

Meta-systems Theory

CHAPTER 1

The Foundations of Emergent Meta-systems Theory

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What is Missing?

It is the most difficult thing to discover what is missing. What is merely absent we know, and remember and sometimes it can be present again, but what is missing was never there, yet it leaves its imprint and trace on everything that is both present and absent and the dynamic between them. In the case of Systems Engineering the hardest question is what is missing in our discipline. Systems that we construct are made up of subsystems of Hardware, Software, and Logistics which are all considered systems in their own right. As Systems Engineers we put these subsystems together to form a deliverable system that hopefully meets the needs of the customer, and then perhaps we go on to integrate this system with other systems in a “system of systems.” In other words we are trapped in a recursion of the system schema. Our problem is that everything is a system, and so the word system loses its meaning for us. So one way to think

about what is missing is what will give meaning back to the term “system”. One thing that is missing is the antipodal dual of the term system. By knowing what is not a system is one way to give back meaning to the term system in our usage. In mathematical category theory we reverse the arrows to get the opposite category, but sometimes we must do more than reverse the arrows to realize the antipodal dual. In order to arrive at the non-system we might have to think outside the system, rather than the box. The term “meta” means what is beyond, over, or above. We use the term here at first in the sense of beyond, and we ask what is the opposite of the system which is beyond it. We expect that the missing meta-system leaves its trace on the showing and hiding of the system gestalt. In this paper we will look for that trace and attempt to reconstruct the missing meta-system from the recursion of systems thinking in which we seem to be trapped. By trapped I mean that we continually come back to the same rather than knowing what is different. When we have too much of the same then it loses its meaning because there is nothing different to contrast with. If nothing else then the meta-system is needed so that we have a better idea of what the system is by its contrast with its dual.

Notice in common parlance there is no dual to the system concept. In common parlance the system is monolithic and not contrast to anything else except perhaps what ever is chaotic and disordered. This is to say, oddly the system as a schema is not part of a system itself. That is because a schema cannot be its own meta-critique. For the meta-critique we must go to a higher meta-level in terms of logically above the level of critique, in other words systems can only be critiqued by at a logical meta-level, in a meta-language as Bateson¹ following Russell² has pointed out. The same is true with all the other schemas other than the system schema, like form or pattern, etc. if we want to critique them then we need to move to a higher logical level where there is a meta-language where we can

¹ [Steps to an Ecology of the Mind](#)

² [Principia Mathematica](#), theory of logical types, cf Copi

talk about differences of schemas. Otherwise, we are merely trapped in what ever schema that we are using, like the system schema for instance, which we can recursively apply to itself, but which does not yield the essential difference that makes a difference between the system and other schemas.

It is extremely difficult to discover what is missing, what has always been missing from our ways of thinking, but by its being always already absent leaves a trace on our thinking, and impression, of what is lacking. It appears as a blindspot in our conceptual field, which is like the blindspot in our visual field filled in and goes unnoticed because of our compensations for it. But once we discover what is missing we realize that it has always been there, right before our eyes, unseen, unnoticed and effecting the way we build our systems without our ever realizing it. This is in fact the case with the meta-system schema, i.e. what is beyond the system that we have not conceptually realized before but has been haunting every system we have created, in the form of our ignoring of the concept of the systems we design and build. We see these effects in the unintended consequences of the system once deployed in its "intended environment". Interesting that *unintended* consequences appear in the *intended* environment of the system. It also appears in the unexpected side effects of the system on other systems within the environment. What we need to understand is that we have a blindspot in our conceptual design of systems for the meta-system schema which envelops the systems we design. This insight is something that is missing in Systems Engineering and systems thinking in general. Systems have an antipodal dual that we need to take into account when we design our systems in order to avoid unintended environmental consequences and side effects on other systems in the same environment. In effect we have no model of the environment, as anything other than a homogeneous plenum into which we place systems we design. Rather we need to understand that the meta-system has a structure of its own which is quite different from that of

the system, and which we do not reach by talking about systems of systems. In order to conceptually reach that structured context, milieu, situation, circumstance, etc which we name here the meta-system, it is necessary to understand that the system schema has an antipodal dual which is normally missing from our vision of the designed system called the meta-system schema. We see this meta-system mostly as a conglomerate of various systems that work together as an "operating system" for the system under design. But we have no concept of the meta-system itself as a field which supports systems. That is a fundamental blindspot and problem for our discipline of Systems Engineering. We need the missing complement of Meta-systems Engineering based on Meta-systems theory in order to have a fully formed theory of our discipline. Unfortunately although Systems Theory exists to be a foundation for Systems Engineering, there is no fully developed Meta-systems Theory to act as a basis for Meta-systems Engineering.

