## SURVEY ARTICLE

## ISLAMIC POLITICAL ECONOMY

by

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## ABSTRACT

*The budding field of Islamic political economy as premised on the epistemologi-cal roots of Divine Oneness as explained by the Qur'an and the Sunnah (guid-ance of the Prophet Muhammad) is explained. Several mainstream economic ideas are thus critically examined and their alternative treatment under Islamic political economy is expounded. The process-oriented model termed in this paper as the Shuratic process or the interactive, integrative and evolutionary process (IIE-process) is shown to be central to the methodology of the circular causation and continuity model of unified reality in Islamic political economy.*

## INTRODUCTION

Islamic political economy is an epistemological examination of socio-scien-tific phenomena in the light of the pervasively interactive worldview pre-sented in the *Qur'an* (Choudhury, 1992a; 1995a; 1997a; 1997b; 1997c; 1997d; Choudhury & Malik, 1992). The social rules and actions of agents (*Ahkam*) in accordance with the *Qur'anic* holistic worldview are then instrumentalized by the guidance of the Prophet Muhammad (*Sunnah*). The discursions involving the *Qur'an* and the *Sunnah* are taken up in the midst of pervasive interactions that comprise the institution of the *Shura*. The *Shura* as a universally interactive, and hence consultative order gener-ates a *process*. This process leads from interaction to social consensus (or majority agreement) called *Ijma*. We will also call the joint process of inter-action and consensus as the interactive-integrative process. From every state of *Ijma* evolve new rounds of interactions followed by new integrations and new evolutions. In the end the *Shuratic* process becomes a combination of the interactive, integrative and evolutionary process of knowledge forma-tion and learning in world-systems. We call this knowledge-inducing proc-ess equivalently as the *Shuratic* process or the IIE-process.

Fundamental in such rounds of the *Shuratic* process or the interactive-integrative-evolutionary process (IIE-process) is the unifying outlook of the universe and its sub-systems. Such a pervasive and universally systemic understanding of the *Shuratic* process is derived directly from the *Qur'an* (Ch. 42, verses 49, 51-3). The unifying worldview is derived from the epistemology and ontology of Divine Unity. Its expression in the real world is regenerated by the flow of knowledge signified by inter-action leading to unification (integration) and their enhancement with new rounds of knowledge (evolution). We thus have the epistemology of Divine Unity and the unification process of knowledge emanating from Divine Unity. The epistemology of Divine Unity remains exogenous but ever present in all sub-systems qualified by extensive *inter*relationships, i.e., in all processes. Such an epistemology is referred to here as the Stock of Knowledge by virtue of its completeness and absoluteness in the total creative frame of the universe.

Unification caused by the flow of knowledge within all systems and processes causing IIE-phenomenon to appear is endogenous in nature. Hence all socio-economic variables, instruments, institutions, preferences and behaviour induced by the flows of knowledge causing unification of systems, relations and processes to occur, become endogenously interrelated.

## THE UNDERLYING PRECEPTS AND ASSUMPTIONS OF ISLAMIC POLITICAL ECONOMY

Certain fundamental precepts of methodology thus lead the way for Islamic political economy. These are as follows:

First, there is a simple formalization of the *Shuratic* process (IIE-process). This constitutes an overview of the methodology of Islamic political economy.

Second, as in the jargon of the classical economic school, Marxism, and neoclassical economics, we must first address the problem of 'value', which Joseph Stigler (1960) said, 'elicited the supreme efforts of the greatest theorists'. The concept of 'value' emerges in an altogether different way in Islamic political economy.

Third, we must explain the principle of universal complementarity and show how this concept of pervasive interlinkages and endogeneity of knowledge-induced variables emerges from and reinforces the process of unification of knowledge.

Fourthly, we must show how analysis and inference are organized in this pervasively endogenous system of complementarities (IIE-process). We must invoke a knowledge-induced simulative design of systems.

With these precepts acting in concert with each other, Islamic political economy becomes the study of the *Shuratic* process or the IIE-process interlinking the economy with institutions, polity, society and science. The agency of decision-making at all levels is taken up in the light of knowledge-induced *inter*linkages. Islamic political economy is thus a study of systems of socio-scientific *inter*relationships governed by the principle of universal complementarity as the explanatory basis of unification of knowledge (Choudhury, 1994a).

## A BRIEF LOOK AT THE METHODOLOGY OF ISLAMIC POLITICAL ECONOMY

The methodology of the *Shuratic* process or the IIE-model hinges on the following critical factors: First is the epistemology of *Tawhid*, that is the Oneness of God in the sense of the Absolute and Complete Stock of Divine Knowledge. Second is the flow of knowledge emanating from the Stock that brings about the unification of knowledge in all induced forms within world-systems. Third, such a unification of knowledge carries the prototype of unity of the Stock and thus complements subsystems together. Fourth, universal complementarity of this type occurs by the process of interaction leading to integration followed by creative evolution to higher planes of knowledge. Fifth, flows of knowledge appear in their creative form in perpetuity. Hence, optimisation and steady-state equilibrium methods are necessarily replaced by simulation methods across domains of knowledge flows and their knowledge-induced forms. Sixth, the permanent completion and closure of the knowledge-induced *Tawhidi* universe is realized only in the Event of the Hereafter (*Akhira*). This is the Event of accumulation of all kinds of systemic knowledge flows resulting in the supercardinal measure of the Stock of Divine Knowledge Cantor trans. Jourdain, 1955).

