# Epistemological Problems in Human Geography: An Overview and a Preliminary Islamic Evaluation

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#### Introduction

Geography is the study of the earth's surface as the space within which the human population lives. The internal logic of this study has tended to split geography into two parts: physical and human. The identity of physical geography is the more discernible part, as it is concerned with the study, over time, of the characters, processes, and distribution of inanimate phenomena in the space accessible to human beings and their instruments. Human geography, on the other hand, is not so clearly defined, as it deals with problems which are, in the final analysis, multidisciplinary or extradisciplinary in character. Thus, although human geography can be consistently defined as that part of the social sciences which studies people solely in relation to space and place, this study can range from synthesizing the relationship between human societies and the Earth's surface (in which people-environment relations are emphasized) to that of an all-encompassing coverage of all aspects of geography not directly concerned with the physical environment.

One corollary of such an all-encompassing coverage is the multiplicity of approaches in human geography. As geographers probe further into the truth of the human phenomena, be it the interrelationship of people (individually or as groups) in their physical or social environment, the spatial and temporal distribution of human creations, or the organization of society and social processes, and as they draw increasingly from extraneous disciplines in the course of such probing, it has become more and more obvious that it is now impossible to forge and maintain a singular human geography.

For instance, an economic geographer trying to understand the unequal distribution of incomes among population groups in different places will be

introduced to Marxist economics, the Marxist explication of capitalism, and, in due course, may espouse Marxist economic geography. By the same token, a social geographer may borrow from Marxist sociology (and eventually become a Marxist) in order to explain and understand, for example, the phenomenon of residential segregation in a free-market society. Hence the consolidation of Marxism as an alternative episteme in human geography.

Some geographers, not convinced by Marxist theories, might find satisfaction in humanistic explorations. There may still be differences between humanistic geographers as regards whether one adopts an existentialist or a phenomenological bent, but the allegiance to human subjectivity and human phenomena will be distinctive in their work and make humanistic epistemes a major contender in human geography. Other geographers may remain positivist and empiricist diehards, still maintaining that objective verification through quantitative techniques remains the ruling wisdom of human geography.

Finally, there are those geographers who believe in the possibility of accommodation between divergent approaches in the discipline. They claim to have been able to transcend, by means of "critical" and structuration theories, the philosophical limitations in the other approaches.

This latter development, however, should not be construed as the demise of pluralistic human geography, for as Johnston observes, human geography is branching towards anarchy, the latter implying not chaos but the free association and voluntary cooperation of individuals and groups. Still,

. . . there is no normal science, no consensus over a disciplinary matrix, no agreement about the right exemplars. Human geography is a shifting conglomerate of small communities, with which many individuals are only weakly linked. No change in this situation seems likely (Johnston 1983, 220).

In other words, current human geography is characterized by an epistemological impasse. This paper seeks to address this issue by describing the nature of the contending philosophies which currently characterize human geography in order to highlight those epistemological points of contention which are difficult to reconcile. It then proceeds to briefly recount the nature of structuration theory, which some geographers see as capable of solving the impasse, and then conducts a preliminary Islamic evaluation of it. Thus this paper does not feature an Islamic review of the initial contending philosophies (positivism, humanistic approaches, structuralism, Marxism) preceding that of the resultant structuration theory, as the overriding motive is to introduce this mainly neglected subject to the field of the Islamization of knowledge. What I am presenting is an overview and a suggestive approach, as this is more appropriate for this paper than a detailed exhaustive analysis.

## The Loci of the Impasse<sup>1</sup>

An academic practitioner normally undertakes research within a framework provided by his/her chosen discipline's philosophy. This philosophy lays out the ways according to which the study is to be conducted: its epistemology (its theory of what we can know and how we can know it) and its ontology (what are accepted as facts or truths for the discipline). Thus, the discipline's epistemology and ontology define its methodology, or rules and procedures, which direct the conduct of research and agreement within the discipline.

