preparations must be confronted with experiments in the intact brain."

Science 14 Dec 01 review of *The Intact and Sliced Brain*, by Mircea Steriade.

At the end of the first paragraph we read: "critical details must be neglected to create communicable theories", and in the last sentence of the second paragraph we read: "the in vitro model of oscillations cannot truly represent the actual phenomenon". In other words, the model or theory *cannot* accurately represent the living brain. The fact that what we have in knowledge is not living and cannot be by the very nature of knowledge, is exactly what this 3-1-2 progression shows us. We formulate (3) our observations on some living phenomena (1) to arrive at an expression of it (2).

We see this clearly in the study of quantum physics. To study this world we apply some technique of measurement to the dynamic phenomena in order to collect data about the phenomena. The measurement itself forces the phenomena to behave in certain ways, ways that are a subset of its inherent nature. In order to collect the data, we must "collapse the wave form". This measurement-phenomenon-data sequence is 3-1-2.

Another example is the modern classificatory scheme of all life, the Linnean system organizing creatures into genus and species, which are subunits of larger categories such as families, and orders. This classification has been accomplished largely by killing the life form under study to better determine such details as bone structure or the finer points of outward appearance. [2]

There is a feature we can observe (in others before we see it in ourselves, as is typically the case) that I think of as "wolf feature". This is an automatic tendency to attack a perceived weakness. This often occurs in conversations, when someone starts to say something they are unsure about—they are tentative, searching to express something for the first time. Wolf feature detects this uncertainty, probably through voice intonations, and immediately and automatically contradicts whatever the person has managed to say. In this kind of conversational occurrence, we see both aspects of the process 3-1-2. The first speaker has expressed something from real experience, or active thought, "catching the thought on the wing", so to speak, and, like a hunter downing a bird, has used the process 3-1-2. The second speaker, probably already negatively poised, senses the living

vibration and immediately attacks it, reducing the finer thought to a formatory contradiction.

In general, if we attend to our actions, we are more likely to use the positive aspects of this process, and if we are asleep, we are quite likely to be used by the negative activity of 3-1-2. We can be Mercury the thief, or Thoth the transmitter, depending on our consciousness.

Notes

- **[1]** When I first read Rodney Collin's example of the virus as the process of form-life-matter, I thought that it was the best example possible. Recently, though, an even better example seems to have come to light with the discovery of a form of protein called the "prion". Proteins are complex molecules that rely on their form to produce their function. A prion is a malformed protein. This malformed protein causes the "spongiform encephalies" such as mad cow disease. While the virus imitates life with its ability to manipulate DNA, the prion is not so subtle—it is simply a form that disrupts life processes until it kills: form-life-matter.
- **[2]** A non-reducing way of classifying life is used by the scheme G. introduced in which an organism is defined by what it eats, what it breathes, and the medium in which it lives.

  It is not good for the soul to kill life in order to learn about it. It is an immature way, an early developmental stage way, to gain knowledge about Nature. Much as a boy's love of hunting may develop into a greater respect for Nature, and a more profound study of it.

The Seven Houses of Perception

Our understanding of perception is severely limited, and not just in terms of its ultimate nature, which is consciousness, but even in the types of perception available to us and their possibilities. It is commonly said we have five senses, but after that all agreement breaks down. Some posit a sixth sense, some more, some speak vaguely of extra-sensory perception, telepathy, and so on. While all this has some degree of truth, it is organized wrong, and a better organization quickly reveals unimagined possibilities.

Our senses of sight, smell, touch, taste and hearing are like the windows of a house, each affording a different view of the outside world. We do not expect to see the same view from the back of the house that we do from the front, any more than we expect to receive the same impressions from our eyes that we do from our ears. If we combine all these different views, the input from our five senses, we might think that we have approximately the total source of our perceptions of the outside world. In reality, all we have is the approximate total of all our perception from *one house*, our instinctive function, and there are six more functions, six more houses of perception.

Our seven functions, or possible functions, are each an organ of perception. We do not normally think of, say, the moving center or the intellectual center as organs of perception, but they are indeed such organs, in addition to the capabilities we normally credit them with. Each allows us to see the world in a different way, each affords us unique views, and it is only in their totality that we can begin to exercise our full potentiality of human perceptivity.