When the above nature of *Tawhidi* (i.e., Oneness of God) worldview of systems is applied to Islamic political economy, it results in universal complementarity *inter*relating the *Shuratic* processes of economy, society, polity and science. The interactive-integrative-evolutionary methodology so established leads to ever-increasing domains of systemic complementarities. Diversities of possibilities and forms cause such complementarities to occur. Hence, as in the endogenous growth model where the law of diminishing return cannot hold on methodological grounds, so also the same along with the neoclassical principle of marginalist substitution cannot hold in Islamic political economy. Valuation of prices, wages, cost of capital and the like are thereby, not carried out by the concept of opportunity cost of resource allocation. Instead, all kinds of prices, factor payments and quantities, together with the associated *social well-being criterion*, are simulated under conditions of interaction and consensus over phases of decision-making among complementing partners and diverse possibilities. We take up the theory of valuation in this regard below.

## A SIMPLE FORMALIZATION OF THE IIE-MODEL

The epi-phenomenon of circular causation and continuity is now explained formally by the following string relation (Choudhury, 1994b):

$$\Omega \rightarrow_s \{\theta_s\} \rightarrow_I \{\theta_1\} \rightarrow_{f1} \{x_1\} \rightarrow_{g1} \{\theta_2\} \rightarrow_{f2} \{x_2\} \rightarrow ... \rightarrow \Omega \qquad (1)$$

Here, $\Omega$ denotes the topology of the *Tawhidi* Stock of Knowledge.

s denotes the instrument of *Shari'ah*-mapping of $\Omega$ 'onto' the experiential world. This advances the rules of *Shari'ah*, as, $s(\Omega) \ni \{\theta_s\}$, since only parts of $\Omega$ can be mapped onto the experiential world (*Qur'an* Ch. 72, verse 26).

'I' denotes the mapping of the *Shari'ah*, $\{\theta_s\}$, 'onto' specific issues and problems of the experiential world by means of discursions called *Ijtihad*. Hence, $I(\{\theta_s\}; \Omega) = \{\theta_1\}$, in the first set of rounds of interaction denoted by 1. This set comprises many rounds of intra-systemic interaction leading to a consensus of understanding. At the point of consensus (or majority rule) creative evolution occurs and causes new sets of similar interaction and integration to continue.

The totality, $E = \{\Omega, \theta_s, \theta_1\}$, is the extended Islamic epistemology (E-episteme) at the outset of any round of interaction. It is also written down in terms of $\Omega$ signifying the Essence (*Nusus*) of the *Qur'an*; $\{\theta_s\}$ signifying *Shari'ah* as the explanatory part of the *Qur'an*; $\{\theta_1\}$ signifying the constructive simulation of the Divine Laws to life through human volitions. Since $\{\theta_1\}$ are primarily induced by $\Omega$ through $\{\theta_s\}$, and these latter ones are functional carriers (instruments) of the Divine Law, therefore, there are attributes that mobilize the knowledge flows, $\{\theta_1\}$. These attributes are A = {Justice, Purpose, Certainty, Well-Being, Creative Evolution}. In brief therefore, we can write, $\{\theta_1\} = \{\theta_1(A)\}$.

$\{x_1(\theta_1)\} = f_1(\{\theta_1\})$ is the knowledge-induced experiential form during rounds of interaction, 1, leading to a consensus. Clearly, $\{x_1(\theta_1)\}$ are premised on the E-episteme.

We now have the well-being (*Falah*) that is generated by the knowledge-induced tuple, $\{\theta_1, x_1(\theta_1)\}[A]$, meaning that A induces the tuple as a whole. From now on 'A' will be implied, and we will suppress the [A] term. The *social well-being function* is given by, $SW = SW(\theta_1, x_1(\theta_1))$. $SW(.)$ is post-evaluated jointly by interaction of the preferences of polity and of the ethicised preferences of agents in and through the market order, the socio-scientific order and the like. These agents are induced by the knowledge forming process, as shown in (1). Thus, such interactive preferences are continuously simulated by knowledge flows as interaction and integration proceed. The agents and agency specifically configuring the variables are denoted by $\{x_1(\theta_1)\}$. Note that for the sake of simplicity, we have suppressed many of the subscripts that should go with the $\theta_1$-variable to signify agents, interaction, systems, variables, their *inter*relations etc.

At the point of post-evaluation of $SW(.)$ in terms of $\{\theta_1, x_1(\theta_1)\}$, creative evolution of similar 'processual' orders arise. Thus, interaction leading to integration in a set of rounds of interaction denoted by 1, finally lead to evolution. The IIE-model is now signified by the emergence of $\{\theta_2\}$. The sequences of tuples, $\{\theta_i, x_i(\theta_i)\}$ and their social well-being criteria denoted by $SW_i(\theta_i, x_i(\theta_i))$, continue on in the *Shuratic* or the IIE-framework.

