ADVANCED KOSMOS THEORY FOR KOSMOS ENGINEERS

Chapter 11 of the Anti-thesis

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Summary:

None yet.

Exploring the Universe as Kosmos

The term kosmos is distinct here from the term universe. The universe is the representation of the physical spacetime environment which contains everything ideally reachable to us as projected by Physics. Kosmos has a different sense as the projection itself rather than the object of the projection. In other words a

Kosmos is a construct that references everything reachable in principle for any age not just the late metaphysical era. Universe tends to be seen as the spacetime environment full of energy and matter postulated by physics. Kosmos is a more general term. It relates more to our idea of what is out there that is everything that has Being rather than the narrow confines of physical reality as recognized by the authority of physics and astronomy. It hearkens back to the theories of everything inaugurated by Anaximander and Thales that founded the metaphysical era. The kosmos they founded is still for the most part in place. Anaximader was the one who started many things common to the Metaphysical era. He was the first to write in prose. He created the first map of the world. He created the first concept of cosmology that saw the earth in the context of physical space. He posited the first metaphysical concept that was nonphysical, i.e. explicitly metaphysical which he called the Apeiron, i.e. Unlimited. He is the builder of our concept of the kosmos in which we live in the Metaphysical era. It was more than just the physical universe. It included writing in prose, and the metaphysical principle as well as mapping the world and giving an architectural view of the context of the celestial mechanisms that surrounded the earth. In the mythopoietic era people made up poetry that spoke in mythic terms of the relations of the mortals and immortals between heaven and earth, like the Iliad and the Odyssey. So writing in prose and explaining the nature of the physus within logos was a new departure. It defined the difference between physus and logos. Physus was what was described and the logos was description. Anaximander used the

numbers and geometrical shapes to consider what might be the actual physical relations between Heaven and Earth. He started the trend of ignoring the Gods and concentrating on what mortals can perceive and think about. He started thinking about the grounds of everything and saw that in order to ground things without the aid of the Gods a metaphysical principle would be needed, so he called it Apeiron, i.e. the Unlimited. We posit that the for firsts he inaugurated, i.e. map of the world, cosmic model of the universe, writing and the metaphysical principle are what make up the Kosmos as we know it. The universe is just one aspect of that set of elements that are necessary to found our kosmos. Over time these aspects have become more sophisticated and many variations of them have been played out, but in our metaphysical era we still need these four basic elements of the kosmos. Thus when we transition from the consideration of the pluriverse to the attempt to comprehend the kosmos we need to reconsider their relations. We do not just mean physical spacetime when we talk of the kosmos and this should change our meaning of the pluriverse as well. For instance we know that orthogonal to the dual finitude of logos/physus stands the absolute or the metaphysical principle, which Anaximander called Apeiron and Parmenides later called Being. Within this clearing created by the two orthogonal opposites it is writing that above all else preserves and transmits our culture. The mythopoietic times were oral rather than literate. The world map is a picture of the basic features of the landscape of our world. The kosmic model is an idealization of physical relations between the earth and the rest

of the universe. Anaximander no longer sees the world as standing on the back of a turtle, but rather as an element of a vast temple made of columnar blocks. Our solar system is just one of these blocks in a vast edifice of the cosmic temple. However, the important thing for us to understand is the map and the cosmic model are not written descriptions but mathematical models and representations in diagrammatic form. In other words they are conceptual structures of an architectural or of a surveying type. These models or maps and their descriptions with their grounding in a meta-physical principle is what makes up the Kosmos. This means that the pluriverse in some sense becomes all the possible descriptions of the kosmos made up of similar maps, models, written descriptions and explanations, and metaphysical principles. See how that changes things from what David Lewis considers in his book? He is thinking of worldmates as anything that is together in the same world in terms of spacetime. But there is beyond spacetime a conceptual space of possible kosmic models. kosmic maps, kosmic metaphysical principles, and descriptions and explanations in prose. In a sense Foucault's program of looking at discourse communities and how they develop genealogically over time is built into the metaphysical worldview from the beginning because of the concentration on prose and the transmission of culture based on text. But all is not just text there are diagrammatic models and maps in conjunction with the text that are not metaphors like appear as crucial in the mythopoietic era. We move from metaphors to analogies and models based on mathematical structures. One might say that the kosmos of the meta-physical

