# The Role of Universal Heart in Our Theoretical Models (specifically in *A Dialectical "Theory of Everything"*)

by Joy-to-You

About this Author: All one need know about me is that I seek and find Joy. No matter what the problems on this eartH or in Life, one can always choose to find Joy, anywhere and everywhere. Joy is easily found in ourselves: Just look at "YOU" reflected in a mirror -- one sees the reflection: "JOY". Quite simply, YOU are JOY!

In any scientific, or thought-based, theory of Reality, the "science" and/or the "mathematics" behind such a theory may often seem devoid of any "human feelings." After all it is these physical and emotional feelings which a major theory is ultimately addressing / redressing as it attempts to ameliorate the human condition. The role of "feelings" as expressed by humans, animals, or some more general class of being, seems completely *un-acknowledged*. Feelings, generally "matters of the heart," simply do not seem "felt" or acknowledged in such theories. This *unAcknowledgment* is surprising, especially when the psychohistory and literature of Mankind is replete with references to "Heart" and matters of Heart.

Philosophers, writers, and theologians have addressed this notion for many an "epoch." Plato, of course, spoke of "the Good," a pure Form. Christians acknowledge a "loving Christ," mediating between the Invisible and Visible Worlds. Muslims pray to Allah: That with a "thousand names." Buddhists aspire to Nirvana, or pure en(Light)en-ment. Modern Science, in acknowledging physical objects/matter (mass,  $\mathbf{m}$ ) and physical energy ( $\mathbf{E}$ ), elegantly expresses their "equivalence" in Einstein's " $\mathbf{E} = \mathbf{mc}^2 = \mathbf{c}(\mathbf{m})\mathbf{c}$ ", or as " $\mathbf{m} = \mathbf{E}/\mathbf{c}^2 = (1/\mathbf{c})\mathbf{E}(1/\mathbf{c})$ " – each being "sandwiched in light".

## Is the Universe Friendly? Does It have Heart?

Einstein himself once claimed: The most important question we can ask is whether the Universe is friendly (or not)? And he seemed to allude that the Answer we choose to give ("assume") will determine how we perceive and experience that Universe we assume. The existence of a "Loving Energy" or "Universal Heart" which may help or guide us, can no longer be ignored and remain unacknowledged. *Quite frankly, we need a "Friend."* Actually, collectively **WE** (Whole Earth) seem(s) to need a "Heart ally" to be included in our thinking/feeling as human beings. Now is the time to assume and assert/insert a supportive "Heart" into our equations, our models purporting to serve the well-being of humanity. *How can Humanity be served if its own Love, or Universal Heart, is not in our theories -- our supposed "models" of Reality? Without Heart, how can man(un)kind evolve into HumanKind?* 

This discussion will show that such "Universal Heart" is already present in the F.E.D.\* model, but perhaps not very visibly. Out of its concern for the future of humanity, and therefore, "from the Heart," its dialectical theory has been put forth. This author believes that the spirit in which F.E.D. has created and offered its theoretical model makes this Heart present in that model. But if "proof" be desired, we shall postulate Universal Heart and show its presence in the theory.

In the Meta-Comment [page-unit **218**] in *Volume 0\** of <u>A Dialectical "Theory of Everything"</u>, Sophya St. Germain reminds us:

Viewed "'psychohistorically", these equations carry emotional, affective, feeling content, not just colorless – abstract – cognitive content. They potentially posit a powerful «mandalla», manifesting the glorious 'erosis' of "cosmogenesis".

It is very much in this spirit of "<u>feeling content</u>" that this mathematician wishes to postulate and perceive "Heart". By inclusion of "Heart" in our theories, I am not necessarily suggesting any particular belief system, theistic or otherwise. The only belief is an acknowledgment that there exists Heart, defined as the <u>common love/feelings/thoughts/beliefs and their corresponding active qualities</u> of each in Humanity and/or all beings. Here, <u>common</u> means "set-intersection," not "set-union." Such an intersection might be

perceived as null -- but even the null set can serve as Acknowledgment! So, our postulate is: *There exists Universal Heart -- which we may perceive/use as we feel/choose.* We now show the effects of Heart in/on a theory.

