

Rethinking Science and Scientific method: The General System Theory its Islamic source, local and global consequences

Hijjo Abdel-Wahid Hijjo

Agenda

- Introduction
- General system theory (GST) as a universal system language
- GST as an ultimate, optimal scientific and secular language of Islam in contrast to inverse system models .
- Management as a cybernetic (circular) central model and moving in an anti-clockwise pattern (A unified approach of worshipping of the universe) representing science in its optimal form
- Decision making as a subsystem and central nerve of management functions and most complex
- Decision making as a central system in its own right
- Role of (ICT systems,7 layers, 5 components (circular model), dual(0,1)) in supporting decision making (Miller assertion)
- Nature and scope of reality i.e. Islamic reality
- Systems Science, Integration, Unification, Theory and Methodology are essential instruments for Islamic (systemic) change with regard to individuals, organizations and societies
- Conclusion: concept of system to be optimized if Islamized.

- Decision making problems as natural phenomena and they constitute systems on their own right (MBA) universality of problems to be resolved
- Lack of correspondence between systemic and natural reality, and outdated mechanistic business models prevailing in Muslim countries (Messy models)
- As an Islamic phenomena the world is perceived from a unified structured approach i.e. systemic approach (Ontology) and the source of this type of knowledge is found in the Holy Quran and the Sunna of Prophet Mohammed (peace be upon him) (Epistemology)
- The Arabic language is the sole systemic and scientific (also religious) language of the system age i.e. a truly natural language

- **GST is the natural and organizational phenomena to match the complexity in the reality**
- **GST interprets the beginning and end of life by Promises as illustrated by the Big Bang and the Big Crunch Theories (instruments for analysis & synthesis), core truthful promise yet to be realized**
- **GST is a global, sustainable and total quality model**
- **GST is a psychologically valid scientific and viable method (Miller) and it is an information science theory**
- **GST is a transdisciplinary and multidisciplinary approach to tackle complex decisions in hard and soft sciences in contrast to the mechanistic models which are static, stagnant and representing handicapped mental models resulting in mental disordered activities**
- **GST is the basis for ERP and data warehouse systems**
- **GST as the theory behind ICT and its consequences**

- **Linear, reductionist and mechanistic era obscure the representation and solution scope (rallying cry)**
- **GST is associated with centrality i.e. central tendency, dispersion and Haniffia (the S shape of the N.D.)**
- **GST is the basis for normal phenomena that even the mechanistic, probabilistic distributions will converge to**
- **GST represents fact and truth in its absolute form i.e. natural theory following the general rules of Allah**
- **Strategic, tactics, internal, external etc.. Are the relevant instruments for balancing internal needs and external pressures with regard to the decision making process (language in pairs)**
- **Using systemic instruments and techniques in decision making to extend the natural identity existing in the human mind with that of the natural reality**

- GST as socio-organizational phenomena based upon the Sharia LAW (the universal social theory)
- GST is a *learning* process in evolutionary context i.e. need to be institutionalized given its origin and roots
- GST as a universal, absolute problem solver in direct contrast with the relative, suboptimizing mechanistic approach
- GST is a systemic, viable phenomena and it is post-post modernistic approach
- GST is an optimal scientific phenomena i.e. the sole scientific methodology, and information systems (central nerve) is a model for other disciplines to follow
- GST is a universal weapon for boundary setting

- **GST is a competitive business model for Muslims**
- **GST is ultimately an Islamic phenomena i.e. socially constructed i.e. Universal social science approach**
- **GST constitutes the natural identity for Muslims and Thus for humanity in general**
- **GST is an instrument to unify science (method(ology)) and techn(ology) (philosophy)**
- **GST is an instrument for balanced growth and development associated with social, psychological, political, economical and managerial aspects.**
- **System age (Islamic) versus Machine age (Judo-Christian).**



Systemic approach as a paradigm and philosophical shift from the traditional linear approach which dominates in Muslim countries (dehumanizing effect).