Prolegomena to a Meta-systems Theory

Although we do not have a developed meta-systems theory there are intimations of it in the work of many different theorists in various fields. In other words the need for a theory of this sort has been felt previously and we need to gather up these strands of thought in order to approach a better understanding of what Meta-systems Theory might be like. So here we will mention the various strands that indicate the traces of Meta-systems Theory in the work of other theorists. Of these the best example is that of G. Bataille in his work The Accursed Share which has been picked up and expounded on by A. Plotnitsky in his work Complimentarity. Bataille noticed that economics did not deal with aberrant cases, and so he did a systematic study of the excluded aberrant cases and realized that beyond the normal *restricted economies* described by economists there was a *general economy* that embodied intractable contradictions. An excellent example was the potlatch economies of North Western

American Indians. Their whole economy revolved around the destruction of useful things in a ceremony that generated value and honor for the one who could destroy the most real wealth. Bataille noticed that one aspect of such economies was that they embodied dual paradoxes of miracles and blackholes, in other words the destruction of material and useful or artistic goods which were the result of a great deal of human labor (blackhole) produced the transcendental value (miracle) of honor and prestige within the Indian tribes who participated. It might be noticed that these dual paradoxes that appear in the general economy can be analyzed with the Diamond and Delta Logics of Hellerstein which is based on the Laws of Form by G. Spencer Brown. In other words there is a logic to the workings of the dance of the negative and positive paradoxes in the general economy. In systems terms we can think about these paradoxes as negative and positive **positive** feedbacks. A negative feedback is generated with a odd cycle of links that dampen the movement of system parameters. From a Systems Dynamics perspective a system can only maintain itself in its environment if it has negative feedback loops to produce homeostasis which is set against the various positive feedback loops within the environment. Take away the negative feedback loop that produces a restricted economy and you have left the positive feedback loops of the general economy which run open loop and unfettered and generally destroy any system without positive feedback that enters its space. We can thus describe the meta-system or general economy with the same systems dynamics equations that we use to describe the system or restricted economy, however what is missing is the negative feedbacks that would make homeostasis possible and so the systems or restricted economies are torn apart by that environment like a small boat in rough seas. So it is not so much that we do not know about meta-systems, as we ignore them, and do not appreciate that they have a structure of their own. In this case the structure of the meta-system is the relation between the negative and positive feedbacks in the meta-systemic field

and the singularities that mark the transitions between them. Another way to visualize these fields is by using the Catastrophe Theory of Rene Thom. It posits environments of folded surfaces that intersect across which points move and sometimes discontinuously drop over folds. Rene Thom posited sixteen such surfaces as archetypal. Normally we only talk about the simplest of these surfaces, but if we consider the complexity of the butterfly and other more complex Catastrophe theory surfaces then we get a static picture of the topology rough seas with their singularities or discontinuities which are more easily visualized than in the case of the positive feedback equations of systems dynamics models. What is interesting about Catastrophe theory is that it posits that a point will move along a surface, but then fall off that surface over a fold and leave the surface in freefall until it hits the surface again. The meta-system can be visualized as a surface with multiple folds which generate multiple discontinuities rather than just one which is the simplest case. When we study these two ways of visualizing the meta-system together we get the picture that the meta-system is made up of four matters:

Miracles: positive feedback in positive dimension

Blackholes: positive feedback in negative dimension

Singularities: topologies which induce sudden anomalous and infeasible changes

Continuities: topologies that induce expected and feasible changes

But there is a more general description of the meta-system that needs to be considered beyond its field properties. This is in terms of the following matters:

Arena/Liminality – Field/Anti-Field

Horizon/Boundary– Limits/Edges

Source/Terminus – Prototypes/Archetypes

Origin/Sink – Entry/Exit

A meta-system is a field in which systems and anti-systems arise, become, decline and vanish. It is like the operating system for an application on a computer which controls resources such as CPU, Memory, Disk space,

communications mechanisms, etc. Such a meta-system forms a field in which these systems come to be and then eventually disappear. As such the meta-system is an arena in which the systems show up and become present with a specific identity within spacetime. While they are within that arena they have effective action on the other systems and on the meta-system itself which gives them reality and it has its own inner workings which allow it to be true to itself, or express its own truth with respect to other systems. In other words while in the arena the systems can manifest all the aspects of Being (identity, presence, truth, reality). Systems within the meta-system have their own boundaries, but the boundaries of the meta-system itself is more like a horizon, i.e. the meta-system external boundary is fuzzy, ambiguous and ill defined for the systems within it. It is only if the arena of the meta-system is turned into a system of systems that this boundary becomes determinate and crisp. An analogy is the Greek idea of "Ocean" the world stream that surrounded the whole world. On old maps there were monsters and it appeared as if the world had an edge that were painted on the peripheries of the maps, these were indicators of the nature of the meta-system environment.