The string (1) so shown, describes how the Divine Law of Unity is simulated in the framework of IIE to establish extensive complementary *in-*

*ter*relations in the experiential world by means of flows of knowledge. Since all inputs and outputs of this system are knowledge-induced, therefore, systemic 'universal complementarity' is established in this order by means of unification of knowledge as an endogenous element. The f's and g's denote the derivation of rules and guidance from the E-episteme called *Ahkam*. The sequences, $P_i = (\{\theta_i\} \to_{f_i} \{x_i\} \to_{gi+1} \{\theta_{j+1}\})$, i =1,2,,..., shown in the string (1), comprise the *Shuratic* processes. The IIE-methodology is realized both within these sequences as across them. Hence such strings of recursive *inter*relationships comprise a circular causation and continuity model of unified reality.

Many generalizations of string (1), including the treatment of the mathematical complementation of knowledge, have been studied (Choudhury, 1995a). These issues are too detailed to introduce here. The point to note is that there is a pervasive and inherent endogeneity manifest in the underlying general system of interrelations either in the knowledge or the 'de-knowledge' planes. These two domains remain mutually disjoint.

The study of such pervasively endogenous processes may appear at first to be afforded by the methods of rational expectations hypothesis, REH (Minford & Peel, 1983). The problem however, would arise from the premise of long run optimal and steady state equilibrium of adaptive models of information flows in REH and the linear simplification of otherwise non-linear models both in information flows and the Bayesian-type coefficients endowed by their own stochastic properties. The end result of the linear processes, the 'expectational' equilibrium simplification and the profuse use of the utility functions make these models of the neoclassical class (Turnovsky, 1995). Even in endogenous growth models we find that the introduction of every new asset generates marginal substitution between them (Romer, 1986).

In the final analysis we find that there always exists marginal substitution between groups of goods in such models. Pervasive complementarity is never a feature of such models just as marginal substitution is not the property of the string (1) — i.e., of the IIE-process model. The very assumption of long-run steady-state optimisation in REH makes this method unusable in the study of IIE-general systems on epistemological grounds.

# PRINCIPLES AND INSTRUMENTS OF ISLAMIC POLITICAL ECONOMY

Here we refer to figure 1 the Appendix. In Islamic political economy the principles are premised on the primal epistemology of *Tawhid* (Oneness of God) including the *Sunnah* (guidance of Prophet Muhammad). This crowning principle then links up with the fundamental issues of Property Rights and Entitlement (includes work and productivity). The instruments emanating from the principles, and thereafter, reinforcing the same to finally realize states of social well-being are taken to be (i) *Mudarabah/ Musharakah* as interactively cooperative joint ventures. *Mudarabah* means profit-sharing; *Musharakah* means equity participation. (ii) Interest-bearing transactions (*Riba*) are avoided. (iii) The institution of wealth tax for realizing justice and goodness in the act of distribution (*Zakah*) prevails. (iv) Avoidance of waste in consumption, production and resources (*Israf*) exists. These instruments and principles are shown to be interactively interrelated. The instruments can be further extended to more of the same type for specific problems of the Islamic political economy. Thus a vastly complex and simulative system is generated in terms of the endogenous *inter*relationships between the entities, all of which are premised on the E-episteme.

# THEORY OF VALUE IN ISLAMIC POLITICAL ECONOMY

In Islamic political economy neither prices nor unit costs of production stand for any measure of economic value *per se*. The existence of the utility function and its associated marginal utility of consumption goods are ruled out on the epistemological ground of knowledge continuum signifying the principle of universal complementarity in the IIE-world view. This principle annuls all the ramifications of marginalist substitution or limited complementarity in the case of multiple goods as in neoclassical economics. Marxist labour theory of value is ruled out, because in it labour appears as the most reduced factor of production with a primordial claim. Instead, the Absoluteness of Divine Unity is taken up as the fundamental episteme of the Islamic political economy.

All prices, wages, profits and quantities are qualified primarily by knowledge flows that emerge from the *Shuratic* process as interaction and integration between polity, economy and society. These processes of recursively

interrelating Actions and Responses (see figure 2 in Appendix) generate interactive preferences on the basis of the *Shari'ah* (Islamic Law) values and are carried through a social contract into markets and agents by means of rules and instruments. The result is value induction in a general system of interaction among the consumption menu, the production menu, the distributional menu and the related policy instruments, institutions and socio-economic variables relating to these kinds of ethicising politico-economic *inter*relations (shown by circular flow of arrows). Dynamic basic needs regimes of goods and services denoted by $\{x(\theta)\}$ induced by the knowledge flows denoted by $\{\theta\}$, are promoted in the light of the principles and instruments of Islamic political economy (Hasan, 1986). Above all these, a creatively dynamic purview of interaction and integration in the social action of the Islamic political economy is preserved. Thus knowledge flows induce all the inputs and outputs in these systems as shown in the string of interrelationships (1).