# Heart as "Heart-operator" that produces Change

At the heart of the Dialectical Theory is the " $\underline{\text{delta}(U)}$ ", where we let  $\underline{U} = \underline{S}_t = \underline{S}_{now}$ . We now, notationally, choose to label this  $\underline{\text{delta}(U)}$  as " $\underline{\text{Universal Heart}}$ ", or  $\underline{\Psi(U)} = \underline{\text{delta}(U)}$ . Thus, Heart is now seen as a qualo-operator/energy creating change events/possibilities. *Universal Heart operating on the Present* ( $\underline{U}$ ) *creates* (differentiates and exponentiates) all the possibilities offered by the power set of  $\underline{U}$  ( $\underline{2}^{\underline{U}}$ )! It is Heart which powers creation of the power set, thereby offering us solutions to our allegedly unsolvable problems. Heart induces Change. Heart power reSolves problems. Universal Heart is like a "generalized-eventity" -- an entity creating possible events! Heart heartifies (loves/creates).

Thus, with a simple but profound change in our viewing (our perceiving), we can now "feel" or fully-acknowledge that the "delta" of the Dialectic is the Universal Heart operator, operating to induce and produce Change! No longer is the Change simply symbolized by  $\underline{\text{delta}(U)}$ . Change is now seen to be the result of the <u>Heart operator acting on U!</u> The Heart-operator  $\underline{\underline{v}()}$  into a new solution set ( $\underline{\underline{U}}$  union  $\underline{\underline{v}}$ ). To what may appear as lifeless, mathematically, the Universal Heart operator gives Life (energy), math(e)magically!

But why has it taken us so long to "see", "feel", or perceive this Heart magic? Are we blind, or don't we know how to feel? Or is something more subtle and invisible at play? It's probably the latter. Recall that Einstein also said repeatedly, "The Lord is subtle but not simply mean." By this he did not imply a "mean/cruel" heart in Nature, but rather that Nature's ways are subtle and that She may reveal those ways (Her secrets) only when we are ready. By now "including" Heart, WE (Whole Earth) shows Itself to be Ready – ready for the changes offered by Universal Heart.

## Heart as an "Invisible Dual-Identity and Pure Potentiality"

Let us assume that Heart is also an "invisible ontological qualifier" that is always present for any  $\underline{U}$  such that  $\underline{U}+\Psi=\underline{U}=\Psi+\underline{U}$  [See A1 below.] It does not affect  $\underline{U}$  in any way under addition (the surface level of qualifier relating: forming sums). Thus  $\Psi=\mathrm{id}(+)=q_0$ , the "zero-th ontology", as the quantifier "0" is for Real Numbers:  $\mathbf{r}+\mathbf{0}=\mathbf{r}=\mathbf{0}+\mathbf{r}$ .

In multiplication (a deeper level of qualifier interaction), Heart interacting with any  $\underline{\mathbf{U}}$  preserves  $\underline{\mathbf{U}}$  [See A1 below], letting  $\underline{\mathbf{U}}$  be  $\underline{\mathbf{U}}$  in multiplication:  $\underline{\mathbf{U}} \times \mathbf{\Psi} = \underline{\mathbf{U}} = \mathbf{\Psi} \times \underline{\mathbf{U}}$ . Thus  $\mathbf{\Psi} = \mathbf{id}(\mathbf{x}) = \mathbf{q}_0$ , as the quantifier "1" is to Real Numbers:  $\mathbf{r} \times \mathbf{1} = \mathbf{r} = \mathbf{1} \times \mathbf{r}$ . Again, Heart has its "invisible presence" in multiplication -- always with us, letting our  $\underline{\mathbf{U}}$  be itself! Thus, Heart can be viewed as both inside our  $\underline{\mathbf{U}}$ :  $(\underline{\mathbf{U}} \times \mathbf{\Psi}) = \underline{\mathbf{U}} = (\underline{\mathbf{U}} + \mathbf{\Psi})$ , and/or outside our  $\underline{\mathbf{U}}$ :  $(\underline{\mathbf{U}}) \times \mathbf{\Psi} = \underline{\mathbf{U}} = (\underline{\mathbf{U}}) + \mathbf{\Psi}$  -- as an endogenous and exogenous "invisible Presence." Heart's presence is neutral mathematically under + or  $\times$ , yet that Presence exists: anywhere / everywhere, anywhen / everywhen. Heart is a simple "presence" that flows with + or  $\times$ , distributing through ("parentheses"), imbuing all *affect* ively -- but not *effect* ing a theory's equations one *iota*!