So meta-systems have determinate internal boundaries where they touch systems but indeterminate horizons as external boundaries. But beyond the external boundaries are a liminal space that is not part of the arena. It is in this space that the ultimate source and terminus of the systems and anti-systems that appear in the arena lay. But each system and anti-system as specific entry (origin) and exit (sink) points within the environment where they come into being and then vanish from being from the perspective of everything and everyone within the environment. A good example of this is Object Oriented programming. An object has a template from which instances are made at execution time. The template is the source/terminus of the object while the instance of an object enters the execution space when a create operation is performed and it leaves the execution space

when a destroy operation is performed on a particular instance. So source/terminus of the system/anti-system beyond the arena is different from the existence of the system or anti-system within the environmental arena itself. The source or terminus lies in the luminal sphere "beyond" the execution space of the meta-system. For instance, in operating systems we have a sense that this liminal sphere is the network to which the computer on which the operating system resides is a liminal space. And we see lots of these strange liminal effects occurring on the internet itself. However, in the case of source templates of objects in object oriented programming, this liminal space is not an execution space but a conceptual space which is not embodied. So the liminal spaces for different sorts of meta-systems can be different from each other depending on the nature of the meta-system. But from these examples we see that there is in the meta-system a kind of circulation where the system arises from its source and then enters the arena of the meta-system at a particular origin point, then interacts within that space with other systems and anti-systems, using resources that are given to it by the meta-system, until the meta-system or the other systems destroys the given system, at which point all its resources are taken from it at a sink, and the system returns to that great repository of possible systems in the sky, or wherever that is its terminus. Systems are produced from prototypes and are archetypal based on their sources and terminuses.

In human religion and in mythology there are a lot of belief structures that concern the meta-system for humans and that constrain human existence. There are questions of where we come from and where we are going with respect to the meta-systemic field. One can read these belief structures as projecting the meta-system schema on human existence. As we know there are myriad meta-systemic projections of this kind. But what is interesting is that they all have a structure similar to that we are positing as the conceptual structure of the meta-system itself.

Within the field of the arena are the meta-systemic properties of blackhole, miracle, singularity and continuity that every system and anti-system has to deal with in its struggle to remain viable. Viability is for the most part the ability to establish homeostasis and avoid the blackholes, discover and exploit the miracles (like food sources), and avoid the singularities and navigate the continuities. For instance one of the blackholes in physical systems is entropy. In order to counteract it one must find a way to generate or latch onto some sort of generator of negative entropy. While entropy is a global property of the arena of physical phenomena, negative entropy is always local and associated with high energy fluxes which can become chaotic. The balance between high energy fluxes that become chaotic and entropy leads us to the edge of chaos where novel orders can be generated. Emergent phenomena tend appear when systems take aim at maintaining focus on the edge of chaos. Emergent phenomena themselves are positive temporal singularities that produce systems with new characteristics and emergent properties which are not merely supervenient on prior pre-emergent properties. But other sorts of temporal singularities can be devastating, such as environmental catastrophes, such as in computer science when someone switches off the computer. There is a delicate trade off between singularities, continuities, miracles and blackholes that need to be negotiated by each type of system aiming at viability within its given environment. If any of these delicate trades are violated then the system suddenly becomes unviable and this leads to catastrophe for the systems within that environment. The meta-system is the face of everything that can go wrong for the system with respect to its meta-system. The system is at risk within its meta-system and the key to understanding the meta-system is to understand those risks, especially the catastrophic ones. By understanding the catastrophic possibilities for a system within its meta-system we gain insight into the nature of the meta-system itself which not only supports the system and gives it resources but also can destroy that system if

large scale meta-system changes occur which are beyond the scale that can be compensated for by the systems.