era is speculative with respect to its connection to the pluriverse. The speculative pluriverse are all the possibilities that flow from the kosmic structures that are created and maintained in prose texts and their associated models as well as the metaphysical principles that ground them. The kosmos in a certain kind of embodiment within this speculative realm of possibility that actualizes as thought structure in the production of prose texts, models, maps and principles which can be studied in terms of discourse genealogy of the type practiced by Foucault. We can study the origin and development of the kosmos as the exploring of these speculative possibilities that are then connected though experimentation to actualities by testing regimes. This is how we render the speculative embodiments as real. Experimental testing regimes are crucial to our production of reality within our era. Truth is seen primarily in terms of verification and correspondence. In other words through truth we hold our knowledge steady in the relation between the descriptions, models, maps and what they refer to. But through reality testing we change these descriptions for better ones. Through truth we specify what in the descriptions is knowledge. Through reality we specify what in the descriptions needs to change to become more true. The descriptions and models are unified also by their reference to the same thing, the same subject. They form a totality of means for describing the same thing which is orchestrated to produce an organized argument about the nature of things which is unified through discipline and rigor within a given domain of coordinated viewpoints. In the course of the arguments different

points are made present to our reason and give to us to consider. Speculative theorizing step by step becomes accepted through the process of argumentation within the universe of discourse set up within a domain. Theory and practice become unified as a result of playing reality, truth, identity and presence off of other in relation each to necessity/impossibly, actual probability, possibility, and potentiality. By abduction we posit hypotheses speculatively and then by experimentation we render these probabilistic actualities. In the process we realize our own potentiality but also the potentialities of nature, and we discover what is necessary and impossible as the limits of manifestation. We express our speculations and our results of experiment in terms of prose descriptions and explanations and proofs and indications as well as diagrams which serve as maps and models. We call upon metaphysical principles such as Being as a ground for this work either explicitly or implicitly by just using our language that has Being embedded into it. Heaven and earth have become the celestial model and the map of the earth, i.e. representations. Immortals have become metaphysical principles such as that which establishes the transcendentals of Kant's philosophy. Mortals have become the writers and readers of prose who simultaneously deny the written basis of their own cultural heritage though their logocentrism. Mortals are those who can only write a finite number of creative sentences as Chomsky says.

In this process we use the schemas as a means of understanding what we find the embodied within discourse concerning the kosmos that manifests from the speculative pluriverse. Schemas are templates of understanding that we project with the hypotheses within the abduction itself. We can induct and deduct only because we have first abducted in the terms that C. S. Peirce explained. That abduction carries a secret within it which is our projection of the structure of things from Large to Small. The abducted templates of understanding by which we project the pluriverse of speculative possibilities and then actualize our observations to produce probabilities are really never considered. They are assumed without comment to be part of the external structure of existence. But in actuality they are the structure of the conscious mind itself. The conscious mind is a dreaming. In waking states this dreaming is augmented by some sensory data not available during our sleep and that augmentation after the processing by the unconscious and subconscious gives us our world.

In alchemy there is talk of the *one thing*, sometimes called the philosophers stone. A good candidate for this stone is the schemas itself. The schemas are a crystalline line structure that we project on everything. Thus it appears everywhere before us and around us but actually it is within us as the very structure of ourselves that we project on everything else. These projections are modified by experimental results, but even though anomalous results are reinterpreted though the schemas. The schemas cover all the ground from the Small to the Large. Everything is mediated to us through the schemas. It is

consciousness and packages everything into neat little boxes for us to grasp, prior to our even wanting to grasp those things. All those things that we are grasping are really the appearances in our own mind which are articulated with qualia from the outside. But if we strip away the qualia then we see the matrix of the schemas as being most of what we see. We normally think of the elements of consciousness as being functions that are applied to perceptions, memories, images etc. But since Kant we have known about the schemas as being projected along with spacetime within our minds which make sense of our world by organizing it into a priori syntheses. The schemas are the ready made form of these a priori syntheses. They infiltrate every concept and experience. We project them without content in our ideas, we project them with imagined content in our dreams and imagings, we project them with highly articulated content in our perceptions and memories. In other words the schemas are what the psychological faculties hold in common. It is because of that common ground that things can meander between faculties. The same thing can be perceived, imagined, remembered, cognized because the media is the schemas. The ultimate articulation of the media of consciousness is via the schemas. Thus their mandala reaches throughout intentional consciousness. Husserl talked about noesis and noema. Both of these operate on the schemas by the intentional morphe. Now we can say that the "morphe" that is projected by intention is the schemas, all of them, not just form. The hyle of the qualia articulate these schemas. The psychological or cognitive faculties that are invisibles operate on the

a mandala that spreads out though

schemas their and qualitative articulations by the qualia. The schemas are the fundamental nature of the things or stuff interpreted in terms of number or logic. Between number and logic are models. Between number and schemas are representations. Between logic and schemas are representations. Logic is well developed with myriad classical and non-classical kinds. Mathematics is well developed with myriad categories already explored in the history of math. But the schemas remain primitive and less well understood. What we have tried to do here is begin the process of exploring the schemas as a whole, thus creating a discipline called General Schemas Theory, which can be more easily related to math and logic in order to produce more precise results. This is especially needed for design that relies on schemas as the basis of the projections of the templates of things to be designed. More than ever we need a flexible design vocabulary that stretches between the Large and the Small. Logic and Math do not interface directly with the hyle or qualia like the Schemas do. They are not inside the intentional morphe like the schemas as a priori projections that take up the qualia into themselves.

