4. Hayawic UniLogic Algebra Formal Set Approach.

A Hayawic UniLogic Algebra H is defined as a 8-tuple (B, F, H, FU, HR, BI. HF and HUM) as follows:

* 1. B. Being is a set of all arbitrary finite set of being interests elements.
* 2. F. Form is a set empty or not empty of self-contained form in which are subset of B.

* 3. H. Hayawic is a set of dynamic interests elements contained in non-empty Form whose interests elements are subset of B.

* 4. FU Form Unity is a set of representation simplest non-discomposeble multi dimensional interests elements whose are a subset of B.

* 5. HR.   Hayawic Root is a set of simplest non-representative dynamic interests whose elements are subset of F.

* 6. BI. Basic Interests is a set of non-simplest non-discomposeble timing and spacing interests of any FU whose elements are Subset of H.

* 7. HFU. Hayawic Form Unit is a representative set of sample BI of any dynamic interrelated HF in form of self-organization contained four states interests transition. Hayawic Unilogic Matrices.

* 8. HUM . Hayawic Unilogic Matrices is the interests measurement of the comprehensive characteristic of ant entity.

Notice:

B. in Hayawic UniLogic Algebra is equivalence of W. in the discipline of sets and logic W is alternatively called the Universe of Discourse or World. In the discipline of object technology an O object is an entity in the world W. but O in Hayawic UniLogic Algebra is equivalence of FU. The FU is an abstraction of a real world in simplest multi-dimensions. The Hayawic Form Unity is a mapping any FU by scheme selected sample BI to represent sample HFU by the Hayawic Unilogic Matrices.

In Hayawic UniLogic Algebra is the usage of the Basic Interests is a samples representative of non simplest interests root, and defined in terms of T&S, Time and Space interests. A HO, on the other hand, has a recursive definition and is a non-empty set of interests elements each of which can be an FU, i.e. basic T or S, or an F, i.e. derived. Structured F is Forms have a structured imposed upon them as merely sets. Examples of structures, which Forms can have, are aggregates, with or without multiplicity of their constituents.

A Form Unity FU is basic interests represent on has defined B as a HO relation on subsets of W called value sets. These subsets of HO are also each given a syntactic identifier called name.

The names of each forms value sets are part of the form definition. A form 's definition also includes the name of the form. A form is, therefore, comprised of a set of ordered n-tuples where n is the number of attributes of the form. Attributes are alternatively called characteristics.

Thus far we have introduced special subsets of B called Form F, attributes of forms FU in which is a subset of HO of the power set of H, which in turn is a subset of the power set of B. And we have introduced a subset HFU of the power set of relations or forms.

At this point we have to see how Hayawic UniLogic Algebra can be apply as a search requirement in our every day life.

1. Select B as a set-of non-empty interests elements.

1. Let electric lights circuit is ore knowledge engineering interests.

2. Defined its FU and their binary Root for formative and Normative interests

B. Let us to conquered these set of electric element as a selected Fuss and display by each binary root
a. The electric currant   (Linear /Non- Linear /High/Low-
b. The electricity connection   (Connected/Disconnected-Regular/Irregular
c. The electricity articulation   (Flexible/Unfixable-Closed/Open
d. The electricity safety   (Guaranty/Non guaranty-Extended/Untended-

e. The electricity provider   (Good/Bad-Durable/Undoable
f. The electric maintenance   (Sufficient/Insufficient
g. The electric billing   (Expensive/Chip-Exact/Inexact
h. The electric consummation   (Reasoned/Business
i. The electric workers   (Technical/Non-technical
ii. The electric business future (Up/Down-Changeable/Unchangeable

Theses different FUs may or may not customize within one or qualitative binary interests Roots each of which may attribute to other FU. And each of which may representative of Timing and Sizing interests.
of that the defined is. This technique is to simplify that defined Being in Basic Interests in which the chosen Roots attributes constitute a self-organizational contained form of electric HFU
Each of which is interrelate dynamically to each other's

2. Late us select, now, the two binary FUs to represent the electric BI as a moving and becoming interests values
of Light related to two FUs: an electric connection and power.

3. Defined its FUs related to the Light functional interests of that electric HFU organizational interests.

4. Name the Formative attributes of T&S interests. And Select, attribute or customize each FU by a relevant interested Haywire Root: The relevant custom for this case of electric organizational interests are: Up/Down for the Timing interests and Connected/Disconnected for the Sizing interests. Name its T&S as a set of interests

5- Graph and find its Formative ISU.

Connected-Disconnected
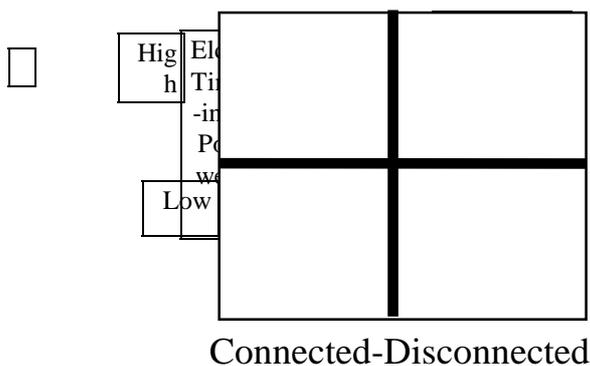
The ISU of Electric comprised four Light State States Interests.
a. Down + Disconnected = Light is in an Excluded Off State.
b. Down + Connected = Light is in a Complementary Off State.
c. Up + Disconnected = Light is in a Contradictory Off State.
d. Up + Connected = Light is in a inclusive On State

6. Name the Normative attributes of T&S interests. And Select, attribute or customize each FU by a relevant interested Haywire Root :The relevant custom for this case of electric Normative may selected from any of the previous FUs according of our purpose such:

a. The electricity safety   (Guarantee /Non guarantee - Extended/Untended.
b. The electricity provider   (Good/Bad-Durable/Undoable.
c. The electric maintenance   (Sufficient/Insufficient.
d. The electric billing   (Expensive/Chip-Exact/Inexact
e. The electric consummation   (Reasoned/Business.
f. The electric workers   (Technical/Non-technical
g. The electric business future (Up/Down-Changeable/Unchangeable.

