A Meditation on The Mind of God
A response to Pir Vilayat Inayat Khan's call to
"Update our Thinking & Upgrade our Realization"
The Abstract Calculus of Form
Baiss Eric Magnusson, April, 2006, Revised Nov, 2007

The fundamental entity I take to be the **pattern,** al-Ahad**,** The One and Only, The Unity, The Sole One, the inspiration for this is from the Beta programming language by Professor Kristen Nygaard, et. al.; the inventor of OOP, (object-oriented programming). <u>Toward the One, the Perfection of Love, Harmony and Beauty, the Only Being United with all the Illuminated Souls who form the Embodiment of the Master, the Spirit of Guidance</u>, the Sufi invocation given by Hazrat Inayat Khan.

Within pure intelligence is the "meta-programmer", al-'Azîm, The Supreme Glory, The Mighty Splendor, The Most Grand, The Greatest, which conceptualizes abstract form, and thus software programs, such as the English language, which can be viewed as a series of didactic tokens to which syntactical processing is applied. Light is the transport mechanism of pure intelligence, and music the transport mechanism of spirit, nature is the synthesis of the two.

"We have a direct awareness of mathematical form as an archetypal structure." (LOF)

The theme of, Laws of Form (LOF), by the late Professor G. Spencer Brown of Oxford University, is that a universe comes

into being when a space is severed or taken apart.   ash-Shahîd, The Omniscient Witness, The Certifier, The Testifier**. This severence is called the boundary, and forms the basis for the Laws of Form. I like to experience Christ's admonishment, Love Thy Neighbor, when thinking of the boundary, as in truth your neighbor is 'Hu' you interact with on the planet.**

The archetype pattern is DNA, intelligent design, which is changeable even within a single generation. Additional inheritances can occur with the subpattern, virtual pattern and pattern variable.

Attributes of the pattern are:

Class => az-Zâhir, The Evident, The Manifest, a pattern becomes a class pattern when it is a generated object. Classes "react" to either time or to sensory change. It is useful to notice the distinction between class and object. An object is an instantiated class, thus the unmanifest becomes the manifest or the implicate state creates into the explicate state.

Variable => al-Bâri', The Maker, The Producer, the One who evolves and re-creates that which exists, both physically and spiritually. Genetic bio-engineering. This is the domain of the psychologists.

Inner => al-Bâtin, The Hidden, The Secret One, The Inner One. The primitive <inner> causes a reverse virtual

invocation, that is in the middle of the present the structure of the past, which is still present, is affected. The activation of the Silsila of the Chistia Sufi Order invokes inner.

Inheritance => al-Haqq, The Truth, The Reality, The Just and Correct, The Truly Existing. The inheritances within the human are described by Hazrat Inayat Khan, in the <u>Soul, Whence & Whether</u>, as genetic inheritance, memetic or societal inheritance, and divine inheritance. Truth is a divine inheritance found in the depth of every human heart.

Replication => al-Wahhâb, The Most Liberal Bestower, The Great Giver, The Giver of Gifts. The action of copying or reproducing something.

Concurrency => Dhû-l-Jalâli wal-Ikrâm, Lord of Majesty and Generosity. The attribute of time, including simultaneity, symbolized by the circle. Rhythm forms the basis for a healthy life.

Virtual => al-Awwal, The First One, The Pre-Existing. With virtual patterns it is possible to describe general properties of a pattern attribute in a super-pattern, and to specialize this description in sub-patterns. <Final> al-âkhir, The Last, The End and The Ultimate. No further extension of the pattern is possible. The Prophet Mohammed was the <final> invocation of the pattern <prophet>.

Type => al-Badî', The Wonderful Originator, The Unprecedented and Incomparable Inventor, The Absolute Cause. A particular formalization of a pattern which is used as a template for generating objects which have a state which changes over time.