- **GST redesigns the ideology, philosophy and structure of science to become systems on their own i.e. science is an Islamic phenomena (sense of ownership)**
- **Any real life human phenomena (design, action, behavior etc..) will not work in a scientific optimal way unless it follows the general structure of Islamic phenomena (Any unsystemic phenomena will converge to GST type of system). i.e. interpreting the behavior of complex phenomena**
- **Systems versus Inverse systems**

- GST is open, synergistic and the sole computing (ICT) theory i.e. a tool for global intervention
- Convergence of previous religions to Islam and convergence of mechanistic age tools into systemic age instruments. This is culminating in unity of religion and unity of science with global consequences and repercussions (GST)
- GST is the sole optimally scientific and religious language. Constituting Unified and Universal Modeling Language, not like OOA which is linear and mechanistic (constituting a mess).
- This is a plea and D'awa to all countries in the world to embrace the GST as an optimal religious and secular language i.e. scientific theory (model)

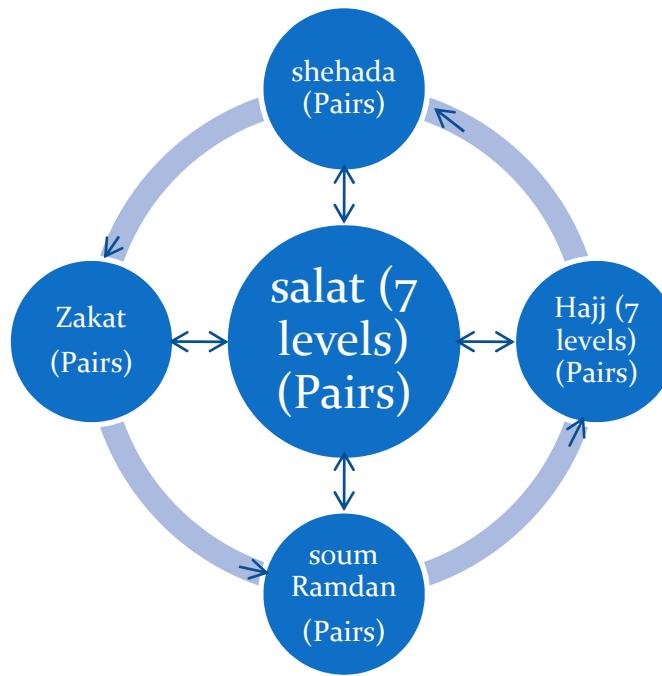
- GST is the basis for software engineering (methodology)
- GST is the basis for business process re-engineering and restructuring (basic new structuration theory)
- GST is the basis for the operating system
- GST is the basis for electronic circuits
- GST is the basis for network systems (Layers, computers, topologies) and Secondary storage devices (direct access)
- Interpreting from a systemic perspective is the best research approach to investigate dynamic and systemic reality.
- Integrating technology with real life systemic reality resulting in emergent properties i.e.. standardization

- Convergence of the mathematical types of equations ubiquitous in our tiny planet, into cybernetic models must be the over-riding goal of any Muslim scholar (IS Models).
- The system science (GST) is associated with enlightenment , evolution in contrast to the machine era (linear, reductionist and partial) is characterized by darkness, backwardness, and retardation
- Evolution within systems (species) and not between systems (methodology of development) i.e. GST is an evolving science in its optimal form that can lead to revolutionary impacts
- GST is a holistic approach (unlike the partial approach) that constitutes the optimal scientific method ever (all traditional types of methods must converge to it). Thus to intervene scientifically and /or religously any where anyplace ,any time, locally or globally, it is your ideal instrument.
- The structured approach (based upon GST) has to be redefined or revisited to reflect a UML aspects
- Balancing IS models within the whole system science i.e. within disciplines (IS central nerves of whole disciplines)