It is as if what we need to do is recreate phenomenology now that we know what "intentional morphe" means. It means the whole emergent hierarchy of schemas. How this was comprehended at first by Husserl to only mean "form" and then reinterpreted later by Gurwitch to mean also "gestalt" and so on adding bits of the schemas one at a time has led to tremendous confusion. General Schemas Theory is a counterpart to a new phenomenology which understands that the whole of the schemas are projected

intentionally within consciousness. Changing what the "intentional morphe" means alters the nature of phenomenology whole. So as а phenomenology would be fundamentally different which takes into account not just all the various schemas but their interrelations that we have been exploring. Also the fact that we now understand better the relations between math and logic and the schemas would help because in historical phenomenology these are treated as just separate topics. but now we can see how these connect to the underlying dualites of physus and logos as the logos of physus and the physus of logos. Note how math expresses not just the non-duality of order but also the finite/infinite articulation of the worldview as well. And of course we must consider the fact that in the history of phenomenology the transcendental framework posited by Kant and assumed by Husserl has been questioned. Thus our departure would be closer to the phenomenology of Merleau-Ponty which attempts to produce an immanent critique of phenomenology. also his phenomenology And comprehends all the different kinds of Being upto and including Wild Being he developed in The Visible and the Invisible. But it is really Deleuze that we need to come to terms with because of his comprehension of the importance of the Mass/Set dichotomy which is seen in his distinction between Repetition and Difference and Representation in Repetition. What we have produced here is merely a journey though the schemas. Taking them in a different order would have produced different results. This effort merely exposes the landmarks but does not serve to ground the discipline of General Schema Theory in a New Phenomenology. Such a phenomenology would have to subsist along with a hermeneutics, ontology and dialectics that are equally sophisticated. These are all the methods of distancing to which we would add heuristic research as a method without distancing in order to center these methods of distancing. But this is a big project that cannot be carried out in the confines of this study. But what we have contributed here is a crucial piece of the puzzle which now tells us what an "intentional expansive reading of morphe" might mean. Phenomenology, Hermeneutics, Dialectics and Ontology are the complementary methods that would use this General Schemas Theory and provide a view of the meta-system of consciousness that is the inverse of the "system" of the schemas. Husserl thought of consciousness as a system after the manner of the system as defined by Kant. But we believe that consciousness is a meta-system within a deeper metasystem of unconsciousness. This new phenomenology centered on the transcendental object of the schemas would be a phenomenology not of a unified subject that Husserl assumed but instead one based on the idea from Nietzsche that the I is fragmented into a swarm of monads, where IT thinks, i.e. the ID and not I. Ultimately this new framework would be based on the structure of the Emergent Meta-system. Ontology denotes monads and their interaction as things or stuff in swarms. Phenomenology denotes views and their schematization of things and stuff. Hermeneutics denotes candidates as possibilities and their annihilation in the production of the seeds of things to come. Dialectics denote seeds and their fructification which produces synthesis giving us emergent things and stuff. Thus

the Emergent Meta-system toward which we are winding our way as we pass from General Schemas Theory, to Special Scheams Theory to Meta-Schemas Theory is the fundamental structuring architecture not just for the schemas but for the disciplines that revolve around the schemas positing objects, viewing those objects in consciousness, interpreting those objects, and making new things out of those objects. In the process swarms of partial subjects (dissipative practices) created and destroyed. are The interaction between the schemas and the swarms of the fragmented I produce within the dreaming consciousness the qualia that fills out the schemas and gives the seeds, monads, views and candidates something to perceive, imagine, remember, cogitate etc. Consciousness is split by the faculties. The centers of consciousness are scattered and fragmented. And the schemas are an emergent hierarchy that is projected surreptitiously in the process of grasping the objects of consciousness a priori out of the magma of existence. It is a strange picture of ourselves that we arrive at by this out of the way route. However it is a picture we need to understand in this era in which as Foucault says in The Order of Things Man is dead as well as God. It is only by developing this picture that we an go beyond logocentrism and all the inversions and substitutions such as those of Nietzsche and Deleuze that attempts to break out of its spell.

Dynamics of Schema Projection

We have been discussing schemas as templates of understanding. But there is

Schema:

SECOND one dimensional

another way to think about that has been pursued by Mark Johnson in <u>The Body in the Mind</u>. In his work are thought of as more fragmented dynamic structures of consciousness one remove from the qualia. He gives a list of the he is talking about in his book on page 126 which includes:

Schema:

THIRD two dimensional

We would like to call these . We might add a few of our own which will be marked with an asterix(). And we would analyze them further in the following way.