All goods and services that are *Shari'ah* determined and promoted in the market order are now seen to be ethicised goods (social goods) in the light of the principles and instruments of Islamic political economy. Consequently, unit cost of production and the labour/capital ratio (which is Marx's version of organic composition of capital) (Ekelund Jr. & Hebert, 1990) are fundamentally determined by the knowledge flow induced in the productive use of labour and capital as the intrinsic essence of value embedded in the produced goods and services. Such a knowledge-induced benefit is termed in the *Qur'an* as *Fitra* (essence as a combination of benefit and felicity). Unit cost, prices and labour/capital ratio are not thereby determined solely by labour or capital.

Therefore, since knowledge must remain the root of value, its measure must be determined by valuation using the social well-being function, which itself is simulative in the string form of the IIE-model. Thus *Fitra* value (F-value) of exchange is the induction of all the complementary variables by the knowledge flows. It is properly determined in the midst of ethicising markets under knowledge-induced preference functions emanating from rounds of the *Shuratic* process (Choudhury, 1992b; Sen, 1985). This concept of value can also be inferred from the fact that the social well-being criterion is an aggregate in a non-linear sense of all the elementary values that can coexist in complementary forms in an ethicising market exchange realized through the *Shuratic* process of the Islamic political economy. It would otherwise be incomplete to read value in any other way, since the bundles remain interdependent.

Besides, the string model of the IIE-process shows that all of its inputs and outputs are functions of knowledge flows. Consequently, the effectiveness of knowledge must be evaluated. This gives rise to creative evolution emanating from interaction and integration that first lead to certain limiting values of the knowledge flows. The juncture of evolutionary epistemology here is characterized by the valuation of the social well-being function.

In the case of wage rate, neoclassical economics determines this in terms of the real marginal productivity of labour or the marginal expenditure of labour-use in monopsony (Mansfield, 1985). Marxist economics equates wage rate with the unit cost of production, given labour as the primal input of production. In the Islamic political economy the wage rate is determined by the classical form of labour market demand-supply *inter*relationship with social action and response. But while the wage rate is simulated in such a classical sense with ethical perturbations in the labour market, the principle of universal complementarity simultaneously determines the simulated value of rates of return (profit rates, profit-sharing rate, yields etc.). Furthermore, since simulated unit cost of production in complementary frames of reference determines prices of goods and services, the valuation of multi-market prices must likewise proceed in the same way.

We have now a general system of simulated valuation emerging through the IIE-process according to the principle of complementarity. It would therefore be inappropriate in such a general system of *inter*relationships to target labour primordially as a premise of value or for that matter, anything other than the valuation of knowledge flows. Such a valuation is performed simulatively by means of the social well-being function in the knowledge-induced  variables. Its methodology being premised on the principle of universal complementarity is none of any of the following: of the utilitarian type, utility based, determined by rationalistic preferences, or a Marxist labour theory of value based on the capital-labour conflict idea of alienation (Cole, 1966).

## THE PRINCIPLE OF UNIVERSAL COMPLEMENTARITY

The principle of universal complementarity is the natural cause-effect (i.e., necessary and sufficient condition) of the unification of knowledge

in the *Tawhidi* worldview applied to all of the socio-scientific world-system. It is applied here to the political economy for explaining resource allocation, pricing, preference-formation and the general ethico-economic equilibrium system (Choudhury, 1990). Within this purview of social action are taken up the gamut of all complementary socio-economic variables.

Unification of knowledge in the *Tawhidi* worldview is dynamically established by pervasively systemic interactions leading to integration (consensus or majority). This is followed by creative evolution of more of the same across *Shuratic* processes. Therefore, the *Shuratic* process (i.e. the IIE-model) plays the central role in determining the necessary and sufficient condition of the principle of universal complementarity. The principle of universal complementarity totally replaces the mainstream economic (broadly scientific) idea of marginalist substitution. Consequently, no neoclassical concept and its prototypes as are so centrally affected by the idea of marginalist substitution can enter any aspect of the Islamic political economy (Choudhury, 1996).

## ORGANIZATION OF ANALYSIS AND INFERENCE: THE QUESTION OF CAUSATION

With the principle of universal complementarity and its analytical equivalence, the unification of knowledge in the *Tawhidi* worldview, altogether new methods of preference-formation, resource allocation and pricing occur. We will now examine these briefly.

### Preference Function

The Islamic theory of social action in the *Tawhidi* worldview commences from a textual reference to the E-episteme. This effectively grounds the *Shari'ah*. A progressive Islamic movement, the Islamic state, institution or educational system establishes this epistemological order in the polity circle (Appendix figure 2). The organized form of agents in polity uses the texts to progressively establish institutions and mechanisms of evaluation and consensus formation through discourse in the broad socio-scientific environment. The assumptions of polity action in the socio-scientific order are minimal. The principle of minimal number of axioms was supported by the Islamic epistemologists like Imam Ghazzali and

Ibn al-Arabi (Karim undated, Chittick, 1989). Minimality of assumptions and axioms also constitutes the foundation of scientific theory (Nagel, 1981; von Mises, 1976). The minimal number of axioms as assumptions is taken here as follows in the Islamic political economy.