In current human geography, there are three contending philosophies: a) empiricist-positivist, which states that experience is the source of human knowledge and that experience can be accepted as fact only if it has verifiable and agreed-upon evidence. Thus, the methodology is one of factual verification; b) humanistic, which insists that the source of knowledge is the subjective world of meanings created by human individuals, that truth is what people perceive to exist. Research is conducted by investigating these individual worlds, thus emphasizing individuality and subjectivity rather than replicability; and c) structuralist, which views the source of knowledge as being that which causes the empirical, and not the empirical world itself, as is the case with the empiricist-positivist philosophy. As a result, facts or truths cannot be observed directly but only through thought, and the only way to investigate these facts is to construct theories which can account for what is observed. However, these cannot be verified because the evidence of their existence is not available.

The empiricist-positivist philosophy poses problems in the field of human geography for two reasons. First of all, the theories which have been developed by adherents to this view have failed to provide convincing explanations for human behavior. Much of the failure resides in the initial assumptions, for they are refutable. For example, one assumption derived from neoclassical economics states that the individual, as an economic actor, is an entirely rational profit-maximizer. Thus, in Central Place Theory, individual entrepreneurs are assumed to locate their service establishments at a particular place which will ensure the maximum turnover, and individual customers are assumed to purchase goods and services from the nearest available outlet in order to minimize their acquisition costs. Similarly, according to Land Use Theory, the individual farmer is assumed to want to produce a certain commodity close to the market because the greatest return is yielded at the market. Industrial Location Theory assumes that entrepreneurs will seek to locate their plants at the location which will minimize their production and distribution costs. In the study of urban social

 $<sup>^{1}</sup>$ Much of the material presented in this section is taken from R. J. Johnston (1986; 1983) and R. J. Johnston, D. Gregory, and D. M. Smith, eds. (1988).

areas, society is viewed as wishing to live in separate parts of the urban area and to minimize interclass and intergroup contacts. Finally, Spatial Interaction Theory says that the whole of the society's spatial organization is taken to involve exercises in the minimization of movement.

What is refutable in the behaviorism underlying these theories is its normative form — how people ought to behave. But not all people behave as rational profit maximizers and distance-cost minimizers. People differ because there are variations in their behavioral processes such as learning, perception, cognition, attitude formation, and so on (Golledge 1981, 1327). Consequently, positivist geographers also look at the more inductive behavioral geography, in which data are collected from individual decision makers regarding those process variables assumed to govern their behavior. The reason for this is the belief that such an undertaking will yield meaningful units of aggregation about which generalizations can be made.

The second problem with positivist geography is its verification. Positivist geographers can use the theory of probability in two ways: a) to state that there is a strong possibility that the relationship observed in a sample may be present in the parent population, with the condition that, according to the methodology of most tests, its exact strength will remain unknown. This raises a problem as to the nature of the population and the sample — what are the populations for geographical theories and to what do the samples refer? If the nature of the population or the sample is unclear, then the validity of statistical significance tests must be doubted, and b) to state that in random orderings of the data set being studied, a particular relationship could only rarely occur by chance. Since the relationship was predicted and is unlikely to occur by chance, it can be taken as "real," thus confirming the hypothesis (Hay 1985). The difficulty with this position is that if it is a sample of one, a correlation may be predicted. But, how large is this correlation? How far does it advance geographical knowledge? How many separate studies must report similar results before the hypothesis is verified? As to those separate studies, do they together constitute a random sample of all possible studies? The problems of verifying geographical hypotheses are clearly considerable. Whereas hypotheses in the natural sciences may be universal in their content and can be tested in controlled conditions anywhere, many geographical hypotheses, like many of their social scientific counterparts, are partial and set in contextual situations where proper experimentation is impossible (Johnston 1986, 42).