Key:

ZEROTH negative one dimensional

Schema:

FIRST zero dimensional

Schema:

FOURH at least three dimensional

Schema:

Schema: Schema: Schema: Schema: Schema:

So what we notice when we try to distribute these Johnsonian among the Perician/Fullerian categories is that they do not form any kind of systematize-able group. They are in fact meant to be a hodgepodge of discovered micro level generators that operate on perceptional qualia directly to produce our first distinctions within the qualia. This is in line with our idea that there is a perceptual and cognitive swarm that are operating on the qualia and which produces what we are calling broader schema of the type we have been discussing based on their low level discriminations of qualia. These may well work like the agents in Hofstadters pattern recognition experiments each one operating as a codelet independently building up a picture in a workspace of the phenomena within perception. The point is that these agents tend to build the same sort of recognition templates over and over again which we call the schemas. However, we do not say that this is a rigid program because if it were we could not appreciate exceptions and anomalies. Rather there is a certain probability that qualia will be understood through these well established perhaps cultural or learned schemas before any other schemas and that violations of these forms tends to get attention and it is normally through these violations that we find out what is really happening with respect to the ontic magma of the physus beyond our projections, i.e. it is though these violations that we hear the voice of the things themselves if we ever hear it. Schemata building agents, or

, will start out making some primary distinction, and then higher level agents will compare and contrast those lower level distinctions to build networks of distinctions which eventually will resemble one of the schemas we have distinguished or some other one that we have not mentioned because it has not become a theme in the literature that has been recognized by the author. It is likely that these schemas are built over and over from scratch every time rather than pre-exist, however, the result of that work by the swarm of

is as if the projection had been a priori. The qualia are firsts. They appear in a field of discontinuities either of time, space, value or sign at the level of pattern. The operate on these patterns to produce distinctions of the type that make a difference pointed out by Mark Johnson as his . These congeal into larger formations which eventually take a form similar to the complex schemas we have been considering as they are processed by at higher levels of Perice/Fuller categorization. Objects appear at the third level. Objects demand continuity to be connected together into a single cluster of phenomena. For the most part the schemas we have been discussing throughout these essays are synergies. However the first few schemas appear at corresponding the Peirce/Fuller categorical levels. Once the gates of higher dimensionality opens up at the fourth level then the schema generators can keep on working to build higher and higher synergetic wholes whose templates are the schemas. We don't hold that the schemas exist in any transcendental realm. rather they are immanent to perception and rudimentary

cognition and are socially constructed by acting as reflexive the autopoietic dissipative agents swarming inside the fragmented Self. Concrete patterns are built which we later generalize into the pattern schema. Concrete forms are built which we later generalize into the form schema. Concrete systems are built that we later generalize into the system schema, and so on. But in our understanding of phenomena we reuse these schemas as generalizations. There is an incestuous relation between a priori projection in perception and a posteriori projection in understanding by which the schemas appear as sanding waves in our reflective relations with our environment. Schemas are in fact non-dual between the passive synthesis and the active synthesis, between transcendental and empirical egos, between cognition and perception. It is the non-duality of the schemas that make them interesting to us. Schemas allow us to pre-grasp the phenomena before we even know what it is, i.e. subconsciously, or unconsciously. It arises in consciousness already so grasped. Yet it is a medium that allows us to see the differences in what has been grasped and thus find the anomalies and exceptions that might alert us that this is something different that we are used to seeing. Through the sameness of the schemas we see difference-in-itself. We might think of them as sameness-in-itself. It is a vast fractal mandala that permeates our perceptions and makes them accessible to our cognition. It is applied by the unconscious by swarms of agents but permeates our consciousness as an invisible structure that complements the invisible faculties. Where the faculties are fragmented these schemas are whole at each emergent level of their unfolding.

They are prior to linguistic processing and are therefore not the same as so called propositional "schemas." The trick would be to take Mark Johnson's

and attempt to see how they might produce the schemas that we have been discussing by working together as social agents. We might view the schemas we have been discussing as lattices of Mark Johnson's at least at the lowest dimensions of the hierarchy of the schemas. In these lattices may combine and his recombine the basic to build the various higher dimensional schemas. In so doing we can see them as building the structure of the observed schemata out of following the concept of Bennett of congruence between communicating structures. In this way the schemas become reflexive architectures built of . This allows us to bv

by . This allows us to approximate their non-duality between passive and active synthesis by a nondual theory of their genesis.

One point that needs to be made is that the passive synthesis is not necessarily unified or total. That is why it can be that there are many

operating simultaneously to build up schemas. And example is the ability to see up to three things as distinct without counting and know their number. After three we have to count but up to three we immediately know the number without counting. This direct knowing of number up to three is part of the a priori passive synthesis but the counting from three on up is part of the a posteriori active synthesis. What Mark Johnson is saying is that his list of are similar to this direct inspection of things that allow us to know if they are '

or ' ' say without calculation or thought or reasoning. Mark Johnson says that this is a result of imaginative all the different projection. But imaginative projections work independently at first but if certain ones fire and give results then we start reasoning and manipulating these results to come to higher order conclusions than just direct inspection reveal. This is a lower level synthesis than that produced by the faculties. However, this raises the issue of the disunity of the I as unity or the detotality of the self as totality even more poignantly than the differences of the faculties do because there are so many different which are all so different from each other. Mostly we are dealing here with in perception but we assume that similar kinds of operate with respect to the other faculties as well. Notice the predominance of space related We would expect more of a balance between space and time and so some temporal schemata may be missing from this list.