First, it is assumed that agents in the political economy invoke a natural sense of acceptance of the A-attributes stated earlier, as carriers of the *Tawhidi* worldview. These attributes are consciously instilled in society by the Islamic movements, Islamic state, institutions and the education system.

Second, due to the first assumption a coercive action in social action becomes irrelevant. The Islamic order must however, protect the rights and privileges of its members, as this responsibility is vested upon the institutions, state or movement by the general citizenry in accordance with the *Shari'ah* and through a *Shuratic* process of self-determination. An Islamic order as in the polity circle comes about by a grassroots participatory *Shuratic* will (Appendix figure 2).

Third, the government and state intervention in any public affair is minimal beyond security, protection, social guarantees, organization, dissemination of knowledge in the socio-scientific order and in the enforcement of rules (*Ahkam*), all being developed by means of invoking the *Shari'ah* and the *Shuratic* process in every affair. The implication then is that the *Shari'ah* and the *Shuratic* process cannot be limited to the domain of social, economic and political matters alone. These are equally extended to the whole socio-scientific order using complementary strings of discursion in all constituent groups. The *Qur'an* is quite clear on this universal implication of the *Shari'ah* and the *Shuratic* process in terms of pervasive complementarities and interlinkages for the universal good (*Qur'an* Ch. 14, verses 24,25,27). The *Mutakallimun* (Islamic epistemologists) upheld this view (Jalbani, 1985; Karim undated; Faruqi, 1977; Muslehuddin undated). The Muslim rationalists rejected it (Qadri, 1988). Shariati brings out the implication of such an approach in Islamic social thought (Yadegari, 1984).

From the polity circle emerge preferences of polity to impact upon the economic order comprising consumption, production and distribution menus and all the agents, agencies, variables and relations that these involve. The objective here is to transform the preferences of agents and

agencies in accordance with the E-episteme. The economy thus responds with its transformed preferences in accordance with the induction by the A-attributes. This generates F-value and delivers social goods and services as a result of the impact. The impact process from polity to the socio-economic order is called an Action. The evaluation of the social goods given the transformed preferences is carried out by the social well-being function in polity. The preferences of polity are thus interacted and combined with the discursively correcting, reinforcing or revising preferences of agents and agencies to form the final interactive preferences. These determine the F-value, the progressive transformation of ethicised markets, their simulative knowledge-induced ethicised market exchange, the associated variables and relations and the social well-being function.

The evaluation of social well-being and its implication on the level of F-value in the Islamic political economy, called social Response, now sets the post-evaluative state of polity. Policies and programs of delivery are accordingly changed in polity to simulate the interactive preferences till social consensus (integration) is reached through sequences of Actions and Responses. Accordingly, a dynamic social equilibrium point is attained. The social well-being function is so evaluated and further evolutionary knowledge-induced social actions are progressed by the on-going *Shuratic* process.

The implication in none of the parts of the Islamic social action is that the *Shari'ah* is changed by a rationalist philosophy or that the *Shuratic* process becomes a neo-liberal political philosophy of democracy. Limitations of the neo-liberal order are well established in the literature (Sullivan, 1989; Sen, 1970; Taylor, 1967; Parsons, 1964). Changes and revisions proceed on at two levels. First, the rules of implementing the *Shari'ah*, called *Ahkam* in the affairs of life (*Muamalat*), must always change, carrying interpretations even though *Ahkam* is premised on the immutability of the E-episteme. Second, based on the assumptions given above, if the process departs from the *Shari'ah* and the *Shuratic* process, no coercive action can prevent this process of devolution. When the latter process occurs, the *Shuratic* process as a universal epi-phenomenon of reality continues on to persist though – but now in the socio-scientific domain. Human synergy is continuously invoked in the political economy as in the scientific realms to create newer worlds of possibilities (Nasr, 1996).

## Resource Allocation and Pricing

The neighbourhoods of social action as sub-sets of the grand socio-scientific universe where the interactive, integrative and evolutionary epi-phenomena appear are characterized by $\{\theta, X(\theta), \text{Pref}; SW(\theta, X(\theta), \text{Pref})\}$. Here $\{\theta, X(\theta), \text{Pref}\}$ denotes neighbourhoods of IIE-points. $S(.)$ denotes the associated social well-being function. Pref denotes IIE-preferences evolving from the *Shuratic* social action. Now no points of the consumption, production and distribution sets are steady-state ones. Consequently, no well-behaved neoclassical production and consumption possibility curves, indifference curves and social welfare maps can exist. Hence we abandon the neoclassical nicety of exogenous preferences, optimal convex sets for resource allocation and their utility and social welfare functions and surfaces. Rather, all social allocations, pricing and social well-being criterion are simulatively evolved in and across neighbourhoods as defined.