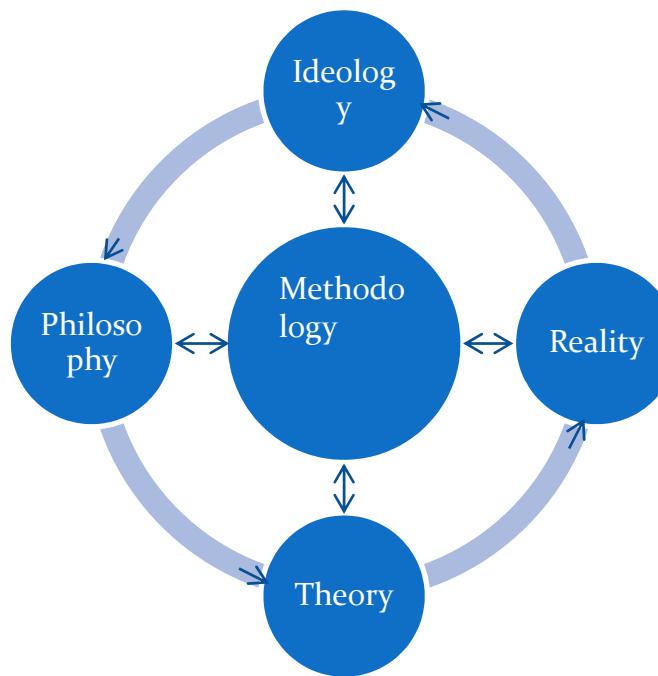
- Redefining science, redefining the learning process, redefining the educational system (in Arabic the words are taken from one source).
- Information system model, based upon the structured approach of GST, to replace the outdated, mechanistic, linear, reductionist and partial science models. This process will be called ‘humanizing’ science and technology making use of the cybernetic model. I.e. a tool for resolving complex national and international problems.
- Thus IS will be redefined and its implication will be felt in each and every discipline
- Relative versus absolute science

- The combination, to be used, which will take the form of system science and information system, is the medium to be used across the hard and soft sciences.
- The university and the universal system language, fragmentation of science, a standardization approach (Central) and unification which means total Islamization of the universe with unprecedented ramifications towards the species that embrace a model contradicting the very essence of the global language (GST).
- GST is an ultimate Islamic Language