Once we recognize that the passive synthesis that produces the cannot be unified or totalized then it is possible to understand the provisional nature of the that provide immediately recognizable conclusions about perception with which one might begin to draw distinctions of a higher order. These distinctions build into higher order templates of understanding that we call schemas associated with monad, pattern, form, system, etc. In order to understand how this might work we can apply the schemas to the observer itself.

We look at things around us and immediately intuit whether they are

or . The same is true of or applying the or or or distinctions. We can see directly if we are dealing with a or a We intuit immediately if there is or a between elements of a configuration of things. But the same distinctions along with the rest of those that appear at Perice category two can be applied to the observers themselves. We can intuit whether observers are near or far from us, whether they are full, or empty, i.e. satiated or searching for some satiation. We can consider them to be either mass phenomena (repetition) or count phenomena (representations). We can see splitting and merging or counterforce and attraction between observers. We can see them as collections in swarms. We can see links or relations posited between them. Notice how once we apply Mark Johnson's to the observers themselves they seem to describe the relations between swarms of monads in an Emergent Meta-system. For instance, we know that the monads are temporal "atoms" of qualia. They arise out of the void or emptiness of existence. They are composed of singularities or isolates. The void is considered empty as it is really just spacetime. Emptiness on the other hand is the lack of substantial ground to anything that appears in consciousness. Thus fullness and emptiness play a key roll in understanding the fundamental emptiness of phenomena. We look at the monads in the swarm and immediately we see that the elements of the swarm are near each other and far from other elements, that in swarming they are operating as a mass rather than a count phenomena. We see this in a flock of birds and in a school of fish and many

other animals that live and move naturally in groups, like a heard of cattle. We have that built into our language when we say a flock of sheep or a bevy of geese. Flocking or school phenomena is a key part of nature which we recognize immediately. We notice a counterforce and attraction between the individuals in the swarm. Within our perception it looks as if they are splitting and merging as they move in resonant ways in relation to each other. Ultimately we know that this is just an optical illusion, but it is this sort of illusion that lets us know that flocking is an important intermediate phenomena in the natural world between individual and species. Links such as reproductive connections between the various animals in the herd are constantly forming and reforming. They are continually coming in contact with each other as they swarm. Close contact allows them to achieve some measure of protection from larger predators. We understand their overall movement by means of iteration of the movement of one organism many times to produce the overall movement of the swarm. We understand that the swarm has extension in space and duration in time. It has a certain dynamic balance that it is continually maintaining in a selforganization of its dynamic structure. All of these distinctions and more are being made as we look at the swarm of bees, the school of fish, the flock of birds and make direct intuitive distinctions concerning them as part of the and disunified detotalized passive synthesis of our experience of the movement of animals and insects in our environment. which we take as primordial movement prior to the movement of individual animals. The primordial movement is inherently social

and reflexive within the swarm. Individuals differentiate out of the swarm. The effect of the individuals of the swarm working together is the production of dissipative ordering structures that organize the environment in fundamental ways.

When we move out of the one dimensional realm into the two dimensional realm we see things like center verses periphery of the swarm, blockage and enablement of flow within the swarm, compulsion and restraint removal in terms of behavior of the individuals within the swarm. Through matching and scale we get some idea of the extent of the swarm and its composition. We see its surface and can consider it as a container in space. The movement of the swarm is a process and it progresses along a path and has a lifecycle.. We can superimpose forms upon it and see it as an object that is a result of synthesis. See how when we go from the zero dimensional which only sees the single monad, to the one dimensional that projects many lines through the swarm, to the two dimensional that sees the surface of the swarm and its depth, until we arrive at three and higher dimensional formations. Notice how all the various apply to the Emergent Meta-system. The higher dimensional aspects explain how the EMS moves from one regime to another, i.e. from seed to monad to view to candidate. This is a higher level synergy which is produced by a nexus of higher dimensionality in a lower dimensional space. It results from the interplay of symmetry and symmetry breaking. All of these are applied immediately as recognitions of aspects of the Emergent Meta-system.