We note that the ethical basis of decision-making, individual and institutional preference formation under a social contract and the determination of all politico-economic relations in light of the ethical premise, makes the microeconomic foundations of macroeconomics a permanent feature of aggregation in the Islamic political economy. Yet we cannot consider a dichotomy between micro and macro methodologies as a tenable postulate of the Islamic political economy. There exists interface between the preference-formation basis and the interactive coordination perspective in the *Shuratic* process. This makes the methodology of the Islamic political economy emerge from an altogether different epistemological orientation than in mainstream economics. This E-episteme delineates a socio-scientific universe of interaction, integration and creative evolution, which when applied to the nature of the Islamic political economy means a micro-macro interface (Choudhury, 1991).

## Question of Opportunity Cost of Resource Allocation

Now no neoclassical idea of opportunity cost of resource allocation can exist. Instead, we define relative unit cost of allocation among complementary possibilities rather than among substitutes by means of the relative social well-being indices. Such an index may be taken up in simple to complex forms depending upon the nature of institutions and problems (Choudhury, 1993, 1992b).

The social well-being function is a possible mode of evaluation of F-value in terms of $\{\theta, X(\theta), Pref\}$. Thus if we consider the resource allocation problem (see Appendix figure 3) in $\{\theta_i, X_i(\theta)\}$, i = 1,2, the concept of a so-called 'opportunity cost' denoted by r for choosing the complementary possibilities with i =1,2, is the difference between the ratios of the goods and their effective prices (determined in ethicised market clearance) in these two situations.

Such a ratio, r, is computed as follows:

$$r = dD_1(\theta_1 \cap \theta_2, X_1(\theta_1 \cap \theta_2), X_2(\theta_1 \cap \theta_2) \,/\, dD_2(\theta_1 \cap \theta_2, X_1(\theta_1 \cap \theta_2), X_2(\theta_1 \cap \theta_2) > 0.$$

$D_i(.)$ denotes the effective demand of the two allocation menus, i =1,2. $\cap$ denotes the complementary nature of these goods in the *Shuratic* process underlying allocation and market exchange with interactive preferences.

In terms of relative prices we can write, $D_1/D_2 = f(p_1/p_2)[\theta]$, with $\theta = (\theta_1 \cap \theta_2)$. This is monotonically related to $p_1(\theta)/p_2(\theta)$, as $\theta$-values increase in the IIE-model, either as demonstrated by the string model (1) or by the social action model. It can be shown by simple differentiation that, $\{d(p_1(\theta)/p_2(\theta))/d\theta\}_1 > 0$, implying that, $\{(dp_1(\theta)/d\theta)/(dp_2(\theta)/d\theta)\}_2 > 0$. Thus the nature of social goods, such as dynamic basic needs baskets consumed and produced in the Islamic political economy, would suggest that $p_1(\theta)$ and $dp_2(\theta)$ increase or decrease together but not necessarily by the same percentages. Since $p_i(\theta)$ is positively related to unit cost of production, therefore, relative unit costs will also be complementing each other.

In a dynamic basic needs regime of Islamic political economy, the prices of such complementary goods will stabilize downwards within such a regime with near-perfectly elastic demand curves. Now the growth of knowledge in the Islamic social action means its determination in the light of the basic needs regimes of development. There is indeed a saying of Prophet Muhammad that market prices are not to be unduly interfered with. This principle was reflected in the politico-economic ideas of Imam Ghazzali and Imam Ibn Taimiyyah (Islahi, 1995; Holland, 1982).

The 'relative' rather than the 'opportunity cost' in resource allocation in the Islamic political economy between two social goods (service) 1 with 2, is given by,
$$|r_1 - r_2| = |\{d(p_1(\theta)/p_2(\theta))/d\theta\}_1 - \{d(p_1(\theta)/p_2(\theta))/d\theta\}_2|.$$

When this difference is positive, allocation 2 is chosen 'relatively more' than the complementing allocation 1, and vice versa. In either case, the existence of the principle of universal complementarity in the knowledge-induced unification world view, will determine prices in ethicised markets, where only simulation and no steady-state equilibrium exists – except for the instantaneous case of ethico-economic equilibrium (Haddad, 1995). Consequently, simulated resource allocation points do not lie on smooth frontiers of the neoclassical genre and its prototypes. It can be shown that the evolution of ethicised instantaneous market equilibrium points is tantamount to moving cobweb equilibriums under the impact of $\theta$-values (Choudhury, 1994c).

## CONTRASTING ISLAMIC POLITICAL ECONOMY FROM ISLAMIC ECONOMICS: SOME ISSUES

In this final section we will examine the contrasting treatment of the three above-mentioned areas in the light of Islamic economics. There are many other areas that likewise can be critically examined between the two disparate areas of content and methodology between Islamic political economy and Islamic economics. For such details one may refer to Choudhury (2000).