These problems of verification, however, have led not to the abolition of the positivist paradigm in human geography, but rather to further progress. For instance, to enhance validity, positivist geographers have moved from simple linear models to multivariate linear and nonlinear models and have also adopted system analysis. Furthermore, they have also proceeded to work on catastrophe and bifurcation theories following the attack on the spatial autocorrelation prob-

lem (compare, for example, Haggett 1965 with Haggett, Cliff, and Frey 1977; Cliff and Ord 1973 with Cliff and Ord 1981; and Hagerstrand 1968 with Cliff et al. 1981). Such progress enables the positivist to claim that positivist spatial economy is now better than before:

It is more carefully defined than before, we know a little more about its organization, the ways it responds to shocks, and the way some regional sections are tied to others. There now exist theoretical bridges, albeit incomplete and shaky, which span from pure, spaceless economics through to a more spatially disaggregated reality (Haggett 1978, 161).

This increased understanding, achieved through rigorous quantitative analysis, can make important contributions to public policy as an applicable scientific geography (Bennett 1981). Contributions are made possible because of the positivists' subsequent move from normative to behavioral approaches and advocacy for welfare geography, although some opponents regard these more as moves of change in style and emphasis rather than in substance (Cox 1981).

The main difficulties with the humanistic approaches are the practicality of doing research and of communicating its aims and results. The constraints of language are at the heart of conducting humanistic research, analyzing the findings, and communicating the meaning, for what is judged to be true is not independent of the language in which that judgment is phrased (Olsson 1975, 26). Apart from that, there are the problems associated with the relevance and orientation of humanistic approaches. Being an epistemology which emphasizes the subjectivity of knowledge, humanistic geography tends to be regarded as unscientific and of perhaps general interest, but as having little relevance to the creation of better objective conditions for the society. Its atomistic focus on the individual may also distort reality, for it gives individuals the freedom to act when in fact they are very much constrained by external circumstances over which they have little control.

Humanists reply that their epistemology is the only one which does not overlook the real cognitive link connecting phenomena with their human authors. This is something which the positivist episteme has either obscured or ignored. Yet it is by illustrating the very complexity and subjectivity of human individuals and in driving home the importance of meanings that a real understanding of human phenomena can be achieved. The obstacle of language does not depreciate the value and importance of the humanist episteme, for people use metaphors in social life. Since meanings are created and communicated through metaphors which signify that understanding is never purely individual but communal, never purely intellectual but experiential, and never purely theoretical but practical,

it is thought possible to erect, via metaphors which people use, a humanistic geography which is simultaneously critical (in questioning rather than bracketing our presuppositions), hermeneutic (in interpreting the meanings behind the particular action), and empirical (in examining the subjectively interpreted objective world) (Harrison and Livingstone 1982).

Finally, the weaknesses of the structuralist epistemology pertain to the development of understanding and to changing the capitalist society into a socialist one, both of which are ardent aims of its protagonists. It is difficult for many people to believe that knowledge is obtained not through the accumulation and verification of evidence, but rather through the development of theories, although such theories can account for the driving forces within society, provide an understanding of human experience within that society, and indicate the intellectual tools which can be used to achieve radical social change. It is necessary for the theories not just to demonstrate the need for a structuralist approach, but also to be able to suggest an acceptable and sensible practical route. As it is, they are relatively underdeveloped, and hence insufficient, for an approach which sees others as lame and counterrevolutionary.

Some forms of structuralist Marxist geographies, in addition, were also criticized for their improper treatment of human subjects. They gave us a world of pallid human profiles where humanity became faceless, mindless, and unauthentic as a result of an ideology and epistemology which manipulated it through the determinism of an external system and reduced it to materialism (Ley 1978, 48). Such a system can only lead to an obfuscation of the processes by which human beings can and do change the world (Duncan and Ley 1982, 54).

Marxist geographers defended their epistemology by emphasizing the fact that only in structuralist Marxist epistemology were the real processes which shape human life identified and discussed. These "real" processes are those which operate in the social life's infrastructure, which the other epistemologies failed to recognize. The epistemological superiority of Marxism lies in its ability to discriminate between a society's superstructure (the level of appearance) and infrastructure (the level of processes). The society's superstructure consists of its social, cultural, political, and social organizations. While it can be directly apprehended, it cannot be used to account for its own existence, for the processes creating it are in an infrastructure which cannot be observed but only theorized and compared with the resulting outputs of the superstructure. In human geography, this means deriving those general theories of historical materialism (the capitalist economic processes) which will account for particular patterns observable in the superstructure, as the latter are not self-explanatory.