The concept is that there is an immediate recognition of the aspects of the EMS which is in-built and that these capabilities of recognition form an EMS in us which swarms in the building of the schemas as a project of social invention and construction. We are attuned to swarming behavior in nature. This swarming has behavior а higher ontological status than the individual movement of animals alone because we as hunters need to understand swarming behavior in order to survive. Hunters may move alone themselves, but their perception is attuned to what they hunt. But there is some evidence that human hunters naturally hunt in packs as well. Canetti explores this in Crowds and Power. We need to understand our relation to animals in our hunter-gatherer origins in order to understand the pervasiveness of the Emergent Metasystem formation of swarms as our means of building up schemas from are the immediate passive synthesis recognitions and distinctions that relate to swarming of swarms, i.e. interpenetrated swarms of swarms. It is because they are related to passive detotalized disunified the synthesis of our experience that we do not notice their projection. Seeds are the traces and scents of the swarms that are apprehended as monads in a swarm upon which the hunter takes views and projects the schemas in order to understand their movement. On the basis of the schemas we project their possibilities decide which and we possibilities to pursue with lightening speed by allowing the possibilities to cancel, rather than winnowing them down using reason. If we used reason the prey would escape before we had a chance to catch it. Once the decision is

made by annihilation then we are either back to following spores because we have missed our chance or we are leaving our own traces as we kill and prepare the meat for transport back to our home base. Since actually making a kill is a hit and miss operation the EMS naturally leads back into itself as a sequence of hunting episodes, so we are aware of the cycling of the EMS as we go from spore, to organism, to views, to projecting schematized patterns of behavior, to projecting possibilities based on schemas. to instant decision to fight or flee, that in all probability leads back to the search for more spoors. All our recognitions and distinctions that we make instantaneously support this EMS hunting of herds by packs of hunters structure. Talking of groups of animals and thinking in terms of mass rather than count are all part of understanding our innate of this phenomena through our language. Each play into this of Johnson's understanding process of herd phenomena of our prey or our own pack phenomena. We have only lived in urban settlements for about six thousand years while we have done hunter-gather activities for over a million years. Ninety Nine percent of our history has been in this hunter-gatherer mode of life. But we often think of the solitary hunter after the lone prey as the archetype of the hunting scene. We often think of the lone gatherer out looking for some rare plant. Rather because herding is so prevalent in nature, and because we ourselves tend to travel and camp in packs, we should consider whether we have a specific adaptation to the herding phenomena both inside and outside of ourselves which still effects the way we look at phenomena other than animals and ourselves. This is to say that there is a

specific adaptation to the intermediate level between the individual and species both in ourselves and in the animals which we prey upon, as well as the plants we gather. With regard to plants this intermediate level leads to agriculture eventually. With regard to animals it leads to herding and husbandry. In other words the development of the tame aspects of our culture are based on our wild adaptations. There is an extreme conservation in our material culture over the last eight thousand years with respect to the million or so years that preceded civilization. Herding and agriculture are a development of the adaptations within us of our relations to herds, swarms, flocks etc as well as fields of plants of the same kind. Rotation of crops for instance is an image of the EMS in plants. We plant a certain type of plant seed and see it arise in our fields. Then we take a view of it and schematize it's organization both in space and time and consider various possibilities. One possibility is crop rotation which causes us to plant a different type of plant seed next time that complements what was there previously. Crop rotation produces different regimes of plant life at different times of year prolonging the productiveness of the soil so we don't have to move on so quickly to clear new land. These different regimes of plant life are symbiotic with each other. Similar things can be done with animals, which have different feeding styles in relation to the flora that they subsist in relation to. Different animals can share the same range if it is managed properly. And of course animals and plants have certain symbiotic relations to each other as well. The good farmer knows about these symbiotic relations between different crops and animals and exploits them to get the most

out of his land. These different symbiotic regimes approximate the meta-schema of the Emergent Meta-system in their mutual inter-operation and dependence. The EMS projects the schemas of various orders from the Small to the Large as ways of understanding the interrelations of elements that the EMS is trying to get to organize symbiotically as a meta-system of interdependent systems. We run into these intermediate areas today in terms of community, neighborhood, folk traditions, and other similar non-institutionalized nonindividual group behaviors. These are some of the social structures that are most under attack by our mass representational media society. We find the most meaning in these intermediate between gatherings marriage and institutional forms of organization. Yet we do not seem to be able to build them effectively to a design. This is because they spontaneously form in certain circumstances as a result of our own flocking behavior that follows other flocks. Part of this phenomena is the social invention and construction of schemas as templates of understandings from fundamental recognitions. The recognitions occur from the mutual interaction of the animals in the pack spontaneously. The perspectives of the various animals at the basis of the schematization of the pack by itself, or of the prey by the pack. Schematization, i.e. understanding the pack or the prey herd is the basis for understanding the possible scenarios and possibilities. Decision is made by cancellation, which is the fastest way to make a decision. Then the side effects of this cancellation form the seeds for the next round of monad creation and then new mutual action. In all this quick recognition, and quick decision is important. But also quick schematization of the situation. That is why the schemas are a priori projections. They are built up quickly from the recognitions from scratch each time as in Hofstadters analogy recognizing systems. There are myriad patterns, forms. systems, environments. They all need very precise mapping in order to find the anomalies and singularities of interest. Just casting a net over the landscape is not enough. rather we need to weave the net into the landscape intimately so that we are attuned to it by that weaving process. Thus readymade schemas will not do. Rather we need recognitions that coalesce around a schema quickly bringing to the fore differences from the expected and divergences from the ordinary. The schemas are a by product of the understanding process. We understand by comparison, and the schemas are broad types of comparison that are expected at different scales of phenomena. They are something between the differences of degree in extension and the differences of kind in terms of qualities that Deleuze talks about toward the end of Difference and Repetition. For instance, patterns have differences of degree in extension as well as differences of kind in terms of quality. A certain pattern generator could have run longer than another and thus produced a certain aspect of a pattern more than some other run of the same generator in relation to other generators. But also the different generators could have been swapped to produce a different kind of pattern, not merely by changing the threads that are used. In other words both differences of degree and differences of kind occur in patterns. But that does not explain the pattern itself and its peculiar structure as a schema. Also patterns in cloth are

