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The Physics of Metaphysics: Personal Musings

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It is suggested that feelings, emotions, reasoning, or remembering, when seen as manifestations of one continuous energy flow, are energy events that differentiate by the intensity and direction in which the energy moves. The flow, initiated by the energy exchange that sustains existence, in passing through a human being lends itself to manipulation, certain faculties regulating its release back into the surroundings. When undisturbed, the energy flow is guided by attraction, and taking the path of least resistance, falls into a system of energy movements that engages the different mental faculties in turn. Part I describes the system, tracing the progression of mental energy events from the simplest at the core to the complex in the enveloping layers of energy movements. Part II describes the changes the system undergoes when circumstances, survival needs, convention, and a sense of self exert an influence.

A hypothetical model of my mind at work evolved through decades of close personal observation. At age twelve, puzzled by swings in mood, I started taking notes on my inner states. In midlife, while wondering what the difference was between emotion and feeling or reason and intellect, I was struck by the notion that regardless of what I called an inner event, all were energy movements that interlinked somewhere. Next I was tracing sensations from their first stirring to where they waned, triggered another sensation, or spilled into a larger movement. For a firmer grip on how the movements interconnected, I made schematic drawings, which introduced a welcome distance between the observer and the observed. Throughout, imagination served as a magnifying device: a fleeting sensation blown out of proportion

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lent itself to observation. Since no one else could know how something felt to me, nor choose the words to describe what I observed, early on I resolved not to look up materials that might instruct — and influence — my interpretations. Driven at first by curiosity, and later by the simplicity in which the findings came together, two decades later I had traced a system of internal energy movements that activate my mind and influence my behavior. What follows is a summary of those basic energy movements.

Part I: The System

I have come to regard the body as matter amassed and activated, and the spirit as the active state of matter. I perceive this *primal union* as consisting of three interactants: an internal energy source that activates matter from within; an external energy field that envelops the body; and matter in which the internal and external energy influxes meet and interact. What I call my spirit is energy trapped in matter, the spirit the agent between the inner and outer energy sources. As a go-between, the spirit passes energy on to matter, and matter, activated from within and without — and transformed by the energy received — expels it back into the surroundings. Being responsive to matter, the spirit is ever in search of the point where the charge it carries meets the needs of matter. Unaffected by the transaction, the spirit only keeps the supply and demand of energy in balance, the spirit rendering the primal union self-balancing.

I envision the spirit as attracted to the internal energy source, and matter as drawn to things of matter outside the union, the two separate pulls keeping the primal union in constant flux (Figure 1). Whether the spirit moves inward or outward it always thrusts forward, moving faster when dipping inward, and slowing down when leaning outward (Figure 2). The closer it is to the internal energy source, the more energy the spirit draws from it, becoming "more of itself"; and the further away, the less charge the spirit carries, becoming "less of itself."

Whether I am excited or dispirited by something in the surroundings has little to do with the thing out there. It depends mostly on whether a sensory input has given the spirit a boost or set it back, determined by the direction in which the spirit was moving at the time of the impact (Figure 3). And when suddenly agitated, it may overshoot or fall short of the balancing point-in-search, thereby either delaying the supply of energy or overactivating matter, the spirit itself causing internal imbalances.

Leaving aside the processes inherent to matter, the five senses are the gates by which external energy sources reach me. Once activated, a sense organ simulates the pattern of vibrations or pulsations received, and for a fraction of an instant the state of the stimulant and my own are the same. Consequently,

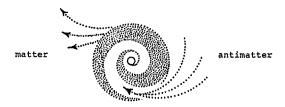


Figure 1: The primal union. Matter and antimatter in rotation around the energy source: matter pulling outward (attracted to other matter), and antimatter pulling inward (attracted to the innermost energy source).

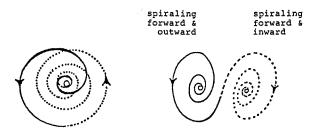


Figure 2: The spirit in motion.

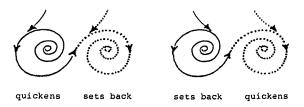


Figure 3: The effect of a sensory impact on the movements of the spirit.

through sensory assimilation I come to know the state of another being as if it were my own. Upon entering the brain these energy impulses converge before they disperse to their respective repositories, the stopover exhibiting properties akin to a prism: impulses enter it on one side, converge in the focal point, and disperse through another side, scattering as they rush to their visual, auditory, olfactory, gustatory, or tactile repositories. There the impulses imprint in registers akin to the color spectrum or scales of musical tones, and are coded accordingly.

In cognition, these minuscule events reverse themselves. When sensory impressions excite the triangular mass, the charge resonates the repositories as well, attraction recalling related imprints to the focal point. And as impulses, say, from a real apple and those recalled converge in the focal point and align, cognition occurs in the form of a holographic mental image, any discrepancies between the old and new impressions instantly apparent. On contact the duplicate impulses are neutralized, and only the new ones imprint, refining the registers with ever finer subdivisions.

Once imprinted, sensory impulses are dissociated from their source of origin and retain no indication as to what external object has generated which impulse. These coded imprints are the raw material from which image patterns (Figure 4) and feeling patterns (Figure 5) are formed. By image patterns I differentiate among all things in existence, and by feeling patterns I respond to them.

I take the excitable prismatic mass to be my intelligence, its function limited to relating the incoming sensory impulses to those already imprinted. Intelligence is unselective — my cumulative past (impulses already registered and coded) determines which of the incoming impressions will be neutral-

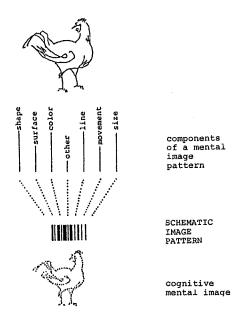


Figure 4: Image pattern. An image pattern is a record of energy output generated by an object or entity. It consists of many sensory imprints accumulated through repeated encounters, the coded energy imprints forming a pattern. Subsequent encounters update and detail the pattern.

ized, and which imprinted to become a working part of my future — past experiences steadily filtering the new.