Furthermore, Marxism is also a form of political ideology which seeks a radical change of those capitalist economic processes. Other epistemologies cannot generate this radicalism because they ignore the political consequences of their work (Peet 1975). This is why positivist geographies, for example, cannot provide solutions to social problems (such as crime) but only ways to ameliorate them. They thus serve to maintain the status quo in society by diverting attention away from the deepest causes of the social problems and towards the details of their effects (Harries 1974). By contrast, the political ideology of Marxism demands that the capitalist imperatives' dominance over individual action be removed and replaced with communism, for it asserts that only under communism can every individual take responsibility for the conditions of his/her life and pave the way for truly human relationships (Relph 1981, 122).

## Overcoming the Impasse<sup>2</sup>

The epistemological impasse in human geography describes a situation in which geographers of different philosophical persuasions have failed to resolve their differences due to the absence of a transcending epistemology. The assertion that a transcending epistemology has not yet appeared may not be welcome by some geographers. This is especially true with those involved in formulating the structuration theory, for they believe that the theory transcends the polarization between determinism and voluntarism in accounting for human agency (or the dualism between agency and structure).

Structuration theory<sup>3</sup> is concerned with the intersections between knowledgeable and capable human agents and the wider social systems and social structures in which they are necessarily implicated. One of its leading theorems is that "every social actor knows a great deal about the conditions of reproduction of the society of which he or she is a member." The other theorem is that structure "is not to be conceptualized as a barrier to action, but as essentially involved in its production" (Giddens 1971, 1976, 1977, 1979, 1981, 1984). Thus the problem of "agency" and "structure" is now conceived of in terms of how societal integration is effected over time and space, how social systems "bind" time and space.

The theory situates behavior in both a local context and a compositional ordering (social classes, etc.). Here, the concept of locale is emphasized as being a temporally and territorially defined social system. People create their locales as their interpretations of the compositional ordering (i.e., space as a structure, a consequence, created by society) (Soja 1980). In turn, people are created by their locale, for the latter is their biographical context (i.e., space as an environmental context, a condition for society) (Hagerstrand 1984). Both acts of people creating their locale and the locale creating people are continuous, with

<sup>&</sup>lt;sup>2</sup>This section relies heavily on the accounts given by Gregory (1988).

<sup>&</sup>lt;sup>3</sup>Some commentators have identified structuration theory as an emerging consensus in social theory and have spoken of a "structuralist school." This group includes such people as P. Berger and T. Luckman, P. Bourdieu, A. Giddens, and A. Touraine (Gregory 1988, 464).

the result that the nature of the locale and its residents are in continual flux (Gregory 1981).

This theory, it is claimed, provides a genuine integrating framework rather than an argument that anything goes. To illustrate, in a reconstructed political geography the compositional structure is the capitalist global world economy. Within it are many locales — the places within which people live, learn, and act. Mediating between the locales and the world economy are states. All three levels are human creations, and all three are changing as a result of human action involving interactions among all three. The result is a fully integrated historical social geography (spatiality is society's formative constitution: its concretization), for change is both spatial and temporal. Structuralist ideas are present (they can account for the mechanisms driving the world economy), as are humanistic approaches (both states and locales represent meanings and provide the contexts for interpretation) and empirical analyses (they allow the evaluation of tentative descriptions of this historical social science's spatial and temporal components). The only element missing is positivism, as the order identified is not presumed to be universal (Taylor 1985, 1986; Johnston 1986, 150).

If structuration theory is to become an epistemological framework which genuinely integrates agreeable features of differing epistemologies in human geography, it needs to develop a series of concrete studies of structuration to feed back into its theoretical articulation (Gregory 1988, 468). This is quite a tall order, as some geographers see the difficulty in operationalizing the framework empirically in the absence of a clear view of how to "break into" the continuous recursive interrelationship of structure and agency in order to undertake empirical research (Gregson 1986; Dear and Moos 1986).