We may think of the moving center or moving function as that which enables us to walk, ride a bicycle, steer a car, cross our legs and so

on, but we also perceive the world in a certain way with it. We perceive time and space with our moving center. As with all moving center capabilities, this perception must be learned. Toss a beach ball to a child and you will see that the uneducated moving center cannot raise its hands correctly to deflect or catch the ball. But that is only part of what the moving center must learn to make catching the ball a reality. It also must determine the speed and direction of the ball. While the information about the ball's movement in space is coming in through the instinctive center, it is the moving center that perceives something in addition to data of sight: it perceives, in fact, something that is *invisible* to sight, it perceives a vector in space-time. The moving center has learned to filter the "blooming, buzzing confusion" of instinctive sensation to focus on the more (for it) relevant data, which is the time sequence of ball locations that enable it, from past experience, to predict the time and location of the arrival of the ball. Instinctive sensation, which we are born with, cannot do this. Nor, for that matter, can intellect calculate this in anything remotely approaching the time required. (People speak of the speed of thought as if it were so fast as to be almost instantaneous. In reality it is our slowest function, and what they are calling fast thought is usually moving function and sometimes emotional function.)

It is this aspect of the moving function, this ability to perceive time and space and their intimate relationship (like two sides of a coin), that allows us to maneuver on the highway or thread a crowded city sidewalk. And this perception of vectors can be extrapolated from the more immediate uses we put it to, to include such things as envisioning the revolution of planets about the sun, or the interlocking of proteins inside the living cell. It is with the moving function that we perceive pattern and shape, movement itself, and three- and four-dimensionality. Far from a mere addition to the five senses, we would be helpless on Earth without moving function perceptivity.

This also gives the lie to the idea that what we want to do or strive to do in ways of self-transcendence is to drop everything we have learned and return to some early condition of pure unmitigated sensory experience. This is the essence of a newborn, and it has taken much effort, much trial and error now long-forgotten, to

acquire our abilities to orient ourself and function in the world. What we have learned, what we have acquired that overlies our essence and filters our impressions is personality. We are not trying to become essence, we are trying to develop true-personality, as opposed to overly-restrictive false-personality.

Our emotional center is another organ of perception, affording views from another house altogether. With the emotional center we perceive, of course, emotions, something invisible to other centers but obvious and of sole importance to the emotional center. We tend to think of our emotional function as that which has personal emotions, but we need to also recognize the extent to which it perceives emotions in others. It can even perceive, in fact, emotions both above and below those of the human.

Part of our lack of awareness of emotional perception is due to our lack of attention paid to it, and also our lack of education of it. Even as recently as a century ago, the importance of emotional education was recognized in Western society, but since then our lopsided intellectual development has all but curtailed this development completely. "We must become more emotional", Ouspensky would say, and to the uninitiated this sounds like he is suggesting we become more unreasonable, full of childish temper tantrums and the like. On the contrary, it means becoming more sensitive to emotions, refining the work of the human factory to produce a higher quantity and quality of energies that shift the working of our emotional function to new levels, levels capable of perceiving ever finer emotional impressions.

One of the chief ways we can educate our emotional center is with art. We feel art, we do not think it. Again, of course, in the last hundred years or so, "art" has often come to mean an intellectual construction in which case it has nothing to do, in fact, with art, which is an emotional medium. Music for the most part still holds its emotional content, though it is rarely targeted at the higher part of the emotional center and instead appeals to the mechanical part. But by becoming more aware of our emotions, we can begin to perceive art correctly, and we can begin to choose to expose our

emotional center to the more refined impressions of art that have been created by and for the intellectual part of the emotional center. It is a start to the eventual perception of objective art, created by and for the higher emotional center.

Another way we educate our emotional center is with people, in conversation and in general with social interaction. Again, we must be aware of our emotions, but in this case we must also be aware of the emotions of others. And, again, we can learn to perceive the different sources of emotion, whether the mechanical, emotional, or intellectual parts of the emotional center. If we are to refine emotions, become more properly emotional, we must concentrate our efforts on developing the intellectual part of the emotional center.

As with the instinctive, moving, and intellectual centers, we can determine the part of the emotional center that is active by the study of attention. The intellectual part of the emotional center is activated by deliberate attention, attention held by will. We make the effort to perceive emotion, and to sustain that perception, and so become sensitive to both finer and cruder energies in this way. Attention that is drawn in spite of ourselves by the art, conversation, or whatever, is activating the emotional part of the emotional center; and automatic, basically unattended emotion, such as in rote expressions of sympathy, or in most popular music, activates the mechanical part of the emotional center. Over time, through attention and consequent development of our emotional center, our tastes change: tastes in art, preferences in conversation, personal associations and so on. All this has to do with the development of emotional perception.