The same channels are in use when impulses, say, from hunger or thirst, activate intelligence from within: a stimulus targets intelligence, intelligence recalls related sensory imprints, which then activate a corresponding sense organ. Activated from within, the sense organ assumes beforehand the energy state of the targeted thing, thereby fixating the organ to respond only to those energy impulses that relate to the fixation, excluding all others. As soon as the urge is satisfied, the fixation lifts, freeing the sense organ and intelligence to receive impulses. Such a fixation also occurs when intelligence is spellbound by external stimulants. When the stimulant is more intense than needed to trigger cognition, that extra energy grounds itself in the body, producing there sensations — a feeling.

Physical sensations echo the spirit's movements, awareness of them informing me how the quick of my being is responding to a sensory impact. A response is pleasant when the sensations are invigorating and uplifting, and unpleasant when they are repressive or jarring, the stimulant accordingly deemed attractive or repelling. I feel neutral only about such presences that

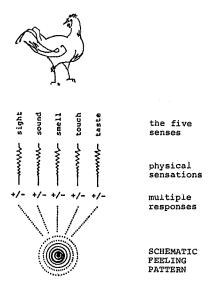


Figure 5: Feeling pattern. At the most, a feeling pattern encodes five separate impulses, one for each sense organ. Since sensations are similar in effect — either pleasing or jarring — through repetition the most stable responses intensify, forming the core of a feeling, and the weaker or wavering ones group themselves around it in rings of diminishing intensity. Patterning coheres a great variety of responses into one response manifest in subsequent encounters.

fail to move me one way or the other, and experience confusion when the same entity issues contradictory impulses, some pleasant and some unpleasant. Disjointed and confusing feelings may round out during subsequent encounters, coherent feelings serving as reliable touchstones that trigger a steadfast response.

The multiple impressions combine in a feeling pattern, arranging themselves by degrees of intensity. Since feelings are predominantly either positive or negative, the number of core feelings I hold is limited, as only the infinite variations therein create their complexity. And since impressions change whenever change is detected, even steadfast feelings fluctuate and can reverse themselves. In the wake of an ongoing event — a relationship, a trip, an undertaking — a chain of feelings surface, events forming extended feeling patterns that also group themselves by degrees of intensity — the strongest close to the core feeling, and the weaker ones branching out, the radial network of feelings standing in for a wide range of related events.

All sensory experiences come together in experience structures — the repositories of image and feeling patterns. Sharing similar impulses, the two patterns cohere — images reconnecting feelings with the external world, and feelings linking images to the innermost state of my being — the movements of the spirit.

Deeply ingrained experiences — childhood, family, schooling, gender, work — yield a lasting pictorial record laden with feelings, each group of experiences forming a separate structure. A structure starts forming as soon as an image anchored in a strong feeling begins to attract related impressions, images studding intersections of feeling patterns providing a visual clue as to what caused a feeling to take a positive or negative turn. In a developing structure the core feeling pattern extends concentrically, while the static key image pattern, charged repeatedly, pushes deeper, the lateral and downward thrusts giving the structure a conical shape. Clustered together — tips pointing inward, broad surfaces outward — experience structures also align by degrees of intensity, forming a mass unified within; the charge highest where the points converge, and weakest where the outermost feeling patterns of one structure mesh with those of a neighboring structure.

New impressions find their way into this three-dimensional labyrinth by attraction. Key images, responding to reverberations issuing from intelligence, flag down impulses to a specific structure, the impulse gravitating to where its intensity matches that of a feeling, where it locks in; imprinting in both image and feeling patterns, intensifying either their positive or negative aspects. Thus every infusion modifies a previous experience, causing, if ever so slightly, the whole structure to realign itself. And while feelings intensify or diffuse, images charged to saturation shed details, becoming a schematic cognitive sign — a pictorial reminder of a wide range of related things.

Unified by degrees of intensity, the mass of clustered experience structures may resonate throughout. Thus when one structure is activated, another may respond — a sympathetic coincidence shifting attention to experiences unrelated in space and time. Experience structures harbor no past, present, or future, only a convergence of energy events arranged by their intensity. These structures form the core of what I call the initial system of energy movements, and they generate sensory memory, daydreaming, dreaming, and imagination, all assisting the experience-organizing processes. The mental image is the link — the "silent language" by which events in the initial system relate, though another sense organ may substitute vision.

In remembering, the processes reverse themselves once again: a casual stimulus resonates a component of an image or feeling pattern, which then pulls up images and feelings relative to an event. As long as I retain an inkling as to what I want to remember, attraction will recall impressions — the underlying feeling guiding memory, extended feeling patterns restoring the sequence in which impressions were received, recalled images appearing upon the mental screen in vivid detail, and with the immediacy of the initial impact. I may stop the recall at any point for closer examination, and if I do not break the continuity of the feeling, pick up the track again. Sidetracking occurs when patterns sharing similar imprints resonate together, causing memories to arc from structure to structure, recollections interlinking also laterally, through association. And so a color is remembered as loud, a sound as sweet, and a sunset as touching.

Daydreaming, dreaming, and imagining are residual events. After a bombardment of sensory impulses, daydreaming takes care of those impressions that failed to imprint in the rush. The backlog calls for sorting out, and as clusters of impressions drift across the mental screen, association does the job — breaks up the clutter into its energy components, which then are either neutralized or gravitate toward their respective repositories, imprinting in feeling and image patterns as well. Daydreams "houseclean" perception, and if after a swarm of impressions I neglect to daydream, a nebulous fixation muddles intelligence, dulls the senses, and so renders me unresponsive and absentminded. Daydreaming and memory oscillate — memory bringing up unsorted impressions to daydream about, and daydreams detailing memories.