Structuration theory also suffers from a weakness found in the discipline of human geography as a whole: the absence of a conceptual or technical basis for achieving cross-scale linkage — it has not been able to develop models which can take the analysis through from macrostructure (at the world level), to mesostructures, and then to microstructures (Haggett 1988, 206-7). In the case of structuration theory, it has yet to develop a clearer and more comprehensive delineation of the "multi-tiered" character of the social world and its cross-scalar configurations (Gregory 1988, 468).

A scale is defined as a level of representation of reality. There are three possible connections between scale levels which can be envisaged: a) same level (or the empirical): a comparative relation; b) high to low level (or the actual): a contextual relation; and c) low to high level (or the real): an aggregative relation. Inferential problems arise in the last two instances, because generalizations about patterns and processes at one level may not hold at another. Geographers just cannot sum all the patterns and processes up, for it has been recognized that "the whole is greater than the sum of its parts" (ibid., 418-9). Indeed, these

issues might indicate different temporal and scale orders of rules linking events and forms (Kennedy 1977).

Structuration theory tries to find the solution to problems connected with the multitiered stratification of reality by way of the philosophy of theoretical realism. Theoretical (or transcendental) realism regards the ultimate objects of knowledge as the structures and mechanisms which generate phenomena and which are intransitive in the sense that such objects exist and act independently of their identification (Bhaskar 1979, quoted and rephrased in Gregory 1988, 332). Human and social phenomena are open systems whose laws of operation cannot be dealt with in the same positivist manner as are physical systems.

Realism offers a particular perspective on the nature of open systems: the world is differentiated, stratified, and made up not only of events (as with positivism) but also of mechanisms and structures. However, according to transcendental or theoretical realism (which informs structuration theory), the identification of mechanisms and structures is far from straightforward, because they are not immediately inscribed in the taken-for-granted categories which we draw upon in our everyday "commonsense" discourse. They refer to systems of social practices which act upon knowledgeable and capable human subjects. This appeal to knowledgeable and capable human subjects is intended to distance realism from "essentialism" (the belief that there is an essential reality lying "behind" surface appearances and which is somehow more real) and from structuralism (which displaces the human subject altogether). Thus, inquiring in the human and social sciences entails a double instead of a single hermeneutic (a theory of interpretation and clarification of meaning). One pertains to the empirical, the life-world (the everyday taken-for-granted life where we disentangle such conjunctures sufficient only for us to cope with everyday tasks). The other relates to the real, our deeper construction of reality where, as theorists, we seek to understand the world by making rational abstractions which isolate unified objects, structures, or groups, and from which we then start to conduct concrete research. These two should not be separated. Hence, structuration theory needs to sustain substantive social theories capable of identifying the relations between different ontological domains while simultaneously recognizing their integrity as differentiated features of social reality (Layder 1981; Gregory 1982; Gregory 1988, 389).

Furthermore, the effects of systems of social practices are, according to theoretical realism, very much determined by the contingent features of the settings in which they occur (Gregory 1985). The appeal to "contingent features" of the "settings" in which social practices occur (to their "conditions") is intended to pry realism away from an unyielding determinism. In contrast to positivism, realism regards scientific "laws" as statements of necessity, not universality. Thus, although causal powers necessarily exist by virtue of the nature of the objects

which possess them, it is contingent upon whether they are activated or exercised. By extension, therefore, their effects depend on the presence of certain contingently related conditions (Sayer 1984).

This means that spatial configuration makes a difference in the examination of the exercise and effect of causal powers. However, the constitution of social reality cannot be accounted for either by its time-space relations alone (the classical error of spatial analysis) or by its elements alone (the classical error of compositional theory): they must be taken together. Thus, structuration theory recognizes the time-space constitution of social systems (Giddens 1981, 1984). The social world should be seen as comprised of space-time entities having powers and effects which may or may not be realized depending on the patterns of spatial/temporal interdependence between them (Urry 1985).