### Consumer Theory in Islamic Economics

Studies in consumer theory in Islamic economics have relied heavily on the mainstream theory of consumer behaviour (Kahf, 1978; Khan, 1986; Naqvi, 1994). Islamic values such as consumption in moderation, responsibility and the *Shari'ah* recommended goods (*Halal*) while avoiding forbidden ones (*Haram*), have been simply implied in consumer utility function and indifference curves that are made to exogenously relate to Islamic values such as the reward in the Hereafter. For instance, Metwally (1991) considered the equilibrium condition of a Muslim consumer in terms of his consuming output and holding capital stock in ways that arecarried up to some point at which the ratio between marginal utility and price (premium) is the same for all output and capital stock and equals the marginal utility of spending on charity. Thus a purely neoclassical meaning is given to the Islamic allocation of resources in valued goods and services.

Such a neoclassical approach to an exogenous treatment of Islamic ethics and values results in a profuse application of optimisation and steady-state equilibrium methods in Islamic economic theory. The essential context and feature of knowledge simulation in Islamic preference formation as explained by the Islamic political economy are ignored. The axiom of independence and pre-ordering of preferences underlying economic rationality in Islamic economics has caused Naqvi to consider independence between his axioms of Islamic economic behaviour, of which the primal one is *Tawhid*. Consequently the central connectivity of this primal epistemology in the Islamic system of complex causality is lost.

## Markets in Islamic Economics

The market system is influenced by exogenous preferences in Islamic economics. The market is thus a consequentialist venue of ethics and values of exogenous individual behaviour, unlike the endogenous knowledge induction of preferences in ethicising markets in the Islamic political economy. Islamic behaviour in the ideal markets of the Islamic economic school is a prescribed one. It is not learned out of the process of discourse. Chapra (1992) for instance used a concept, of moral filter in the pricing and resource allocation mechanism. According to this concept, market prices are assumed to be governed by Islamically prescribed baskets of goods and services to the exclusion of imperfect ones. The filtered output is the ideal Islamic one and prices are thereby ideal in such a filtered market. The market order is thus segmented into a recommended and an impermissible part. The moral filter guides preferences to the prescribed segmented market within such an assumed differentiation. In all of these the role of learning that progressively breaks down the market duality by moral induction is replaced by prescribed behaviour. Hence a price discriminating model is implied between the segmented markets. No analytical treatment of osmosis from one market subsystem to another is made clear.

## Resource Allocation in Islamic Economics

We have explained in this paper that the resource allocation of neoclassical economics that has entrenched Islamic economic methodology assumes the existence of opportunity cost of alternatives that compete rather than co-operate in the market venue. This is the cause and effect of the principle of economic rationality and marginal substitution that embod-

ies both microeconomic and macroeconomic theory of production and economic growth. Thus, although no aggregation is possible from the level of microeconomic decision-making to the macroeconomic level where decision-making and behavioural aspects of economic agents are absent, Islamic economists nonetheless emulate neoclassical economics to treat the microeconomic and macroeconomic segmentation in Islamic economics. This leaves empty the epistemological foundation of morals and values that makes all of Islamic political economy a learning behaviour on the basis of knowledge induction. Thereby, only microeconomic phenomena are legitimate in the Islamic political economy. Macroeconomic menu is a non-linear interactive, integrative and evolutionary compounding of microeconomic preferences and its impact on the socio-economic variables, policies and institutions.


## CONCLUSION

This paper has given an overview of the analytical nature of the Islamic political economy considered as a vastly interactive system of socio-scientific epi-phenomenon premised on the immutable epistemology of Divine Unity. We have formulated a consistent and workable framework of analysis that can be established on the framework of unification of knowledge premised on Divine Unity at the core.

The study of Islamic political economy was then used to critique mainstream economics. Alternative explanations of some of the issues tackled by mainstream economics were provided in the light of the Islamic political economy. We have not claimed a detailed explanation of this field here.

We also realize that in the earlier economic literature there has existed the treatment of knowledge (Boulding, 1967; Hayek, 1945; Kirzner, 1997). But our standpoint on the pervasively knowledge-centred field of Islamic political economy was premised on the epistemology of unification of knowledge being extensively endogenous and complementary in *interre*-lations, which other approaches have failed to establish due to their roots in areas of social Darwinism (Neurath *et al.*, 1970).

In the end we have shown that the paradigm of Islamic political economy and world-system premised on the epistemology of unity of knowledge

in the *Qur'an* and the *Sunnah* (*Tawhid*) gives birth to a new field of human inquiry that can be truly revolutionary as it is authentic. In contrast to this paradigm we have shown briefly that the traditional field of Islamic economics has failed to go beyond the mainstream economic theorizing, much of which is neoclassical economics and its varied prototypes.