During sleep intelligence is free of sensory activities, and the experience-organizing processes come into full swing. In dreams my cumulative past meets the present, and as feelings translate into corresponding visual terms, dream images enact the integration. Yet it is not the image but the underlying feeling which yields insight, the image only standing in for a feeling recharged at this particular juncture in my life. Originating in a realm other than the actual world, dream images are apparitions, and although their pic-

torial accounts presented in silent ritual acts may puzzle the waking mind, dreams bring to attention my innermost state, leaving behind implicit directives as to what to daydream about or elaborate upon with imagination.

In memory, the self is but one other thing remembered, and in dreams I am a captive observer or participant. Imagination places me at center stage endowed with exquisite powers. When imagining, I arrange situations, select the participants, manipulate circumstances and the course of events, and choose the outcome — I direct, stage, invent and detail events, and in the process discover a self of many faces, capable of unspeakable acts and heroic deeds. By observing myself in actions enlarged and embroidered by imagination, I face my hidden fears, live out my inclinations, and locate my weaknesses and my strengths — imagination sorting out and realigning feelings, preparing me for the future.

The events described so far make up the initial system of energy movements. In it the energy takes the path of least resistance, and mental events are involuntary, responses reflexive. This initial system, however, is enveloped by another, by the extended system of energy movements, which traps the energy flow before it escapes back into the environment. The issuing hubbub and noise of mental chatter smothers sensations and feelings, creating a barrier between the two systems. And once the extended system is in force, the larger part of mental and physical activities is willed.

The extended system consists of three interactants: emotion, reason, and intellect. I envision emotions as extensions of the initial system. When an overly stimulated feeling rouses energy in preparation for action, the self-balancing forces within the initial system expel that extra energy — the energy being emoted activating matter and spending itself in muscular contractions which express the feeling. Reason is cerebral, housed outside the routes of physical sensations that inform me of sensory activities. Having no way of knowing what takes place in the surroundings here and now, reason receives information through hindsight — sensory memory holding a mirror to reason. Reason gains access to sensory memory through words, word sounds activating the encoded sensory imprints in image and feeling patterns. The intellect can be described only as the silent force of attraction. It associates: in the initial system it arcs from impulse to impulse and from pattern to pattern, and when associating images, it imagines and intuits. Intensified by imagination — the force is cumulative — the intellect leaps into the extended system, hence associating the separate activities of the two systems, cohering them into one functional whole.

Together, emotion, reason, and the intellect form a triad which relies on energy issuing from the initial system: emotions are extensions of the self-balancing processes, reason taps the energy being emoted, and the intellect comes into power only after thought networks begin to form. The separate

activities of emotion, reason, and intellect relate to each other like the sides of a triangle — each faculty responds to, is regulated by, and in turn regulates the inclinations of the other two. Each has a thrust and pull which translates into will: emotions deriving will from the self-balancing forces; reason from the logic of cause and effect deduced from its perception of order; and the intellect from the force of attraction. When one faculty exercises its will, it falls under a double influence in return, and when two faculties are engaged, the third idles, its influence felt remotely. Each faculty exerts its will on its own behalf only, and since all three receive energy from the initial system, they tend to compete for access to it, the will in command shifting from faculty to faculty. Their interdependence renders the extended system self-regulating, much as the initial system is self-balancing and self-organizing.

An emotion surfaces in response to an external stimulant, the initial system raising that extra energy necessary to trigger a reflexive action. While feelings sink in and dissipate, emotions rise from within in a single wave — the energy emoted spilling into some part of the body and producing there sensations that trigger a sequence of biological events which release the excess energy into a physical expression or emotional act. Sensations of joy, fear, love, anger, grief, or courage expel the energy in different actions, thus whether I flee, fight, frown, smile, kick, or embrace that which is encountered, reflects the underlying feeling — emotions exposing the most intimate, most vulnerable part of my being.

Since emotions are an extension of the self-balancing principles, when their expression is held back, the energy does not dissipate but remains trapped in the trunk. Having lost its momentum, the unspent energy collects in pools; there emotions intermix and oscillate, creating residual or derivative emotions that keep pressing for their release, creating physical and mental discomfort. Say, when love admixes with held back fear, the derivative emotion is either jealousy or envy, depending on which of the two emotions is more dominant. Anger mixed with fear turns into contempt or hatred, and with courage into revenge, while courage infused with joy incites pride; and so on, the combinations endless. Derivative emotions are energy on the loose, and they may account for a great number of specifically human traits which give our responses and actions that special twist. And while basic emotions are simple events — they rise as they must, spill along the path of least resistance, and spend themselves in muscular contractions emotions that lack the impetus to trigger action, linger on. Seizing the moment, reason takes advantage of the reserve, taps the energy, and then uses emotional channels to animate intentional actions.

Reason does it with words. By giving names to things and events, reason reconstructs the external world one word at a time; and by arranging words in an order that makes sense to it, reason creates a world separate from the

one that is perceived through the senses. Reason also sustains itself in an active state by word soundings, mental chatter activating sensory imprints. It develops the necessary skills through trial and error, gradually acquiring the disciplines by which it delays emotional releases; teases emotions into being; releases the energy in measured doses, and so animates thought and action.

Words also form patterns (Figure 6), which interlink experience structures with thought networks, the two systems stitched together word by word. Thus thoughts that stem from actual experience root in the initial system and branch out in the extended system, verbalizations activating sensory memory, feelings, emotions and imagination, and making them accessible to rational scrutiny.

Reason's ability to delay emotional gratification creates emotional needs — a restlessness that translates into wishing, wanting, and desire — used to motivate rational actions. By tapping the energy and releasing it through emotional channels, reason implements rationally conceived intentional deeds. Since the energy that animates emotion and reason is one and the same, the flow divided oscillates, inciting hesitation and internal bargainings — I want/I do not, I should/ I should not — which may escalate to a tug-of-war between the two faculties: rational exertion aiming to control an emotional urge, an intense emotion challenging reason. When reason's vigor matches the force of emotion, the two enter a symbiotic relationship, now embracing in order to fight, and fighting in order to embrace. In the grip an emotion may rise to the pitch of passion — to a fixating obsession that numbs the senses and clouds perception. And if reason denies emotional gratification for too long, the whole system may heave and rid itself of the fixation by fulfilling the emotional need reason has fed.