Some geographers are still skeptical about the plausibility of time-space relations in concrete spatial forms, for they regard abstract propositions about time-space relations as highly generalized and rather indifferent (Sayer 1985). To resolve this, it is suggested that geographers not erect a rigid dividing line between "abstract" and "concrete" research, but instead observe a careful delineation of a hierarchy of concepts in which time-space relations become ever more tightly specified (Gregory 1988, 390).

## Overcoming the Impasse: An Islamic Review<sup>4</sup>

It seems that the chances of human geography solving its prevailing epistemological impasse will depend on the ability of structuration theory to:

- (1) solve the problem of operationalizing its framework empirically so that empirical (concrete) research can be conducted to substantiate it:
- (2) unify analyses of the micro-, the meso-, and the macrostructures into a coherent whole; and
- (3) justify the intelligibility of theoretical realism in which the theory is grounded.

With regard to the first problem, how do we "break into" the continuous recursive interrelationship of structure and agency in order to undertake empirical research? The question can be restated thus: How do we know that a realist theory of mechanism is valid if it is not subject to direct empirical testing? The

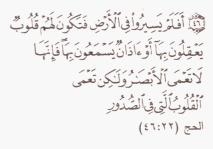
<sup>&</sup>lt;sup>4</sup>Mohammad Iqbal's *Reconstruction of Religious Thought in Islam* (1934) furnishes much of the Islamic reasoning in this section.

Islamic answer is that we "break into" the continuous flux of human social life by integrating field observation with introspection:

46. Do they not travel through the land, so that their hearts (and minds) may thus learn wisdom and their ears may thus learn to hear?

Truly it is not their eyes that are blind, but their hearts which are in their breasts.

Al Hajj (22:46)



The verse outlines the methodology of seeking the truth or knowledge. This consists of an empirical method (for "travel through the earth" denotes fieldwork and field expedition) as well as a hermeneutic/interpretative method. The verse instructs the Muslim researcher to gain truthful knowledge through empirical investigation (*mulāḥazah*): one cannot engage in armchair scholarship. But empirical investigation alone is not sufficient: it must be reinforced with introspection and an incisive, profound, refined, and critical interpretation of the empirical data. The shortcoming of many scholars is their failure to produce a valid interpretation, a result which is due mainly to their own inability to recognize the truth of the matter for various reasons (prejudice, bias, reluctance, ignorance, stereotypes, etc.).

The empirical mode, however, is not the only mode of knowledge in Islam. In Islamic epistemology, the truth can be reached in a number of ways. The empirical and positivist mode (*mulāḥazah*) has just been cited. Apart from this, there are *badāhah* (reasoning with self-evident truth or common sense) and *tajrībah* (reasoning with human experience) (Ghorab 1981). These two stipulate that we can recognize the truth if we care to reflect upon what is real in human living and if we are not making it unnecessarily difficult for ourselves to be realistic about it. We can then perceive that, for instance, living in a human society is structured by its mode of economy and politics. That the Qur'an itself contains numerous economic guidelines, such as forbidding the institution of interest, is further proof that Islamic epistemology does recognize the reality of the economic mechanism in human social life. This reality is not in any way lessened or affected just because the mechanism is abstract. And, as the Qur'an informs us, the operating reality of such a mechanism can be apprehended

<sup>&</sup>lt;sup>5</sup>Ghorab (1981) gives a lucid though brief description of these four methods of reasoning used by the Qur'an. In this paper, however, only casual allusions are made to Ghorab's methods of reasoning, or even to Islamic concepts of knowledge in general. This is not meant to simplify the Islamic aspects of the issue, but only to suggest the ability of an Islamic epistemology to reconcile methods which are not easily reconcilable in Western scholarship.

through a reflective study of its empirical consequences (i.e., 33:42).