different from ceramic patterns, and other patterns vary quite remarkably from each other. Yet they are all patterns. Patterns have to do with the interweaving of qualia together. How this is done is different in different media. How it is done may cause differences in degree in extension (larger for longer) or differences in kind in terms of quality (red squares rather than blue diamonds). But patterning itself is not explained by these differences. Nor can it be intensity that explains everything as Deleuze suggests. For Deleuze intensity means implicate depth, i.e. the relations of implicate order in the proto-gestalt to the gestalt. Implicit pattern prior to its becoming explicated does not explain the phenomena of the pattern schema, it merely says that there is a proto-schema and a schema itself which are intertwined in a different way from the differences of degree and the differences of kind. The proto-schema is the design of the pattern prior to its application to a media. The proto-schema is signified in terms of intensity of patterning. In general Deleuze does not understand the nondual nature of the schemas and attempts to explain it in terms of depth verses surface as opposed to the different ways of articulation of differences. We see this in Deleuze's terms difference-in-itself and repetition. Deleuze wants to turn from representation (count) to a mass phenomena. and from identity to difference which is normally ignored. But this merely continues to operate within the oppositions of the dualistic way of looking at the world. That is why Deleuze's solution is ultimately nihilistic. He cannot break out of dualism even with the most radical reversals and inversions, i.e. of set to mass and of aspect to anti-aspect. These are still

oppositions even if he says that he is rejecting oppositions. Deleuze is still not understanding pure difference in itself as a mass phenomena and as something to affirm beyond negation, even though that is his goal because we are still contrasting these with the set and the identical in order to give them meaning. These are not non-nihilistic distinctions.

Beyond Aspects of Being

What are the non-duals with respect to each of the aspects of Being? Lets take truth and falsehood. It non-dual is uncertainty because we ascertain either truth or falsehood by having evidence that corroborated or uncorroborated. Ascertaining is the action which truth and falsehood share. Thus the uncertain is the non-dual of truth and falsehood. The uncertain is neither the one of ascertaining nor the dual of corroboration or uncorroborated. Similarly the untested is the non-dual of reality and illusion. We make tests that are either passed or failed. So testing is common to reality and illusion so the opposite of testing is the untested. The untested is neither the one of testing nor the two of pass/fail. Similarly identity and difference are found by distinguishing, so the undistinguished is the non-dual that is neither the one of distinguishing nor the designation same or not-same designation of identity and difference. Similarly, unattendance is the non-dual which is neither the one of attendance taking (roll call) nor the dual of here or not-here of the student. So we have four non-duals related to the four aspects: uncertainty, untested, undistinguished, and unattendance. Now within certainty there is selection, within testing there is criteria, within distinguishing there is

marking, and within attendance taking there is signing. Notice how these are related to the kinds of pattern that exist: flux =selection; structure = marking; value = criteria; and sign = signing. In other words, if we attempt to find the non-duals of the aspects of Being then we run into elements like the four kinds of pattern. When we make a pattern we are exercising selection, criteria, marking and signing. We select the thread, and we use aesthetic or some other criteria to pick the pattern that will be woven. We mark and sign to weave the thread into the woof. Marking is setting the thread into its place in the woof. Signing is the way that the thread relates to the next and the last that was laid down in the woof. Selection is made on criteria and signs are based on marks. We interplay identity and difference but that is based on the non-dual which is prior to all the aspects being actualized. This means that the pattern schema is the result of the non-dual between all the aspects of Being, not just identity and difference. These can be seen either in a set or mass context. Deleuze wants to relate mass repetition to difference and resemblance to identity in order to raise up what is normally suppressed. But this merely leads to nihilism by a different route. Rather we need to take into account all the aspects and think about their nonduals and when we do that we come up with the various kinds of patterns that interrelate. Patterns are the basis of forms and forms are the basis of systems and so on up the ontological hierarchy. Once we have established the non-dual as the standing wave of mutual understandability then it propagates easily from one threshold of organization to the next. Monads are hypothesized as the hyle from which selection of qualia