To reason, nothing is self-evident unless it can be weighed, measured, compared, divided, or added up, and when the procedure is verified by others, rational claims are accepted as truths. Reasoning aligns the chaotic and random sensory impressions, engages emotions to motivate action and justify intentional deeds, and by reconstructing sensory experiences into rational events, reason hushes feelings as well. Deducing from its handiwork a conception of order based on cause and effect, reason conducts its affairs accordingly.

Thoughts that spin on the heels of sensory impressions — verbalizations trailing, meandering, breaking off when the senses disengage — are unintentional. Steeped in actuality, these thoughts are the raw material from which thought networks evolve. Thoughts are intentional when reason directs the senses to collect, investigate, compare or compute the data pertaining to a specific thing or event — intentional thoughts interlinking the fragmented meanderings, laying the ground for thoughts which bring separate lines of reasonings to a logical resolution. With resolute thinking reason comes into power: relying on words alone — no longer on hindsight — reason begins to

ROOSTER

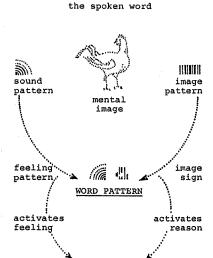


Figure 6: Word pattern and word meaning. A word pattern is coupled: the sound part plugs into a feeling pattern, and the meaning part into an image sign — a skeletal cognitive pattern that links the word to an object.

function independently of sensory memory. Close observation and astute reasoning yield foresight, and having foreknowledge, reason can forecast events, plan ahead, and prepare for eventualities. And so reason comes to conduct my life.

But reality often clashes with what is assumed, change constantly undermining what reason has so laboriously put together. And when changes threaten a fundamental line of reasoning, instead of undoing its work, reason is quick to usher disturbing thoughts to a sector in thought networks reserved for such discrepancies. This provision enables reason to discredit all discomforting impressions, experiences, and information by simply declaring them ungrounded or invalid, or belonging to fancy or illusion.

Enter the intellect — the force of attraction felt like a flash in the brain, often strong enough to shatter the most rigid lines of reasoning. In thought networks association makes illogical jumps, forcing reason to weigh the unweighable, measure the unmeasurable, divide the indivisible. These thought-provoking sweeps lay the ground for rationalized abstract ideas and ideals, such as truth, liberty, or beauty, whereby clusters of everyday experiences, brought together by similarities in feeling, escalate to abstract perfection.

Intellection is a closed circular event, a strictly mental affair, intellectual excesses generating an unrest that has no natural outlet. The silent deepseated charge relies on reason to provide a means of release — ground the charge in an intermediary material that lends itself to manipulation, be it clay, paint, word, sound, or people. Since the energy that shapes a medium is released via emotional channels, at this point intellect and emotion cross paths and may switch tracks — the act fulfilling an emotional instead of intellectual need. When denied expression, the trapped potential embarks on a venture all its own: substituting images for words, the intellect then "thinks" in metaphors, the high-voltage visions inducing a dreamlike state — fixating intelligence, disengaging the senses, and in bypassing words, rendering reason impotent. But when reason acknowledges an intellectual need, and guided by innate sensibilities reaches for a medium, and assists in mastering a craft, then impassioned feelings guide the hand, the eye, the ear, rendering the invisible visible, the inaudible audible. Having no script or rules to follow, the intellect then simply relates what is given, and so creative endeavors come into being.

Like the initial system, the extended system also generates residual activities, namely, verbal memory, reflection, retrospection, and contemplation. Unlike sensory memory, which is activated by sensory impulses, verbal memory is activated by silent or voiced requests. The word/sound recalls to the focal point of intelligence clues of a fragmented image, similar to those found in children's coloring books or paint-by-number pictures — each clue a component of a larger totality prompting the recall of a specific word; every component a separate memory event, the number of components denoting the complexity of the request. Association directs verbal memory, and although I may rummage in the right experience structure, I may not find the word or data requested, because there is either no sensory imprint to back up a learned word, or no word for what I sense to be there. These blanks, discovered only in recall, do not just fade away but gape in readiness to be filled in, and weeks later, while leafing through a magazine, out jumps the missing detail or the word I was looking for.

Reflection, retrospection, and contemplation are memory events in which the intellect has the upper hand. In reflection it relates recent thoughts to feelings; in retrospection the intellect surveys the connection of thought to experience; and in contemplation it rummages through feelings that underlie an abstract thought. In every one of these states the intellect checks, verifies, and realigns the channels that cohere the two systems.

In these processes reason and intellect enter a symbiotic relationship, and both engage imagination. Reason calls for imagination to embellish a point in question — to make the red bloodier, the white more innocent, the forest darker — in order to strengthen the emotional charge and so intensify a wish, or diffuse a desire. Used as a handmaiden, imagination performs reluc-

tantly, and must be disciplined to take directives. But when riding an intellectual charge, imagination is like a maiden wooed — in the blush of attention it emblazons images with select details, eager to please and tease the intellect into ever greater expectations.

Unless the intellect is subdued by rational considerations, the speed by which it functions quickly pushes reason out of the way. During intellectual activities reason — a pedestrian caught in high traffic — may attempt to plod along and make sense of what the intellect stirs up in a sweep. Or it may brush aside the sudden mergers and resolutions as amusing possibilities. Or reason may use these thought highways as shortcuts, forgoing rational proof. The shortcuts pave the way for attitudes which, deduced by generations through experience, are the saving grace of reason — attitudes supply readymade explanations as to why certain actions, thoughts, or modes of behavior are more plausible than others. Whether ingrained, borrowed, or self-deduced, attitudes channel responses along premeasured allowances and denials, at once curbing and directing emotional and intellectual releases, saving reason that much thinking. Attitudinal restrictions bypass feelings, and by eliminating hesitation and mental friction, attitudes mimic the path of least resistance.