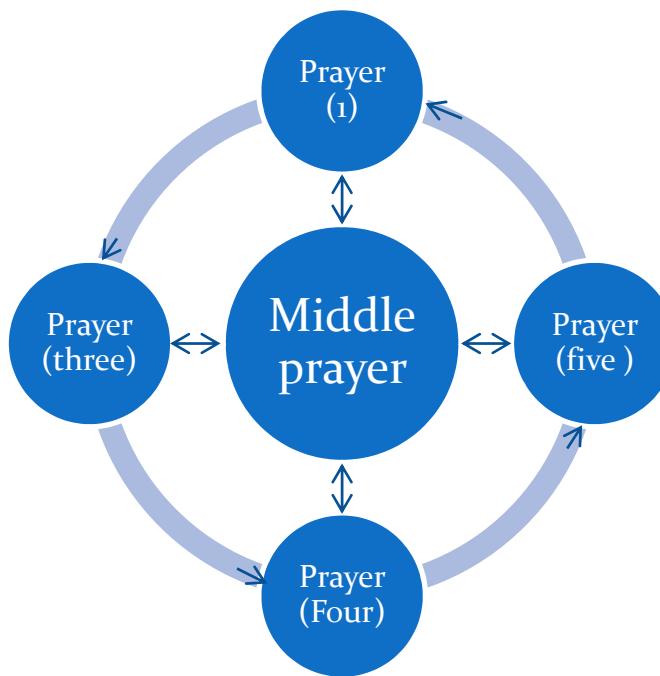
Natural system of Pillars



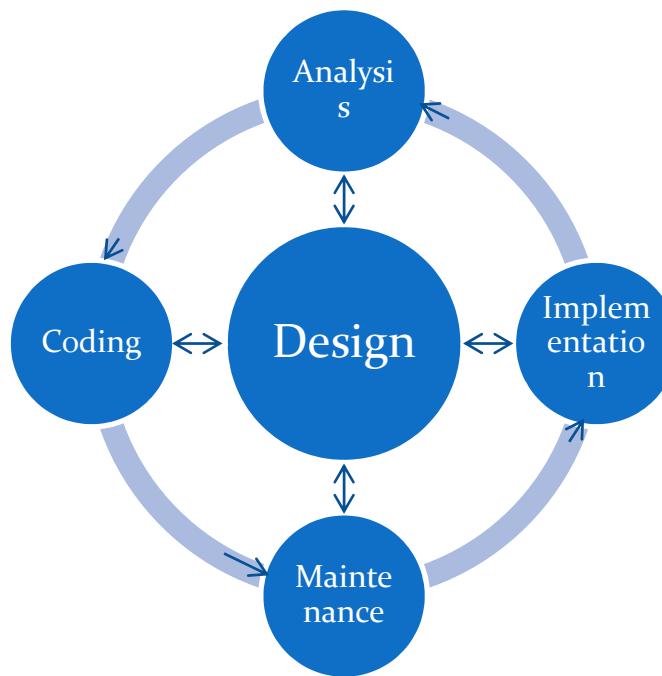
Natural system of Organized and originated Science



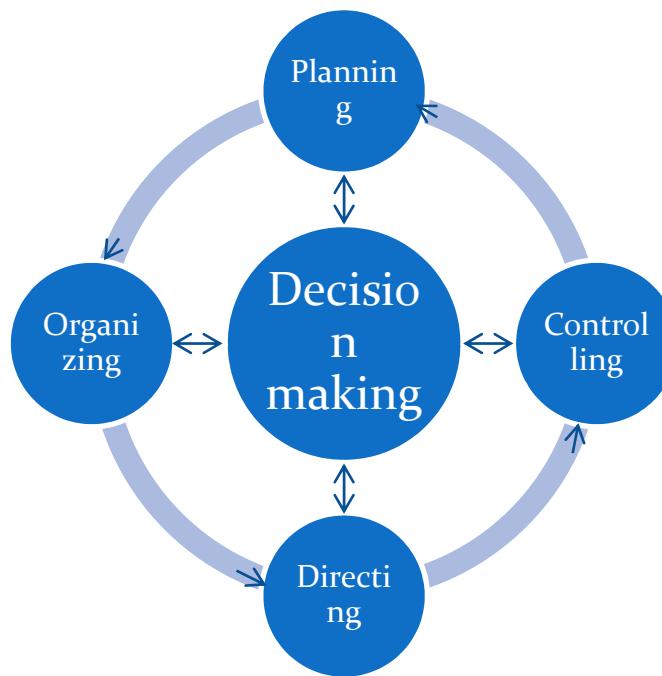
Natural system of Prayers



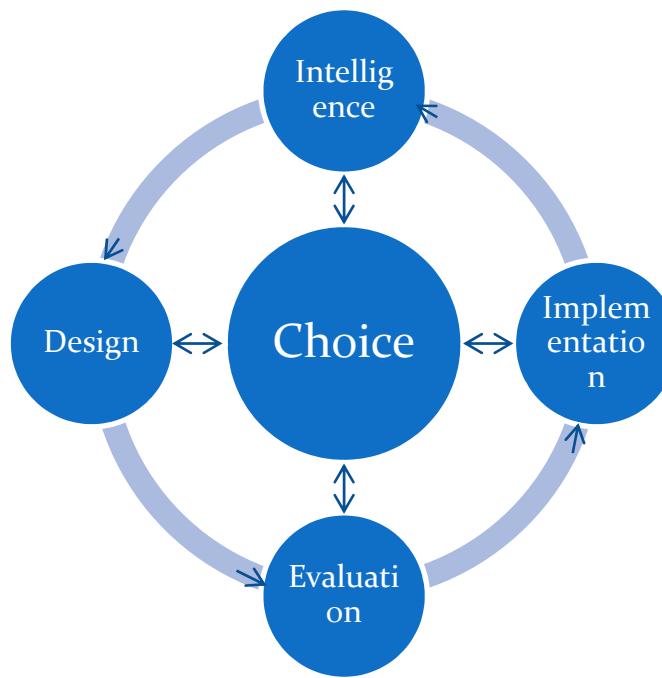
Natural Methodology Of IS development (Evolutionary)