Open-Scapes

We are discussing meta-systems because our language does not really have a good name for this type of schema that is the antipodal dual of the system. All the words that we might use, context, milieu, situation, circumstance, field, "operating system", medium, media, etc. are all specific types of meta-systemic phenomena rather than the general case. When we look into our language we find that there is a word that is near to the general case, i.e. the conceptual core of what we mean by meta-system and this is the word "-scape." Unfortunately this word is always a suffix added to another word, like landscape, mindscape, seascape, cityscape. Thus we would like to coin the term open-scape to describe the meta-system. An **x**-scape is a panoramic view from a particular position in the landscape of everything that can be seen from that point without moving but only rotating around the axis tied to a specific point in the landscape. This is the phenomenological grounding of the meta-system. In other words the meta-system is everything seen from a particular situated point of view. This leads us to consider how a system is really a gestalt, and that the meta-system must be seen as a proto-gestalt. In other words, we see gestalts everywhere we look as we produce wholes in our visual fields which can be seen as systems, or forms, or patterns etc. But we seldom ask what is the conditions for seeing a gestalt. The conditions for seeing a gestalt is our glance from one thing to another in our immediate environment. What is it that determines the path of the glance from one thing to another within the environment. For instance, we all have the experience of hearing a strange unexpected sound at night in our immediate environment. What do we do? We freeze and we sense the environment to our utmost ability to determine if the sound is a portent of danger. This is a reptilian response from our ancient genetic past. Reptiles freeze to

conserve energy before they fight or flee. Sometimes they will continue the freezing in order to play dead. This view of the environment from that frozen set stance is the x-scape where we take in a panorama of signs and sounds and scents etc from our environment without moving in order to determine the next course of action. The scape we are talking about can be a landscape, seascape, or any other type of environment. But the nature of this environment is its openness, our openness to it and its openness in terms of manifesting phenomena. So we will call the meta-system as proto-gestalt the openscape. The proto-gestalt is what David Bohm calls an implicate order. Systems have explicit order but proto-gestalts have implicate order. We unfold the implicate order in the openscape as our gaze moves from system to system, i.e. gestalt to gestalt as we appraise the environment for threats. When we unfold this implicate order we are in fact unpacking according to the traces what exists in that environment. In other words we are looking for what is missing, what we missed when we looked at the environment before, the unseen threats that lurk in the environment are what is foremost in our minds as we look out on the panorama of what is present within the immediate environment. We are looking for the traces of what we have missed in our more casual assay of the environment previously. In fact we have a mode of perception that is always keyed into the sensing of the environment at this level which is called the glance. We continually monitor our immediate environment through glances, which is different from what we look at directly within the environment. What is interesting is that our glancing at things on an ongoing basis is linked to the proto-gestalt just as is our hyper focus in frozen posture when our fear has been tweaked by some unexpected feature of or event in the environment. Both of these modes are directed at the proto-gestalt of the openscape meta-system rather than at system gestalts that appear within the meta-system. We look at gestalts but we glance at the openscape prompted by the implicate order of the proto-gestalt. We hyperfocus on the openscape and

search for traces of what is missing within the protogestalt of the meta-system that surrounds us which is composed of the gestalts we notice and are familiar with. This is to say that our over intense or less intense survey of the situation are directed at the proto-gestalt while our normal looks at gestalts are directed at what we have already schematized in the situation.

This phenomenological relation we have to the proto-gestalt (conceptually the meta-system, more generally the open-scape) is made more complex because there are two different types of gestalt (conceptually the system). There are visual gestalts that are primarily static grasping of phenomena as wholes, and there are the auditory gestalts that are primarily dynamic grasping of phenomena as wholes. In other words there are both static or dynamic gestalts. The dynamic gestalts can be called temporal gestalts as opposed to primarily spatial gestalts. Temporal or Dynamic gestalts do not get the recognition they deserve in the literature. In the dynamic gestalt it takes time for something to become what it is. But it is what it is the whole time it is becoming what it is. In other words as we say a word, sentence or speech which takes time to utter we are dealing with whole events which are nested in other whole events that are not all present at once. Temporal gestalts are plays of presence and absence together in a chunking of time as well as space. We must look at the open-scape not just as a homogeneous spatial environment in which we are free to look at anything any time. Rather the open-scape has a structure that determines the implicit order in which gestalts are seen and the time that it takes for temporal gestalts to appear. It is this structuring of the meta-system projected onto the environment that is the key element we are trying to capture in our description of the open-scape. This implicate projected structuring of our immediate environment out to the horizon in relation to our response to threats, real or imaginary has not been studied enough. It is a schema that is the dual of the system schema. And our lack of understanding of this schema is a critical missing element of our

understanding of the context of the systems we design.