From the standpoint of reason, emotions, feelings, imagination, and the intellect are forces on the loose - unpredictable, unreliable, unselective, and susceptible to suggestion and manipulation. Thus as soon as reason begins to assert its will effectively, it treats emotional and intellectual urges as raw potential in need of regulation. And when reason takes on the responsibility, it encounters resistance, but no other indication that these energies are not for the use of reason alone. Enamored by the idea that human nature is not perfect and in need of guidance and supervision, reason often succeeds in turning me into a vehicle for rational objectives. Since thoughts reflect in deeds, action is the ultimate test and measure of reason's prowess. And since action does not come naturally to reason — it must seek emotional motivation, set a goal, follow a course of cause and effect, overcome obstacles, and make choices at every turn — reason is constantly tested by what it sets out to do and what it actually accomplishes. Reason faces its own shortcomings most severely when its efforts to make things better only make them worse. The resulting internal dialogues and bargainings — reason versus feeling, emotion, intuition/intellection - may rattle reason to such an extent that the triad, locked in labyrinthine thought, may exhaust the whole system to collapse.

In their early stages the internal dialogues triggered by anxiety, guilt, suffering, hope, or despair lead to vigorous self-examination. Complications arise when these self-initiated investigations are no longer instructive but turn obsessive, a natural inclination, exaggerated by imagination, taking over

and determining the outcome. In states of anxiety, imagination elaborates the positive and negative implications, and depending in which line of reasoning I am stranded in, the state may escalate to a paralyzing fixation. Guilt badgers imagination into scrutinizing events that took an unfortunate turn unnoticed, and then self-flagellation is the norm. In suffering, imagination exaggerates the cause of affliction, rousing either a dormant rebel or martyr. In hope, imagination embroiders the future to sustain emotional stamina; or, when hoping against hope, induces a stoic passivity. And in despair, the very absence of imagination may bring about a devastating standstill.

In all cases reason's indecision and confusion renders thought self-destructive. And as long as reason insists that it alone knows what's best, the malaise continues. But if by its own strength reason grasps that the forces directed against it are the same that sustain it, and that thought is counterproductive — and only action, for better or worse, will break the paralysis — then whatever is humanly possible is within reason's reach.

With this realization the triad jumps into shape — the initial and etended systems realign and fall into synchrony, and functioning as one, bring the resolved system of energy movements into being (Figure 7). Now the faculties engage in turn, as the occasion demands, and the path of least resistance, echoed by supportive attitudes, leads to an abundance of stamina steeped in spiritual imperatives — the force of attraction unerringly selective, its power cumulative.

In a spiritually grounded system, feelings ring clear, emotions surface as they must and spend themselves in action, and residual emotions hardly have a chance to form. Reason, relieved of chasing after emotions, and no longer having to fuss over controls, is free to apply its unique skills when they are called for. Alert to every impulse or inclination, reason now assists the energy in passing through the system by removing obstacles, be they mental or circumstantial. Imagination is quick to explore the parameters of possibilities, and the intellect, having secured the linkage between thought and feeling, guards the integrity of the whole. With the intellect presiding and reason in attendance, every dream has a chance.¹

¹I do not envision the faculties as fixed in a locus within the brain, though in some cases this might be the case. A faculty may consist of a circuit inside the brain — a certain configuration or loop in the flow locking in the energy for a while. Or, a faculty might reflect a field of energy of a specific intensity, the level of intensity determining which of the faculties gets activated. Or, specific energy movements may trigger chemical releases which might agitate certain centers and shut off others. It is also possible that faculties in the initial and extended systems function along various frequencies, which may occasionally fall into synchrony, forming a unified whole — the resolved system.

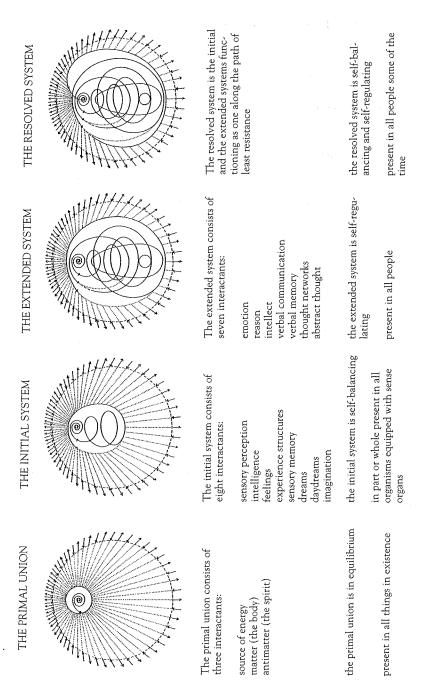


Figure 7: The path of least resistance and the four systems of energy movements.

Part II: The System in Relation to the World

Described in Part I were the system's internal fluctuations, some faculties assisting, some hindering the energy's release back into the surroundings. In any case, the energy released by the system initiates interactions with other entities, which in turn affect the system's state and condition its responsiveness on several levels.

To start with, the system retains a sense of equilibrium that reflects the environment in which it exists, the adjustment to circumstances at once stabilizing and predisposing the system to changes that take place in its immediate surroundings. I detect three states of equilibrium: when I perceive circumstances as unchanging and fulfilling my basic needs, I settle into a state of stable equilibrium. Imbedded in the environment like a pebble in sand, I respond only to those changes that threaten to dislodge me. When circumstances fulfill only some of my needs, I am poised for change, and like a pebble balanced precariously, settle into temporary equilibrium. And when circumstances are perceived as constantly changing, I am like a pebble inside a moving vessel, every touch-point engaging all my faculties, change keeping me in a state of constant equilibrium, even when circumstances stop changing.

One can spend a lifetime in one of the three states; or shift one's perception of place, of need; or change circumstances to fulfill the changing needs. But as soon as attention focuses on one particular thing, the system consolidates, and unified within, is poised to interact (not flee, not fight). At that point I strike a disposition: employ a (rational) tactic. Unlike attitudes, which organize thoughts and standardize behavior adaptable to many similar situations, a disposition organizes internal resources for a specific task, for whatever it is that warrants an approach with a purpose in mind — be it a stone, a plant, an animal, a person, an institution, or the powers that be.