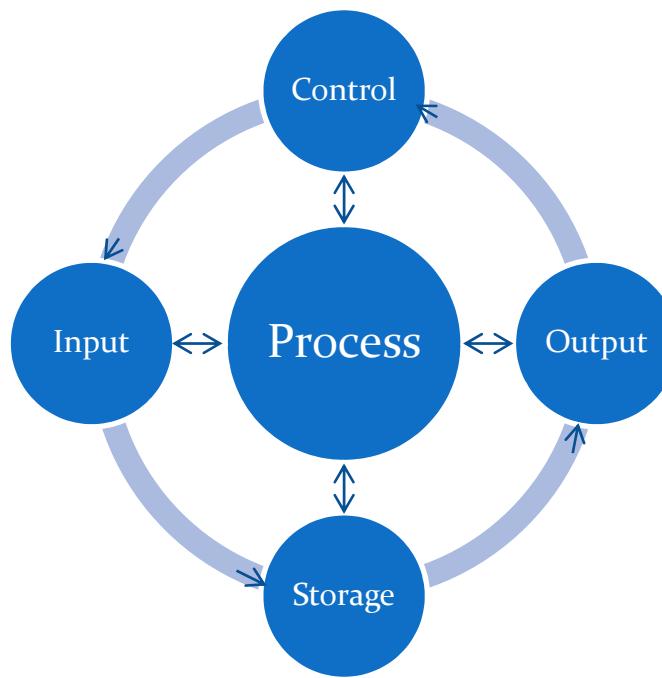
Natural system of Management Functions



Natural system of Decision making

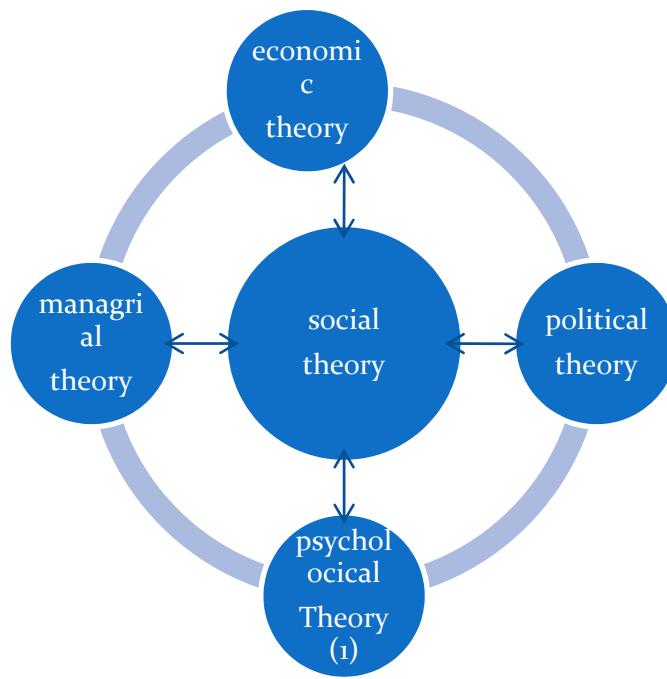


Natural system of the Computer



Natural systemic Phenomena







185

105