Meta-system Representation

One question that we will address here that has not been addressed before in previous papers is the question of Meta-system Representation. In other words, how do we represent the transition from a system to a meta-system such that we see the trace of the system in the meta-system environment. For this we will appeal to a literary device as our guide and also consider the implications of the Systems Theory of George Klir. In *Architecture of Systems Problem Solving* Klir shows us how to decompose a system into its variables and considers the possible relations between these variables as the possible system architecture. He calls the process of starting from the variables to derive the whole system the process of "system identification" and the process of starting from the whole system to create the structure of the variables "system reconstruction." What we want to do is follow out the implications of this for the meta-system. In the meta-system each system has multiple shadows that it casts on the environment. These shadows are the functions within the system that relates to the environment. Normally we look at the systems themselves as substantial things within the homogeneous plenum of the environment. But what if we turn the tables and view the systems within the environment from the meta-system perspective. In that case the meta-system would take account not of the systems but of the shadows cast by the systems on the environment. In this case we could consider the systems to be specters that are merely made up of their shadows cast on the environment, rather than something substantial. In most cases we are talking about the variables that correspond to the input and output variables within the system as related to specific corresponding output and input variables of other systems or the meta-system. To distinguish them lest us call the shadow variables handoff variables or handon variables. Handoff variables give information

or energy or matter to the input variables of the system, and handon variables take the output from system variables and hand it on to either other systems or reservoirs within the meta-system. The handoff and handon variables are the shadows of inputs and outputs from systems in the meta-system. Both the System and the Meta-systems have their own possible architectures of internal variables with their states that give them each a unique architecture. But one way to view the system is merely as a specter which reacts to the handoff and handon shadows of the systems within the meta-systemic field. Thus it could be seen merely as a collection of these shadows rather than something constituted as a unity within itself. In this way we could see the collection of systems within the meta-system as a set of decentralized functions that react to the handoff and handon shadows rather than as a unity which is a whole in itself as we would normally think of a system. Let us call the parts of the meta-system that collects all the shadows of a particular type across all the systems the meta-system contains an emanation. We would call it that because the emanation would collect together the response from all the shadows of a particular type and give the meta-system response to all of them as a mass effect. Thus there might be multiple mass effects generated by the response to various system shadows that emanate from the meta-system. But let us follow Blake and call these fusion of these mass effects a Zoa, i.e. lifeforce of the meta-system.

Blake in his poem the four Zoas identifies four manifestations of Albion which occurs when Albion is asleep. These manifestations are called Zoas, or lifeforces. Each Zoa has an emanation, a shadow and a specter. But if we think of a Zoa as having multiple emanations, and emanations having multiple shadows, and shadows being unified in a specter, then we get a picture of the inverted world of the meta-system which is quite interesting.

What we have not yet discussed is the fact that just as we have the dual of systems in the meta-system, so to there is a dual of the set

called mass. We live in a culture that appreciates systems far more than meta-systems, and we also live in a culture oriented toward sets far better than its orientation to masses. We would note that other cultures have been mass oriented, such as India and China and that they have developed logics that are mass oriented rather than set oriented to go along with this different way of looking at things. Mass logic is called Pervasion Logic while Set logic is Syllogistic Logic. An important point made elsewhere is that there should be an alternative form of the mathematical categories that are based on mass that is the dual of the set oriented categories that is the basis of our mathematics in the West. If we had such a set of mass based categories then we would be much better off in Systems Engineering because many of the problems we have describing systems in operation or executing is because these are mass not set phenomena. We design things using a set approach, but when we execute or operate these systems they become masses and we have no categories or logic to support our thinking about systems in this state. Also when we move from the system to the meta-system many times the meta-system operates as a mass rather than as a set. Both systems and meta-systems can have both set and mass modes. For instance if we design a meta-system we also design it as a set, but when we operate it then it becomes a mass-like thing. So there is an interplay between set and mass here, but many times we want to consider the system as a set, say a set of different kinds of objects, and the meta-system as a mass-like field that those objects operate together within. So at the extremes we are looking at the relation between a set like system in a mass like meta-systemic field. But all the other permutations are possible as well. Our logic and our mathematical approach to description of these schemas should accommodate all the different permutations of system/meta-system and mass/set including their logics. Now the Blakian vision of the Zoas and their parts gives us a sort of inverted view of the system. We can see the systems within a meta-system as an epiphenomena of the meta-system. In this case