can be made from, or that which we can develop criteria for. Monads are the smallest mark and the simplest sign. When we understand that all these monads form a single field then we have to posit the even deeper level of the facet as the realm of interpenetration. Schemas in general represent filtering selections from the senses and staged criteria by which those are judged. We mark the selections we have made and then those signify to us and to others as a basis for new selections based on new criteria. We are unattendant and signing brings things to our attention to the present and absent. We are undistinguished and marking records our distinguishing identical and different. We are untested and our criteria establishes the basis of our reality or illusion. We are uncertain and selection makes us consider true and false. In the monad these different aspects are fused. But in the pattern they first make an appearance in the weaving of patterns or the inscribing of pottery. Based on the closure at the level of pattern then there is a texture created that is again closed as form which then is a new material with a new openness which is closed as system which then creates a new material with a new openness, and so on up the emergent ontological hierarchy. Difference-in-itself is not the key to our understanding the schemas. Rather the non-dual and the non-nihilistic distinction. i.e. the representations of difference and identity in existence are the key. Deleuze talks about positivity of difference. But really what is important is not just difference for its own sake but establishing nonnihilistic distinctions for selections based on criteria, and then once those selections have been made marking them for future reference which then stands as

a sign for both oneself and others and as a basis for making further distinctions. At the level of pattern these non-nihilistic distinctions based on the non-dual create the different kinds of patterns. But on the level of form they create the four variations of form. And so on up the hierarchy. At each level we are making distinctions based on non-dual criteria within the intermediary realm. The aspects themselves are dualities that play around these non-dual non-nihilistic distinctions confirming them. Identity and difference in themselves mean nothing, are nihilistic because they are dualities. Difference in itself is a dual with identity in itself. If you have one you need the other to comprehend it. But what is happening is a distinguishing and that is a marking from the point of view of a positivity. But marking does not stand alone. We mark to signify. But marking and signifying do not stand alone because we select what to mark based on the criteria we take from our signs. There are complementarities of complementarities at the non-dual and non-nihilistic level. We make nonnihilistic distinctions by knowing the origin of something. We understand the non-dual based on knowing the sources of things. Sources and Origins are opposites to the Boundary and Arena. These are the fundamental opposites around which the meta-system schema is built. It is not a matter of saying yes to life or no to life but just saying *life*. The affirmation is an unnecessary addition. The affirmation is the will to turn away from nihilism, the deadly reifying no. But turning away is a turning toward again. We need to stop turning as we have stopped moving before that. Motion is contradiction. But when we stop moving there are still the contraries of twisting to

and fro. Saying *nay* and saying *yes* are part of that twisting. If we stop leaning in one direction or the other then the nondual realm opens up which is the deep connection between the duals. Nihilism is the realization of the identity of the different, of the contradictory. The nondual is the secret connection between the duals behind the scenes. In the non-dual realm different criteria exist than those that appear on the surface. So on the basis of these different criteria from the sources we make different selections on the surface. We mark non-nihilistic distinctions and these serve as signs for others and ourselves of our capacity to make distinctions that as Plato says cuts between the joints of the matter, rather than through the bones. In doing so we unleash meaning from the void which overcomes mere diacritical significations. In a way these are the non-nihilistic distinctions between the faculties, or at a more refined level the differences of Johnson. It is between the the differences between the Gods of the Greeks, or the Sumerians or the Egyptians. It is the differences between the letters of the alphabet. It is the differences between the roots of Being and other words. It is the differences between the kinds of Being or the special systems. In other words it is the distinctions between the most crucial of the differences and identities projected by a culture. Between the truths and falsehoods, between the presences and between the reality absences. and non-nihilistic illusions. Making distinctions based on the non-duals like order, right, good, fate, the sources and root are very difficult but not impossible. This is the greatest challenge of life. We do not have to affirm life. Life itself lives in us regardless of what we affirm or

deny. What life calls for are non-nihilistic distinctions based on non-duality. Affirmation of too much difference is just as bad as affirmation of too much identity. Affirmation or negation, i.e. speech in general is bad if it does not take into account the surrounding silence. The univocality of Being means that despite the different kinds of Being and its fragmentation that if you say "IS" then it is speech of the same about the same in spite of the fact that it carries difference as fragmentation within it both among aspects and kinds of Being. Realization of existence is coming to terms with silence or the lack of projection in general. This is the touch stone, the groundless ground of all speech, of all projection. The groundless ground of existence is seen as empty and void from the point of view of the projections and univocal speech. But from the point of view of existence emptiness and void are full, full of nonnihilistic distinctions based on the nondual. This is a positivity beyond negation that does not rely on affirmation or denial but on silence. From that silence we make non-nihilstic distinctions rooted in the non-dual nature of existence which is both empty and void.