Amazingly, Heart is a "dual-identity," for both Addition and Multiplication, and therefore, It is a **2**-in-**1** kind of "kNew Unity" for a new thinking/feeling/perceiving. It is both like **0** and **1**, yet unique from them each -- since  $\blacktriangledown$  does not "annihilate another qualifier" or "insist on Its way", as **0** does in real multiplication:  $\mathbf{r} \times \mathbf{0} = \mathbf{0} = \mathbf{0} \times \mathbf{r}$ . Clearly, ontological multiplication always preserves and/or elevates, and with  $\blacktriangledown$  it never annihilates! [See A2 below.] Many might call such an [id]entity: "nothing," like the "empty set." But, is the empty set { } simply a set with no elements, or might it be a set representing pure potential? In this case, we shall interpret  $\blacktriangledown$  to be *pure invisible potentiality!* Heart is certainly not Nothing – for it's *in* Everything!

Furthermore, Heart interacting with Itself can only produce Heart, Itself ( $\nabla + \nabla = \nabla$  or  $\nabla \times \nabla = \nabla$ ). But what might  $\nabla$  operating on Itself be:  $\nabla(\nabla) = \nabla$  By analogy,  $\nabla(\nabla) = \nabla \nabla = \nabla$ , the first element of  $\nabla$ , so perhaps  $\nabla(\nabla) = \nabla \nabla = \nabla$  and  $\nabla$ , the first element of  $\nabla$  leaves el

Thus, Heart =  $\nabla$  is a hitherto invisible "key" with manifold aspects: "qualo-operator", "generalized-eventity", "dual-identity", "pure-potentiality" in our open ontological meta-number and operator space. Thus, our original Fundamental Equation of the Dialectic (where  $\underline{U} = \underline{S}_t = \underline{S}_{now}$ ):

$$\underline{U}_{new} = \underline{U} \times \underline{U} = \underline{U} + \underline{delta}(\underline{U})$$

$$becomes$$

$$\underline{U}_{new} = \underline{U} \times \underline{U} = \underline{U} + \underline{\Psi}(\underline{U}),$$

$$which allows \underline{\Psi} \text{ to be even more visible as}$$

$$\underline{U}_{new} = \underline{U} \times \underline{U} = (\underline{\Psi} \times) [\underline{U} + \underline{\Psi}(\underline{U})] (+\underline{\Psi}),$$

the same equations: whether ♥ is seen or unseen, acknowledged or not!

## Heart as a "Door to a New Knowing"?

We have shown at least what was to be shown. Assuming and notationally inserting a Heart operator (and "dual-identity") into our Dialectic does not change the Dialectic. Rather, it makes the Universal Heart agent clearly "visible" and acknowledged in the Dialectic. Perhaps our ac**Know**ledg**ing** will gift us the Heart-key that opens Its door to a *kNew* **Knowing** -- by which we listen to and act on (acknowledge) our own inner whispers: "Hear it, Hear't"!

What <u>Heart</u> does for our model (and for us) is much as observed by the F.E.D. co-founders in Afterword **II** [page-unit **223**] of *Volume 0*:

It is as if, having renounced the "Midas Touch", we have gained the 'Midas Mind', and every topic it touches turns to conceptual gold!

Only I should like to re-state that observation in terms of Heart:

It is as if, having acknowledged "Heart's Touch", we have gained the "Heart-Mind", and every topic It touches turns to feelings/thoughts of Heart-gold!

Since this author is not a member of F.E.D., he does not speak for it; nor are his ideas/beliefs necessarily those of the Foundation. However, he very much values F.E.D.'s *Dialectical Theory* and finds it to "include Heart," as explained above.

The Axiom of Choice allows (and ultimately requires) our further choice(s). With Heart in our theory, may It remind us of *our common Humanity which Heart represents*. May It guide Us to humane choices -- for it is Universal Heart's operational "*puls-ing / plus-sing*" that creates / adds the needed possibilities for remedial "Heart-Change" -- on our revolving and *evoL*ving -- "eart(H)eart".

-- Joy-to-You (May, 2012)

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\*F.<u>E.D</u>. = Foundation <u>Encyclopedia Dialectica</u>, authors of <u>A Dialectical "Theory of Everything"</u> –

Meta-Genealogies of the Universe and of Its Sub-Universes: A Graphical Manifesto,

**Volume 0**: *Foundations*. Many F.<u>E</u>.<u>D</u>. texts are available for free download at the following websites -- www.dialectics.org and www.adventures-in-dialectics.org

#### Appendix A1: The Dual-Identity of ♥

### *Proof that* $id(+) = \Psi = id(x)$ :

Let there exist a qualifier " $\mathbf{q}_0$ " not in  $\mathbf{NQ}$  such that  $\mathbf{q}_0 + \mathbf{q}_0 = \mathbf{q}_0 + \mathbf{q}_0$  for any  $\mathbf{q}_0$  in  $\mathbf{NQ}$ . Then  $\mathbf{id}(+) = \mathbf{q}_0$ .