As an aside, our chief tool, by far, in developing our emotional capabilities, is the non-expression of negative emotions. This simple idea is generally poorly understood. For one thing, it has nothing to do with the suppression of negative emotions. The suppression of negative emotions is at best foolish and at worst dangerous. The non-expression of negative emotions has to do with finding reasons—good, convincing reasons—to not express them. For another thing, *we don't know when we are expressing negative emotions*. We think we do, but we don't. I see no real alternative to

working with at least men or women number four on this who can, with requisite patience and understanding, show us something about ourselves that we simply will not believe otherwise: the extent to which we express negative emotions. This can be by posture, by verbalization, by attitude, by activity, in short, in countless ways. It is not at all unusual for people to think that they "do not have a problem" with negative emotions, as if this were some aspect of the work they did not need to deal with. On the contrary, we all need to deal with it. And *it is not a disadvantage* to have to so deal. By learning about our negative emotions—and we only learn about them through the work that begins with their non-expression—we discover a great deal about the emotional center. It is as if our work on the non-expression of negative emotions introduces a "tracer" into our psychic life, much as a radioactive tracer in our bloodstream illuminates right and wrong working of our circulation. By learning about our emotions, by following them to their sources, we see the workings of much else besides.

Another organ of perception is our intellectual center. With the intellectual center we perceive ideas. Ideas are real things, just as rocks and people are real. That there are real things that are invisible to the senses should not surprise us, as the perceptions of all other centers are invisible to the instinctive center's senses. Einstein once said "The most incomprehensible thing about the world is that it is comprehensible." This refers to his astonishment that the ideas and formulas of physics found expression in the actual data of "the world". But if we recognize ideas as realities, this no longer seems so strange. This is perhaps most noticeable, or striking at any rate, in the mathematics associated with quantum mechanics, in which scientists examining the equations are able to determine what is possible or impossible, even if it defies all previous thought and common sense. In the phenomenon known as quantum tunneling, for example, it is possible to trap a sub-atomic particle behind a barrier from which it does not have sufficient energy to escape. Nevertheless, with a certain statistically-determinable frequency, it will in fact get outside of the barrier, *because the equation that describes the particle allows it*. The idea is more real than such common-sense notions as energy or matter.

Considerably less exotic ideas are equally real. And not only ideas associated with science such as order, chaos, identity, difference, magnitude, and so on, but ideas such as justice, goodness, and freedom are equally real. Regarding the latter, we can see a recognition of such realities in the ancient Greeks and indeed in other cultures widely separated in space and time. In Greece, a pure, true idea was *theos*, a god, and was personified as, for example *Dike*, the god of justice. The Greek gods were and are real, just not in the personified way that we have come to misunderstand them.

Much of the nonsense in our skulls has nothing to do with the perception of real ideas, of course. As with other functions, we have to educate the intellectual center to perceive clearly. It is a long and laborious process, illustrated by Plato as Socrates in his search for truth. We are as mistaken in thinking that we can automatically perceive real ideas without learning how to do so as we would be mistaken in thinking a newborn could catch a beachball. And again, the way to develop our perception in the intellectual center is just as it is in other centers, through work with attention so that we use the intellectual part of the intellectual center. Ideas that fascinate us and carry us along willy-nilly in a flow of excitement have to do with the emotional part of the intellectual center. One finds a great deal of this kind of "thinking" on the net for example, in which people blabber unreflectively about ideas, arriving at great depths of impractical and ineffective "ideas". These things are not real. (One also finds a great deal of wrong development of "magnetic center", magnetic center that has developed in the emotional part of the intellectual center instead of the intellectual part of the emotional center, but that lies outside the topic at hand.) Ideas that are simply the repetition of what we have heard or read are from the mechanical part of the intellectual center.

It is, perhaps, with an awareness that ideas are real that we first begin to get a glimpse of a new reality beyond the one in which we live. If goodness is as true now as it was then, it is eternal. What else is eternal? And do we have the ability to perceive things eternal, even to perceive eternity itself, whatever that may be? This discussion, which relates to the higher centers, we will leave for a

moment to discuss one more of our "lower" centers, the sex center, and its function as an organ of perception.