the fusion of the emanations of the mass like behavior of the meta-system into the Zoas is the important thing. Systems are merely their functional shadows collected together in emanations, and the system themselves are merely specters that are lists of these shadows that are instantiated in the system. Thus the system is considered thin and the meta-system thick, rather than the other way around which is more usual for us. One of the positive aspects of viewing a system this way within the context of the meta-system is that it maximizes the reusability and interfacing of systems within the framework of the meta-system. This way of looking at things reduces the systems to mere shadows of themselves rather than being substantial things in their own right. It is the exact opposite of the way we look at systems today which are center stage in our vision of our world. Meta-systems are peripheral if considered at all. But if we turn this upside down and consider the meta-systems as the key schema and the systems as peripheral then the vision is similar to that of Blake of the differentiation of his Zoas. In this vision there is a transition from set-like to mass-like approaches. But the transition is such that the system is vitiated becoming just a list of its shadows, and the shadows are really responses to the handoff and handon variables of the meta-system. And these are collected together into mass like emanations as the meta-system reacts to the various shadows en-mass and produces an overall and specific response. But the meta-system is still a whole which is seen as the fusion of its emanations. And for Blake these fusions of the emanations into the Zoas itself forms a minimal system of for kinds of Zoa that again fuse into Albion who is asleep. In other words the Zoas are the creatures in the bad dreams of Albion. If we consider that the hardware on which the operating system works is a final layer and that the operating system as a meta-system itself has four viewpoints on it, i.e. data, function, agent and event, then we could see how the Zoas could even fit into our scheme as the differentiation of design viewpoints on the meta-system, which in this case is seen in this vision as the substantial part of the

system/meta-system duality.

This vision of the dominance of the meta-system over the system is merely given as an alternative representation that favors the meta-system so that we can break free to some extent from our obsession with the system schema. But it can be seen as a general representational model for the meta-system in its relation to the systems within it which captures the transition from set-like approaches to mass-like approaches very well. Because every system is inside a meta-system for the subsystems within it, we can reverse this image and place it inside the system itself as its relation to its own sub-systems. In that way the specter becomes a solid and full being inside, which from the outside appears as only a wraith. Thus it is interesting to understand that this view can be nested like Russian dolls just as the sub-system, system, and system of systems picture can be recursively applied. That means that everything that is considered as a recursive application of the system schema can also be seen as a nesting of meta-systems. The system in this case is only the surface separating the various nested meta-systems. In other words the system merely becomes a shell for transitioning between meta-system levels.

Solving the problem of meta-system representation allows us to understand the relation between other schemas as well as they are basically repetitions of the relations between system and meta-system at another emergent level. In other words as we ascend the levels of the schemas we can always consider the lower level schema to be a specter with shadows on the emanations of the higher level schema which has its own emergent fusion (with a lifeforce of its own) of these emanations which in turn fuse the shadows of the specters.

Conclusion

Meta-systems Theory is very important to Systems Engineering because it is the hidden dual of the system, i.e. it is the interface through which the system interfaces with

reality, and asserts its own truth to its requirements, and is given identity through its unique presence. Identity in this case is the instantiated list of shadows within the specter. Presence is signified by the interface between the input and output variables of the system in relation to handoff and handon variables of the meta-system. Truth has to do with the production of a truth model which takes the various inputs of the shadows and produces a mass like emanation from it which is then a reference point for the shadows sensing of the current situation. Reality, even if it is virtual is created by the fusion of emanations into the lifeforce of the Zoa which is a viewpoint within the meta-system design. Further there is an extension beyond representability to the level of Albion where there is a fusion of these animating viewpoints. If we can understand this alternative vision of Blake, who took umbrage at the vision of Newton which saw the world as the interaction of lifeless objects based on ironclad laws of nature, then perhaps we can see that the Romantic vision of the Enlightenment was an attempt to recognize the need to consider the meta-system as well as the system. As Gadamer notes in Truth and Method, the Romantic Vision was in fact a kind of affirmation of the basic structure of the Enlightenment, because although it turned the model upside down fostered by the enlightenment it still made the same distinctions paramount, like the difference between reason and the irrational. Mass like phenomena are brushed under the carpet and labeled irrational as a set based approach is raised to high status or pushed low depending on the attitude toward the enlightenment. What we need to realize instead is that the mass based approach is merely the dual of the set based approach which has its own different legitimate logic, and this difference is just as important as the difference between system and meta-system. Meta-systems theory needs to be brought out of the shadows itself and seen as contributing to our ability to produce systems by creating a difference that makes a difference between the system and the non-system which is not just another system at the same or a different level of abstraction.