Late us select now the Normative FUs to be related to the electricity safety by different root Attribute such: (Good/Bad-Durable/Undoable) in instead in which ware Attribute to the FU electricity provider.

We have to grave The Normative ISU
Calculate its Hayawic interests tendency and dependency value
This will be determining based on its Normative BI.

        At this point We have to see How each of these four states normative requirement can be found and measured by qualitative and quantitative by using Matrices of (Damascus) Functional states values:

The Rule of Hayawic UniLogic Inferenances

The Rule of inference of the Aristotle logic as well as the Boolean Logic is versions of HU. But the Rule of Hayawic UniLogic Inferences is not limited to.
For example, both logic did not include nor a Formative or a Normative value. The Aristotle logic is mer measurement of the prepositional mental

information by examines the relation between the premise and the conclusion. The Boolean logic did not have dynamical tendency and dependency interests value. This multi Levels value is very poor and narrow presented in the traditional logic.

But, despite this difference we may have a better understanding by starting and comparing what is common between the inferences of theses traditional logic and the HUA.

For example in Aristotle logic one may found the statement including BI in which there're two interrelated FUs:
  The Lattice Interests Roots (LIR) are the (Partial /Total) and the (Affirmative/ Negative) interests. Theses (LIR) are different compare the Hayawic States Roots (HSR) in which are not related to (N,P,L,H) Roots notations but are related to the four ISU states notation. i, e :
In part one can recall the logical presentation of the (Opposite Square) or (Van-diagram) related to (LIR) can be presented better in the framework of ISU as the follow:
Partial + Negative = Contradictory or Conflicting.
Total + Negative = Exclusive or Isolating.
Partial + Affirmative = Complimentary or Coexisting.
Total + Affirmative = Inclusive or Unifying.

Each of theses values may be used as inference resources to conclude the value of other values based on a Multi-value.

The Rule of Hayawic UniLogic Inferences is including a table of (T) in which is not limited to one of two values (T (xor (F) but is including both (T and (F) values in form of a Maximum (max) or/xor/ and/ Minimum (Min) values.

For example If the value of the Inclusive is given as (Maximum True (1,1) Then we can drove conclusion in which that the Exclusive is (Maximum False of (0,0) and the complementary is a (Minimum True 1,0) as well as the contradictory value (Minimum False of (0,1)

The (Max (T) is different compare the (Min (T) according the initiating value ether as a (0) or (1). If the (Max (T) is an Exclusive (0,0) Then the initiating referential value is (0). But if the (Max T) is attribute to the contradictory other complementary or value (0,1) then there are not

(Min (F) value in any of both related to each other or related to (0,0) or (1,1) value. Therefore only the Max value of (1,1) and (1,1) values mat have a (Min (T) or (F) value.
By contrast the (Min (T) or (F) of (0,1(1,1) may be Maximized each to (1,1 xor (0,0).

This Hayawic Inference may extended to include a Midum (Mid) value in which can be associate within other (Mid) value to be a (Max (Mid) value as a Total Unclear Interests Value (TUn) s, or (Men (Mid) values as a Partial Unclear interests Value PUn). This both cases express did not existed in Boolean Logic because the (Middle Excluded) and in Aristotle the Causality, Sincerity and the Clarity values are Excluded.

The Rule of Hayawic UniLogic Inferences includes the (Max (mid) in the case of the absent of any of P, N, H or interests in a defined entity. The meaning of this (Max (Mid) is different from HFU to other. For example in cases of the Speech this dose mean that the Speech's interests value is either a natural technical interest. Or is a deaden interests.
The (Min (Mid) is expressing a lack of clarity interests decision.

But, in the case of non mental information the (Max (Mid) value dose mean that the entity in which represented by such non-mental information is in inertia or is in moving and becoming posse state.

This different Symbols of Hayawic UniLogic Algebra is only related to the Living Circle Entity System as a Hayawic Form. Therefore the Hayawic Unilogic Algebra is only applicable in a defined HFU.

Thus, the greet application of the HUA can be related to any entities has a Self-Organizational Contained Form or a part of it. This includes a Formative and Normative interests. For example after we defined the Formative value of an entity (speech). We to defined its normative value in which does constitute a dynamic Tendency and Dependency of the entity in questions (Speech). This Normative Value can be outcome of different sequences in which the Normative value can be found based on the Hayawic States Roots (HSR) in stead of the (LIR) Lattice Interests Roots. This dose mean we have conceder the notations symbols of unifying, Isolating, Coexisting and Conflicting as the Normative Values background of the Formative Values in which one may found an Unifying Formative speech in an Exclusive Norm interests.

Other greet application of this HUA can be related to the Testing Behavioral Interest in which on add an additional quantitative value to a defined entity in which we have to calculate, operate and inject the its ISU by a Well Divided Numbers Unit. This Well Deviled Numbers Unit should be extracted from experimented or spouse Multi-Value Unit.

But the greets application ever of the HUA is information communication requirement, software and hardware system analyses design and testing by using the ISU organizational and functional interests.