The sex center has astonishing powers of perception. Astonishing, in both its speed and its ability. It has much of the characteristics sometimes associated with "ESP", in that it can, for example, see behind us, making us turn our heads to link eyes with an attractive sexual affinity. (This is not to be confused with another apparent example of ESP, a function of the intellectual part of the instinctive center which is much slower. That function may also, for example, "see" behind us, but the subject of it's perception is associated with a real or possible threat, danger, or physical challenge.) The sex function also "calculates", for lack of a better word, an incredible amount of information about the suitability of another person as a sexual partner in not just a matter of moments but in less than a moment. In addition to using visual sensation as a source of the material that it perceives, the sex center perceives chemical signals through scent or a closely allied function, and perceives a still unknown energy transmitted by other sex centers. (It is not the subject of this essay to discuss the centers as transmitters, only as receivers, but they transmit as well, for example the emotional center transmits emotions that are perceived directly by other emotional centers, if they are awake enough.)

It is with the speed of the sex center and the same speed in the right working of the emotional center (this is the speed enabled by the sex and emotional center's distinct hydrogen 12s) that we can connect with the higher centers and their very different perceptivity. Higher centers are "calling to us", as G. said, but we must have "ears to hear".

The higher emotional center perceives *meaning*. It does not, however, perceive meaning directly, but perceives meaning as it is represented by things. These things may be physical objects such as stones or flowers or diagrams, or they may be less concrete objects such as ideas, sounds, occurrences. "All things are metaphors", Goethe famously said, and this is the perception of higher emotional

center. Higher emotional center is perceptive of the expressions of higher emotional center, just as the emotional center perceives the emotions of other emotional centers, and the intellectual center perceives the ideas of other intellectual centers. If we can think of the intellectual center trying to perceive a Botticelli masterpiece, or of the emotional center trying to perceive calculus, we get a glimmer of the difficulty of perceiving the expressions of higher emotional center with lower centers. What if a piece of art is objective art? How would we know? Oh, someone might tell us it is, but they may be mistaken. In any case, *for us* it is not objective art unless we can perceive it as such, and that is only possible with higher centers. Similarly, there are objective diagrams, objective poems, objective writings, objective dances, objective ideas. These are attempts by higher emotional center to communicate with us, even we here. As an example, there is an ancient teaching in which the emotions are compared to a horse that pulls the carriage (body) and is, however ineffectually, steered by the driver (intellect). The old idea of Pegasus, the winged horse, represents higher emotional center. Myths, fables, fairy tales, legends, whole theologies, histories, and so on, may be formed in the language of higher emotional center.

In its higher, more pure, perceptions, all things have meaning and there is no need for diagrams, art, and the like to vivify our higher emotional center. Such states can be read about in the literature of all times and places. The world itself then teaches the receptive soul.

Higher intellectual center perceives reality directly, it perceives unity. About this, the less said the better. The very terms higher emotional and higher intellectual are perhaps misleading, as both are beyond and inclusive of both emotional and intellectual perceptions. It is as if with our lower centers we perceive light refracted through a prism, each center perceiving a characteristic wavelength, but the higher centers increasingly perceive the pure light of the source from which the rest derive.

Clearly, if we are aware (*when* we are aware) of only a few of the instinctive center's five senses, we have a long way to go.

Note

It is almost always instructive to use the enneagram to help us gain insight into a topic if we know enough about the topic to apply it. The functions can be plotted as the six/seven points on the enneagram as shown here:

(The sex center, not shown, corresponds to the "seventh point" of the inner circulation.)

With this, it is possible to see the relationship between the particular point on the enneagram when discussing human psychological functions and other knowledge I've plotted on the enneagram in other essays. This is not easy to see. On the one hand, you must invoke your intuition to see the connections. On the other hand, it is always necessary to be cautious about seeing connections, because in a certain sense we must suspend (or at least demote) logic to use intuition, and caution is required because too often the suspension of logic causes us to see things that aren't there, to see them because we want them to be there, we think they should be there. So this is an exercise in psychological thought (see Three Types of Thought), in which we use intellect and emotion in fine cooperation, and must distinguish between a fast and intelligent emotional perception of correspondence, versus the relatively cruder relief or excitement of a desire achieved.

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