I detect five dispositions: emotional, rational, assertive, resigned, and resolute, acquired in no particular order. One or two tactics are picked up through observation, the other options deduced from experience. All are double-edged. As my approach affects the other party's state of being, so the other's response challenges me: the tactic employed, the intent, my composure and my self-esteem. Thus every time I interact with a purpose in mind, I put myself on the line. Only those interactions that harbor no intent other than to share experience or information, do not challenge the self in the act.

The following descriptions of the tactics employed by each disposition underscore the effect a disposition, carried to its natural resolution, has on the individual who takes the initiative.

The emotional disposition uses attraction or repulsion as a means to attain a projected goal. For the pursuer, the external challenge is to engage the other party emotionally, and the self-imposed internal challenge is to let go

of restraints, and let the expression or action (reflecting attraction or repulsion) convey the intent. If the approach evokes a favorable response, the interaction may fulfill the projected goal. But if the response is negative, the pursuer's actions will show aggravation, the emoted energy spending itself in expressions that hasten to terminate the interaction. The rational disposition engages reason alone. The external challenge is to engage the other party with a rational objective that justifies the approach, and the internal challenge is to suppress the natural inclination, to hide all traces of emotion. If the response is favorable, the goal may be attained. But if the approach is rejected, discouragement frustrates the interaction. The assertive disposition aims to engage the other by any means. The external challenge is to project conviction, and the internal challenge is to reinforce a rational approach with an emotional charge. Even when the goal is attained, the pursuer may fail internally, in becoming either overly rational or overly emotional. And if the response is negative, internal balance is even more difficult to maintain, loss of it doubling one's sense of failure. The resigned disposition aims to prolong an ongoing interaction. The external challenge is to keep the other's interest alive, and the inner challenge is to restrain from showing either emotion or reason. The suppression of one's will invites the other to take the initiative, and if the one so empowered finds the interaction useful, a favorable response can be expected. But if the other sees no benefit in it, indifference terminates the interaction. The resolute disposition aims to overcome indifference. The external challenge is to pressure the other by dismissing the uncalled for responses and pouncing on the "soft spots," and the internal challenge is to distinguish the yielding from the resisting tendencies detected in a vague response. In this mind-set, responses that show no open resistance are disregarded, but when resistance is persistent, a resolute pursuer terminates the interaction either by accusing the other of failing to deliver the expected, or by blaming the self for grossly misreading the responses received (see Figure 8).

All dispositions project a thrust that is intrusive and disturbing to the other party. Since the use of a disposition benefits the pursuer alone, the odds are stacked from the start, unless both parties are aware of the intent that motivates the interaction. Imposing one's own will on others for personal gain or satisfaction falls short of evil deeds because the approach does not victimize the other outright but proceeds in stages, allowing for orientation — letting the other party yield, resist, retaliate, or withdraw from the interaction at will. And since dispositions may change in mid-course, both parties have ample room to flex their reactions.

Evil deeds, however, are not that different. A distressed individual needs only to envision the self in action to feel an upsurge of energy. Invigorated, reason may playfully weigh the odds, and as the intellect intuits — associates

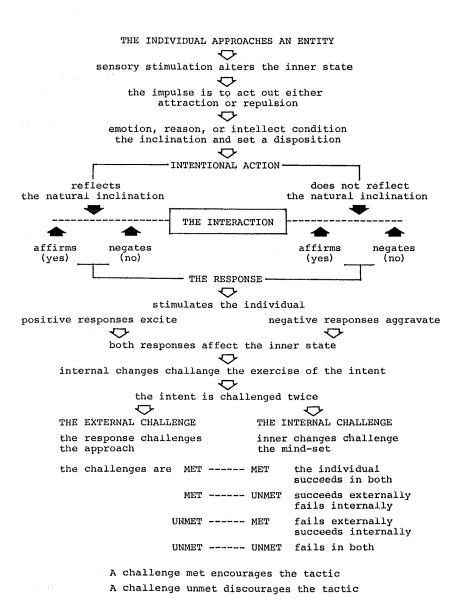


Figure 8: Internal changes during an interaction.

images instead of thoughts — imagination elaborates every step to be taken, and a plan of action spiced with risk and danger may evolve. At this point the resolute disposition, already selective and partially fixated, needs to be taken only one step further: if one fixates on one's own need alone, ignoring the responses of the victim at whose expense one seeks sensory, emotional, intellectual, or material gratification, the fixation dehumanizes the victim, turning him or her into an object devoid of will. With moral urgings and sensibilities suspended — if only for the decisive moment — the individual can carry out his or her intentions without hesitation. And if gratification is attained, the act attests to the criminal's ingenuity and cunning, self-confidence and esteem boosted in like measure.

Whether the fixation that alters perception is self-incurred or inflicted, evil deeds offer a uniquely enticing challenge to reason. When the self-preserving itch is more insistent than some moral imperative, with emotional motivation titillated to bursting yet held under control, and the intellect pitched to intuit instead of meddle with thought, reason carves out an arena entirely its own. Since action is the measure of reason's prowess, when action fulfills a pressing need or compensates for ravages suffered (actual or imagined), evil deeds bestow a sense of unchallenged omnipotence as the ultimate reward.

Under similar duress a morally responsive individual seeks engagement in endeavors removed from the oppressive situation. But when in dire straits one has no safe outlets, one tends to turn inward, withdraw from social interactions. And once again a rationally induced mode of conduct is apt to generate a series of inner states that are potentially self-destructive. Described in terms of experience, the many phases of alienation are due to the increasing intensity of pent up energy.