Further, assume that under subscript\_0,  $q_0$  follows the same *aufheben* product rule as all  $NQ \cup \{q_0\}$  elements.

So  $\mathbf{q}_0 \times \mathbf{q}_0 = \mathbf{q}_0 + \mathbf{q}_{0+0} = \mathbf{q}_0 + \mathbf{q}_0 = \mathbf{q}_0$ . Thus,  $\mathbf{q}_0$  is 'Boolean' -- not 'contra-Boolean' like the  $\mathbf{N}\underline{\mathbf{Q}}$  -- and so is notated without an underscore. Then  $\mathbf{q}_0 \times \underline{\mathbf{q}}_n = \underline{\mathbf{q}}_n + \underline{\mathbf{q}}_{n+0} = \underline{\mathbf{q}}_n$ , and, similarly,  $\underline{\mathbf{q}}_n \times \mathbf{q}_0 = \mathbf{q}_0 + \underline{\mathbf{q}}_{n+0} = \underline{\mathbf{q}}_n$ 

 $q_0 + \underline{q}_n = \underline{q}_n$ . Therefore,  $id(x) = q_0$ .

Let  $\underline{\mathbf{M}}$  be a qualifier sum,  $\underline{\mathbf{M}} = \underline{\mathbf{q}}_{k1} + \underline{\mathbf{q}}_{k2} + \dots + \underline{\mathbf{q}}_{km}$ . Then  $\mathbf{q}_0 + \underline{\mathbf{M}} = \mathbf{q}_0 + (\underline{\mathbf{q}}_{k1} + \underline{\mathbf{q}}_{k2} + \dots + \underline{\mathbf{q}}_{km}) = (\mathbf{q}_0 + \underline{\mathbf{q}}_{k1}) + \underline{\mathbf{q}}_{k2} + \dots + \underline{\mathbf{q}}_{km} = \underline{\mathbf{M}}$ . Thus,  $\mathbf{q}_0 = i\mathbf{d}(+)$  for all of  $\mathbf{q}_0 = \mathbf{q}_0 + \mathbf{q}_0 = \mathbf{q}_0 + \mathbf{q}_0 = \mathbf{q}_0 = \mathbf{q}_0 + \mathbf{q}_0 = \mathbf{q$ 

Next, we reasonably assume distributivity of  $\times$  through such a "non-amalgamative" sum, and expand  $\mathbf{q}_0 \times \underline{\mathbf{M}} = \mathbf{q}_0 \times (\underline{\mathbf{q}}_{k1} + \underline{\mathbf{q}}_{k2} + \ldots + \underline{\mathbf{q}}_{km}) = (\underline{\mathbf{q}}_0 \times \underline{\mathbf{q}}_{k1}) + (\underline{\mathbf{q}}_0 \times \underline{\mathbf{q}}_{k2}) + \ldots + (\underline{\mathbf{q}}_0 \times \underline{\mathbf{q}}_{km}) = (\underline{\mathbf{q}}_{k1} + \underline{\mathbf{q}}_{k1+0}) + (\underline{\mathbf{q}}_{k2} + \underline{\mathbf{q}}_{k2+0}) + \ldots + (\underline{\mathbf{q}}_{km} + \underline{\mathbf{q}}_{km+0}) = \underline{\mathbf{q}}_{k1} + \underline{\mathbf{q}}_{k2} + \ldots + \underline{\mathbf{q}}_{km} = \underline{\mathbf{M}}.$ 

Similarly,  $M \times q_0 = (q_{k1} + q_{k2} + ... + q_{km}) \times q_0 = (q_{k1} \times q_0) + (q_{k2} \times q_0) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_{0+k1}) + ... + (q_{km} \times q_0) = (q_0 + q_0 + q_0) + ... + (q_{km} \times q_0) + ... + (q_{km}$ 

 $(q_0 + \underline{q}_{0+k2}) + \dots + (q_0 + \underline{q}_{0+km}) = \underline{q}_{k1} + \underline{q}_{k2} + \dots + \underline{q}_{km} = \underline{M}. \text{ So, } q_0 = \mathsf{id}(x) \text{ for all of } <_N \underline{Q} \cup \{q_0\}>. \text{ Letting } q_0 + \underline{q}_{0+km} = \underline{M}.$ 

 $\mathbf{v} = \mathbf{q_0}$ . Then  $\mathbf{v}$  is both the additive and multiplicative identity for all of Open Qualifier Space!