Procedures => al-Hayy, The Living, The Alive, The Everlasting, The Deathless, The Ever-Living. "God is within you; you are His instrument, and through you He expresses Himself to the external world." Bowl of Saki, by Hazrat Inayat Khan. An organ of a larger containing body, see **Class** above.

Recursion => Patiently Muhammad continued in the path of the search after truth, and he heard, "Cry on the sacred name of thy Lord", lâ ilâha illâ Allâh. The growth of a crystal. Programmer saying, "to iterate is human, to recurse, divine."

Imperatives => al-Mubdi', The Originator, The Starter, The Beginner. An imperative is a syntactic element for describing an action. Transmogrification is a morphological translation, which could be encapsulated into an imperative. Ishq, love, is the energy behind the action.

Whereas imperatives exist within a containing space, replication can occur concurrently, and thus independently of each another. Both require a template and an object. Free will

is the manifestation of <virtuality> and independent (i.e. of any rhythm) <concurrency>. A Sufi respects free will by refraining from telling anyone what he/she should do. Either virtuality or concurrency, or both, are distorted when disharmony is prevalent. Pir Vilayat warned us of becoming "monsters of self-sufficiency", in failing to be cognizant of the surrounding ecology. "There are many sins, big and small, but the greatest sin of all is the recognition of sin." The Vadan of Hazrat Inayat Khan.

Present => must have attribute of time in order to satisfy "progress towards the ideal", of the three-fold integrity, expressed in Beta as:
    Enter -> Imperative -> Exit
Expressed in Edsger Dijkstra's, The Discipline of Programming as:
    Valid Pre-Condition -> Computational Progress -> Satisfied Post-Condition
The operation of the above guarantee's success in all endeavors, <time> not withstanding.

The formal definition of an object is a "program entity which has a life-span of its own". Nygaard & Dahl

There are no such things as objects, there are only beings. Pir Vilayat Inayat Khan.

The notion of **virtual** is likened to inheritance, which to the Sufi is three-fold:
    1) Divine Inheritance
    2) Parental Inheritance (DNA)

3) Societal Inheritance (meme's, etc.)

The notion in **inner** is that of "the thrust of the future transmutes the energy of the past", expressed by the Wazifa, Dhu'l-Jalal wa'l-Ikram - Lord of Majesty & Generosity.
In the world of programming, it is letting an object, during construction, the ability to invoke attributes of a descendant. Our process of creation, where a sperm joins an egg, has the attribute of inner.

Focused attention, embodied with will, which is expressed through love, is the way of the mindfulness of the Buddha. Continual practice of focused attention leads to mastery, which is the awareness of will.

Prayer for the Universel
"O Thou, Who art the Maker, Molder, and Builder of the universe,
Build with Thine own hands the Universel, our temple for Thy divine message of Love, Harmony and Beauty." Hazrat Inayat Khan

In qigong, teaching is received via the ladong point, the palace of toil, in the middle of the open hand.

Appendix: (a meditation)

Toward the One...   *Ya Allah - Ya Fatah (the Constructor)*
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       Ya Zahir :   Ya Batin   The Manifest, The Inner

One
     Ya Awwal :   Ya Ahad   First One, The One and
Only
     Ya Badi :   Ya Mubdi   Originator, Beginning
     Ya Hayy :   Ya Haqq   The Living, The Truly
Existing
     Dhu-l-Jalal wal-Ikram   Lord of Majesty &
Generosity
     Ya Bari :   Ya Wahhab Maker, Liberal Bestower
     Allah Hu, Allah Hu   The only reality is the
Reality of God
     Ya Muta'ali   The Ascending on the
Journey;
}
Ya Mu'jib   The Fulfiller

Practice: As a walking meditation take each phrase separately, repeating 11 times or more.

"There is One Master, the Guiding Spirit of all Souls, Who constantly leads all followers towards the light."
Second Sufi thought of the Ten Sufi thoughts of Hazrat Inayat Khan