At first, in the comforts of isolation one enjoys a repose from external pressures. Occasional urges to cross the divide are taken as a weakening of will, to be ignored. Before long, one feels and acts like a stranger among people who enjoy each other's company. Having lost its social simplicity, the "me" perceived as separate from "them" now speaks in two voices: the one behind the barricades insists that false facades are self-defeating, while the one who deals with the world insists that appearances secure the daily bread. At this point a bargain might be struck. But if internal arguments exhaust one's motivation to act, performing like an automaton one soon forgets how to feel. Sensing a handicap, one begins to see the self either as a victim of oppressive powers, or as a failure deserving humiliation. Both views excite imagination, and if indulged in, both are fixating. At this point action (constructive or destructive) may break the circle and lift the fixation. But if the pent up energy is held back, the intellect moves into high gear, and as visions invade intelligence, fixating images silence the mental chatter. The absence of words shuts off reason, and emptied of meaning, the simplest task becomes

insurmountable, each hand movement calling for a separate memory. And once a pervading curiosity invades the mind — in expectation that something profound is to happen and shatter the silence — at the still-point there is no telling whether the rush of sensations one longs for is to rouse the will to live or the will to die. It no longer matters — both lead to action, to that one single act that is to end non-being.

Where then is the experience of freedom? In bursts of energy — in the sudden emotional upsweep, the exuberant gesture, a thought taking a leap. Since I learned of freedom in the denial of it, and in its loss first tasted its sweetness, I have come to regard freedom as a social construct: human strivings mirroring the shortcomings of a group or a society. Presently individuals are set apart by how much each has invested into his or her personal development, and from this perspective freedom is not a bundle of human rights granted by a society, but a structure that subdivides society into strata of different activities. I envision this hypothetical structure as having four levels of freedom stacked one on top of the other: physical, emotional, intellectual, and spiritual freedoms, every plateau accessible to all who aspire to make the transition.

I am free to move about, and this freedom, inherent to my physical makeup, enables me to provide for myself. Nevertheless, I have to master the skills reflective of the environment I live in, and as long as I am fit, my chances of survival are similar to those of all able individuals. On this level of existence the laws of the jungle prevail. On another level, I am a member of a society, and if I expect to share the benefits it proffers, I must pay my dues and observe the laws and modes of conduct by which this society governs itself. Disregard for established norms invites scorn, reprimand, or punishment, thus lack of emotional control on my part endangers my own well being. Yet regardless of how responsible or well versed in social skills I might be, society expects me to suppress my singular sensitivities in public. Feeling constrained and denied expression, I try to exercise freedom of speech, only to learn that to be effective, I have to master the skills necessary to formulate and communicate the observations, convictions, or ideas I harbor — to attain a measure of intellectual freedom calls for considerable effort on my part. Still, I am burdened by civic, ethical, aesthetic, religious, and ideological doctrines that set priorities and confer value on my accomplishments. Striving for freedom unencumbered by imposed standards. I ditch society and turn to self to explore the dimensions and limitations of spiritual freedom. But in order to unfold and develop the potential sensed within, I need a medium expressive of my sensibilities. Suppose I find such a medium, master the craft, and savor occasional gushes of unrestrained expression. And still, if I want to express myself without censure or interference, I must support myself independently of the good will of other people and avoid stepping on anyone's toes. Only then can I be a law unto myself.

The four levels of freedom are interdependent, the stability of one affecting the stability of all. Although spiritual freedom is the least dependent on social interactions, my expressive potential is cowed not only by circumstances but also by my own internal bargainings — the constant weighing of the demands imposed by my aspirations, against the demands or comforts of survival. Since only freedom of movement is granted at birth — the other levels attained through personal effort — each freedom gained must be sustained by actions that reflect it, or the claim (voiced or silent) is merely a pretense and not a freedom mastered. And since each stratum of freedom has a distinct objective that calls for specific skills, a freedom is secured by attitudes that keep my reasonings and activities focused. These separate attitudinal frameworks do not intermix, attitudes rendering each level of freedom a world unto itself (see Table 1).

Once a balance is struck between circumstance and aspiration, the world is rife with possibilities. Now the world and I are two separate entities, both moving in the same direction on parallel tracks, only at varying speeds. To stay "in the running" demands that I switch gears often — slow down when things around me move slowly, and rev up when they move fast — adjust my inner pace to the changing momentum of the external events I relate to and on which I focus. When the two run parallel, I am in harmony with the world, and when out of synchrony, I sense friction.

Each falling in or out of synchrony is marked by an interim duration: external durations punctuated by lapses between changes observed in position, appearance, or substance of things or events; internal durations marked by lapses between inner friction and the absence of it. In either case duration is the experience of time. What is called time is a duration cut loose from an observable beginning and ending: the interim lifted out of context an abstraction suspended in the mind — time a construct of the human mind without a correlate in the actual world.

Our standard time measures — the abstraction made tangible by clocks and calendar pages — add up not to the passage of time but to the revolutions of only three planetary bodies in orbit. Time measures dismiss the rest of the world which pulses with a myriad of durations taking place immediately everywhere at once. Beside time measures, I experience time in seven different ways, in each the world and I seen as if through a different lens:

(1) There is a time when the past and the future part and the present expands, stops fleeting. It happens when forgetting my human guise I become other than myself — say, a pigeon strutting, straining to rise; or a drop of water, me swelling as the drop swells, rolling over as it does, and while hanging upside down, learning what every drop of water knows already. By becoming other, I take measure of the self: in the absolute now the world is a mirror held up to me, and I am a mirror to all. Only "before"