But can such be possible? This does imply that  $\underline{A}^2 = (\underline{A} + \Psi)^2 = \underline{A}^2 + \underline{A} \Psi + \Psi \underline{A} + \Psi^2 = \underline{A}^2 + \underline{A} + \underline{A} + \Psi = \underline{A}^2 + \underline{A}$ , which is always the case in  $\underline{NQ}$  since  $\underline{A} + \underline{A}^2 = \underline{q}_A + (\underline{q}_A)^2 = \underline{q}_A + (\underline{q}_A + \underline{q}_{2A}) = \underline{q}_A + \underline{q}_{2A} = (\underline{q}_A)^2 = \underline{A}^2$ . After all,

 $\underline{\mathbf{A}}^2 = \underline{\mathbf{A}} + \underline{\mathbf{A}}^2$ , is saying that  $\underline{\mathbf{A}} \times \underline{\mathbf{A}}$  "subsumes"  $\underline{\mathbf{A}}$  in qualifier space. Thus, pure potentiality offers no contradiction – only potentiality!

#### Appendix A2: ♥ as self-opposite/self-inverse in a space without opposites or inverses!

Since  $\forall + \forall = \forall = id(+)$ , this implies  $\forall + \forall = \forall = id(+)$  is self-opposite (relative to  $\forall = q_0$ ), where otherwise there are no opposites (yet defined). And since  $\forall \times \forall = \forall = id(\times)$ , this implies  $\forall \times \forall = \forall = id(\times)$  is self-inverse (relative to  $\forall = q_0$ ), where otherwise there are no inverses (yet defined). So,  $\forall$  is like "1" in that  $1 \times 1 = 1$  and like "0" in that 0 + 0 = 0.

But  $\forall$  is not like zero in two important ways. First,  $r \times 0 = 0$  for any real r, which follows from  $r \times 0 = r \times (0+0) = r \times 0 + r \times 0$  since  $\langle R, +, \times \rangle$  is a field,  $r \times 0 + r \times 0 = r \times 0 + 0$ , so  $r \times 0 = 0$ . (For any qualifier  $\underline{A}$ ,  $\underline{A} \times \Psi = \underline{A}$ , not  $\Psi$ .). Second, 0 has no real inverse since  $r \times 0 = 0$ , never 1. If 0 had a real inverse, say  $0^*$ , then  $1 = (0^*) \times 0 = 0^*(0+0) = (0^*) \times 0 + (0^*) \times 0 = 1+1$ , so 1 = 2, and  $R = \{0\}$ ! (In qualifier space, no such contradiction results because of the idempotency of all qualifiers under addition:  $\underline{A} = \underline{A} \times \Psi = (\underline{A} + \underline{A}) \times \Psi = \underline{A} \times \Psi + \underline{A} \times \Psi = \underline{A} + \underline{A}$  is perfectly "normal" for any  $\underline{A}$ !)

Appendix A3: "As above, so below ..." and "As below, so above ..."!

Proof that The Cumula under x are isomorphic to The Naturals under +:

In F.E.D. Theory, the " $\mathbf{k}^{th}$ -cumulum" from  $\mathbf{NQ}$  is the sum,  $\mathbf{\underline{C}}_{k} = \mathbf{\underline{q}}_{1} + \mathbf{\underline{q}}_{2} + \dots + \mathbf{\underline{q}}_{k}$ , which is shown to be same as

 $(\underline{q}_1)^k = \underline{C}_k$ . Thus,  $\underline{C}_m \times \underline{C}_n = (\underline{q}_1)^m \times (\underline{q}_1)^n = (\underline{q}_1)^{m+n} = \underline{C}_{m+n}$ , which implies that there exists an homomorphism H between  $\{\text{all }\underline{C}_k: k \text{ in } N\}$  under  $\times$ , and  $\{\text{all }k: k \text{ in }N\}$  under +, defined by  $H(\underline{C}_k) = H[(\underline{q}_1)^k] = k$ , so

 $H(\underline{C}_m \times \underline{C}_n) = H(C_{m+n}) = m+n = H(\underline{C}_m) + H(\underline{C}_n)$ . We have now that **H** is **1:1** and onto, so it is an isomorphism:

 $\{Cumula\ under \times\} \rightarrow H \rightarrow \{Naturals\ under +\}.$ 

Thus, if our space of "Cumula (ontologies)" is regarded "As Above" under **x**, then "so Below" it is in the Naturals under **+**. Heart reveals *Above* via what is understood *Below*, and *vice versa*.