## ABOUT THE AUTHOR

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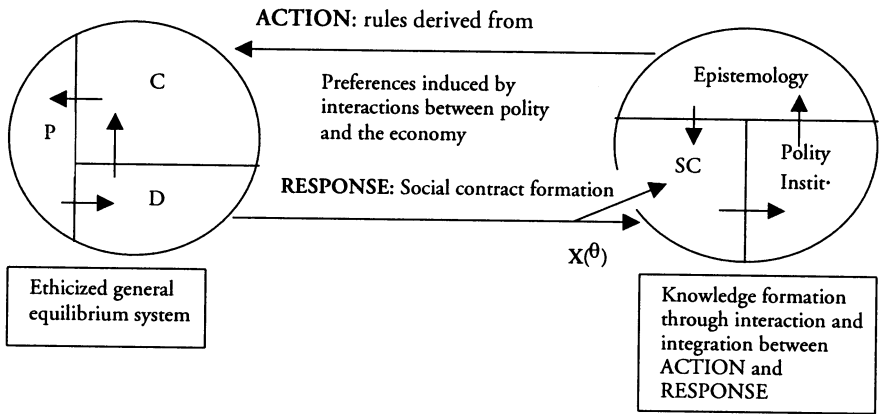
## Figure 1

### Principles and Instruments of Islamic Political Economy
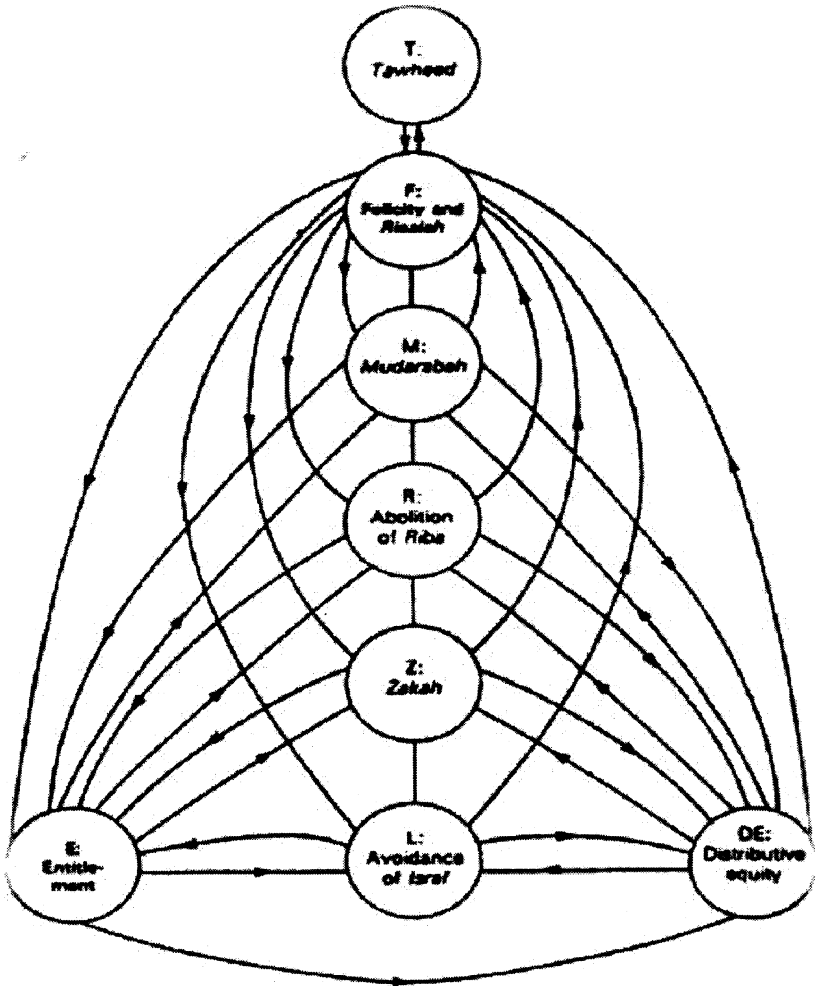


In this figure it can be seen that a great many possible combinations can be formed among the Islamic principles and instruments. The key aspect is the return of all such circular flows (shown by arrows) to the crowning principle of *Tawheed*, and this is only possible by way of Islamic conscience formation and subsequent benefits through the realisation of the understanding of felicity.

## Figure 2
### Interactive, Integrative and Evolutionary Nature of Social Action and Social Response in the Islamic Political Economy



ACTION: rules derived from

Preferences induced by interactions between polity and the economy

RESPONSE: Social contract formation

$x(\theta)$

C

P

D

Epistemology

SC

Polity Instit·

Ethicized general equilibrium system

Knowledge formation through interaction and integration between ACTION and RESPONSE

$\{\theta, x(\theta);$ Pref$\}$ are the knowledge-induced socio-economic variables determined by interactions and integration followed by evolution as marked by Action, Response through preference changes and inter-systemic complementarity as shown by the circularity of the arrows.

## Figure 3

### Resource Allocation in the Islamic Political Economy

In this 3-dimensional diagram the impact of $\theta$-values on $X_i(\theta)$ is shown. Note the evolution of the fuzzy space of actions, S, in the IIE-framework. This evolutionary fuzzy bundle is made up of interactive trajectories like $T_i$, $T_i'$, i =1,2,... The evolution of the knowledge-induced fuzzy spaces is shown by $S_1$ to $S_2$ along the trajectory OT.