Table 1 Attitudes that Separate the Four Freedoms

SELECTED CONCERNS	PHYSICAL FREEDOM	EMOTIONAL FREEDOM	INTELLECTUAL FREEDOM	SPIRITUAL FREEDOM
the objective is	physical security and comfort	emotional security and comfort	independent thought	self-knowledge
one is driven by	survival needs	emotional needs	the ideals upheld	a potential seeking expression
seeks liberation from	deprivation	oppression	convention	ideals
thoughts focus on	improvement of conditions	social interactions	the human condition	forms of expression
the means are	survival related skills	emotional control and social skills	rational and intellectual skills	mastery of a medium
energy is spent on	securing necessities	adjusting to social demands	formulating observations	unfolding innate capabilities
the outcome depends on -	adaptation to exist- ing circumstances	social flexibility	accuracy of observation	directness of expression
achievement amounts to -	accumulation of goods	fulfillment of social aspirations	contribution to knowledge	convergence of realities
misuse results in	obsession with goods	obsession with power	self-righteousness	self-promotion
pursuit endangered by	physical debilitation	alienation and loss of social identity	loss of ideals and purpose in living	loss of touch with actuality

and "after" mark the transition. Only a myriad of appearances disguise the sameness in one and all. Changes take place close to skin, like hot or cold, or rain; (2) Time flows like a river when the world shatters into myriad separate things, all carried by time from the past into the future in a linear progression of changes. In this time frame, time and change conspire, rendering every one thing separately mutable. If I stand still, oppressive changes pile up around me. If I resist the onslaught, the fight is upstream all the way, the effort futile. And if I drift along, the undertows pull me under. In linear time, only dreams and memories are reliable; (3) And there is a time when time seems less imposing, the changes less intrusive. Staying outside the flow of natural events, from the safety of my niche I take action — take time to rearrange things, and introduce agreeable, controllable, and predictable events, propagating changes that improve my lot — the availability of time giving me a grip on change itself. In this mind-set days are a string of right and wrong actions, every intentional deed a black or red entry in the balance sheet of gains and losses. The future itself is but one other event-in-themaking, the present only a means of getting there; (4) Ever so often the futility of human arrangements shocks me into a standstill. In this state nothing makes sense anymore: what's the rush, where to? What's the fuss and bustle all about? In the end, what difference does it make how I amuse myself in the meantime? Yet to sit back and do nothing is not that easy either — memories of an active self disturb the present, while the present undermines the future. And while the world moves on as usual, trapped in an immensity of time, I stagnate. The slightest prospect of change now strikes me like the promise of a spectacular escape — change the expected deliverance from annihilation; (5) I am in personal time when I sense a clock ticking inside me. It strikes the hour when change recommends itself. And with a sense of self in motion. I gravitate from change to change as from magnet to magnet, confluences of inner and outer events delivering endings into beginnings. When nothing tugs or pulls, I wait and listen. And upon completing a set number of revolutions, the inner clock strikes again — directing my attention, urging me to move on. On this path of least resistance, change is the vehicle while time marks durations of distances, change in time delivering me where I belong: (6) I am in circular time when days string together like beads on a loop of time. On some days I slip back to where I was many times before, going through the same motions, sifting through the same thoughts. On other days I slide forward, getting ahead of myself, yet I am not going any place in particular. Routine is where the self and the world intersect. Change is the keeper of patterns I am learning to read: in circles small and immense, everything is becoming something else — either more or less of itself, or part of some other thing. Nothing is ever gained or lost or wasted, not even my insignificant life; (7) Once in a while timelessness alights with energy spilling forth

like a fountain turned on full. Seized by the gush — surrendering to the moment at hand — in this fissure of time I am an instrument to energy rushing through me, not acting upon me. Yet whatever I touch is changed — in the absence of time I am the agent of change. And in the changes I make I receive gifts unasked for, brought forth by the sap that splits the seed, the bud, the bloom, or keeps the planets in orbit.

In each time frame — in absolute now, in linear, useable, stagnant, personal, circular time, and timelessness — the same familiar world is seen from a different perspective, each frame offering a different grip on the world, engaging different sensibilities and corresponding faculties. Whether I relate to things near or far, sets the pace of my inner and outer activities — the near clamoring for immediate attention, the far relaxing the urgency. Facing a world in constant change, I switch frames as circumstances demand. But when I fail to notice change (inner or outer) and cling to a prevailing time frame and mind-set, habit takes over. And then I am tackling events with unfit rigging — unsuitable sensors, unmatched faculties frustrating my efforts.

Deeply ingrained outlook and thought patterns need not plague individuals alone. Entire nations, if not continents, may live under the spell of one dominant time frame — emerging civilizations squander energy on progress in useable time, spent civilizations unwind in circular time, and those caught in the crossroads of change face the pitfalls of linear time.

Yet one always has a dream. Once a notion takes root that one can live a different life, the change must first be imagined before action can follow. Imagination consolidates an image of self, shaping the image to fit the vision, imagination projecting the self into a future role. That forward-pointing self-image stands in between the inner and outer realities as an interface, fixating attention on things that might fulfill the dream. Due to fixation the world "conforms" to that vision, the image setting priorities, accentuating my shortcomings, negotiating possibilities, and channeling intimate reasonings into intentional actions — the self-image compelling me to think and act and conduct my life in accord with that phantom self. And while some phantoms grow weary, some shatter, and others grow outsized, even demand that the world conform to the dream, some harden into useful social masks.

At any time several self-images coexist side by side, one for each major experience: one reflects circumstances; another family or social status; others gender, occupation, or a similar focus. The assembly of self-images may act in chorus or clash in outlook or mind-set, the images apt to challenge one another for predominance, though all change face eventually. Without self-images to generate hope and set priorities to conduct, life is devoid of a future and action meaningless — although this too can be an interfacing self-image. The bargains I strike with my selves constantly reshape my dreams, not always for the worse.

Throughout, attraction is in force — attraction that self-balancing, self-regulating, self-organizing, non-sequential, non-linear force present everywhere at once, much like gravity — gravity but one other form of attraction. Every instant in the grip of attraction, I have no free will, as even my most ardently reasoned choices are made either in support, or in denial, of an impulse. Throughout, the striving remains the same: energy pulling and pushing toward the path of least resistance in whichever direction — benevolent, malevolent, or self-destructive — energy in its indifference seeking to maximize itself. As micro and macro fields of attraction interact — bending, yielding, the larger swallowing the lesser — they create the tensions I experience within. Awareness is the sensing of energy in motion, the self but a junction of dynamic confluences aware of itself precisely because of that fluctuation.