#### *Proof that The Naturals under* **x** *suggest The Cumula under an* "**xx**" *operation:*

As an example of Below revealing what may be Above, we notice that multiplication in **N** has yet no analog in Cumula space. So, let us define an "xx" in Cumula space by  $\underline{\mathbf{C}}_m \times \mathbf{\underline{C}}_n := \mathbf{h(nm)} := (\underline{\mathbf{q}}_1)^{mn} := [(\underline{\mathbf{q}}_1)^m]^n = \underline{\mathbf{C}}_{mn}$ .

Then  $\times\!\!\times$  is commutative since  $\underline{\mathbf{C}}_n \times\!\!\times \underline{\mathbf{C}}_m = \left[\left(\underline{\mathbf{q}}_1\right)^n\right]^m = \left(\underline{\mathbf{q}}_1\right)^{nm} = \underline{\mathbf{C}}_{nm} = \underline{\mathbf{C}}_{mn} = \underline{\mathbf{C}}_m \times\!\!\times \underline{\mathbf{C}}_n$ .

Let  $h(k) = (\underline{q}_1)^k = \underline{C}_k$ , so  $h(m) \times h(n) = \underline{C}_m \times C_n = C_{mn} = (\underline{q}_1)^{nm} = h(m \times n)$ . h is an isomorphism. Thus, what is understood "As below" in our Natural Numbers under x, can be shown "so above" in The Cumula (under x)!

{*Naturals under*  $\times$ }  $\rightarrow$  h  $\rightarrow$  {*Cumula under*  $\times$  $\times$ }.

## *Proof that The Naturals under* **^** *suggest The Cumula under an* **^** *operation:*

As another example of Below revealing what may be Above, we notice that exponentiation in **N** has yet no analog in Cumula space. So, let us define an  $^{\land}$  in Cumula space by  $h(n^{\land}m) := (q_1)^{m^{\land}n} := [(\underline{q}_1)^m]^{\wedge^n} = \underline{C}_m \wedge \underline{C}_n = \underline{C}_{m^{\land}n}$ . Then  $^{\land}$  is non-commutative since  $\underline{C}_n \wedge \underline{C}_m = [(\underline{q}_1)^n]^{\wedge^m} = (\underline{q}_1)^{n^{\land}m} = \underline{C}_{n^{\land}m} < \neq > \underline{C}_{m^{\land}n} = \underline{C}_n \wedge \underline{C}_m$ , in general.

Let  $h(k) = (\underline{q}_1)^k = \underline{C}_k$ , so  $h(m) \wedge h(n) = \underline{C}_m \wedge \underline{C}_n = \underline{C}_{m^n} = (\underline{q}_1)^{n^n} = h(m^n)$ . h is an isomorphism. Thus, what is understood "As below" in our Natural Numbers under  $\wedge$ , can be shown "so above" in The Cumula (under its  $\wedge$ )!

{Naturals under 
$$^{\land}$$
}  $\rightarrow$  h  $\rightarrow$  {Cumula under  $^{\land}$ }.

In the Reals, we know that Limit  $\mathbf{u}^{\mathbf{u}} = \mathbf{1}$  (as  $\mathbf{u}$  goes to  $\mathbf{0}$ + from above). This result might suggest that  $\mathbf{0}^{\mathbf{0}} = \mathbf{1}$ . Further, if Cumula space be expanded to include  $\underline{\mathbf{C}}_0 := (\underline{\mathbf{q}}_1)^0 := \mathbf{q}_0$ , then  $\underline{\mathbf{C}}_0 \wedge \underline{\mathbf{C}}_0 := (\underline{\mathbf{q}}_1)^{0^0} = (\underline{\mathbf{q}}_1)^1 = \underline{\mathbf{q}}_1$ , or  $\mathbf{q}_0 \wedge \mathbf{q}_0 = \underline{\mathbf{q}}_1$ . Thus, if  $\mathbf{v} = \mathbf{q}_0$ , then  $\mathbf{v}^{\mathbf{v}} = \mathbf{v}^{\mathbf{v}} = \underline{\mathbf{q}}_1$ . So, Heart, acting on Itself exponentially (with Its own exponential Love), creates the first qualifier,  $\underline{\mathbf{q}}_{one} = \underline{\mathbf{q}}_1$ !