The integration of the empirical with the actual and the real is possible in an Islamic epistemology due to the presence of a principle which unifies and transcends the peculiarities of differing approaches to knowledge: the unity of knowledge or the unity of truth. In Islam, this unity devolves from Allah's absolute unity and is convertible with it (al Fārūqī 1988). He is the Creator of all reality as well as all truth. In other words, He is the reality. And, according to the Qur'an, this reality can be approached in more than one way. As a result, an Islamic epistemology therefore has no difficulty in integrating the empirical with the rational and the intuitive, for they are regarded as sectional views of reality when taken in isolation and, when taken collectively, they complement each other in producing a total view of reality.

By contrast, in the operationalization of the structuration theory, there seems to be a lurking skepticism about the ability of pure thought to guarantee the validity of the truth asserted. Refuge is sought in empiricism, but this must lead to futility as the abstractness of the truth is not submissible to direct sensing. To return to pure thought, then, would only mean to reinstate the problem.

The case of an Islamic epistemology is different. Espousing the view that the nature of the ultimate reality is spiritual, it builds in itself the facility of another mode of reasoning called intuition. Thus the path of knowledge begins with the concrete empirical, passes through the abstract theoretical, and ends up in an affirmation of the intuitive. In an Islamic epistemology (Qur'an 22:46), the "heart," (qalb; pl. qulūb) is a kind of inner intuition or insight which brings us into contact with aspects of reality other than those open to sense perception. Islam regards it as a mode of dealing with reality which represents yet another level of human experience having the capacity to yield knowledge by interpretation (Iqbal 1934, 15).

The conception of the structuration theory seems to point to the inadequacy of pure thought as a mode of dealing with social reality. The reality to be apprehended and comprehended requires an additional method. Yet, what more can be offered by an ideology which is secular, alien, and even hostile to a religious mode? This theory has come a long way in recognizing the relevance and utility of (double) hermeneutics, yet it seems to be without a sensible foundation in which to ground them. Typical of the secular worldview is the belief that an extension to the intuitive would cause irrationalities, religious or otherwise, to enter its epistemology and render it unscientific. It is taboo.

This brings us to structuration theory's second problem of unifying the analyses of the micro-, the meso-, and the macrostructures into a coherent whole. The great lesson produced by structuration theorists is that reductionism is an enemy to sound reasoning in the social and human sciences. Structuration theory tries to circumvent incoherence by positing an integrating role in spatiality (regionalization). Space matters, but if space is not just a reflection of society

but is society itself, how do we reconcile this place-centered regional ontology of human spatiality with the reality of naturalistic (physical) space without the benefit of (a reconstituted) essentialism? Structuration theory is averse to the belief that there is an essential and more real reality behind social life. This is understandable in the context of Western theistic notions of essentialism. But the incoherence remains in structuration theory even when this more essential reality is replaced with infinite humanism, however capable and knowledgeable the human subjects are. Humans rule in every tier of social life, in every stratification of reality; this seems to be the structuration theorist's way of mitigating reductionism and materialist determinism (see, for example, Gregory, forthcoming).

If humanism is adequate, how do we account for consequences and eventualities in history and social life which are not intended by finite human authors in the first place? Thus, in an Islamic epistemology it is necessary to recognize the existence of the profoundest reality behind social reality in order to comprehend the reality of the structures and mechanisms that generate phenomena. But this Islamic "essentialism" is not Christianity's anthropomorphic God or the scholastic cosmology which "tries to reach the Infinite by merely negating the finite. For the Infinite reached by contradicting the finite is a false Infinite, which neither explains itself nor the finite which is thus made to stand in opposition to the Infinite. The true Infinite does not exclude the finite; it embraces the finite without effacing its finitude, and explains and justifies its being" (Iqbal 1934, 28).

Nor is the supreme reality the scholastic teleology which infers the existence of "a skillful external contriver working towards a pre-ordained end and on a pre-existing dead and intractable material the elements of which are, by their own nature, incapable of orderly structures and combinations" (ibid., 28). To endow the world process with purpose in this sense is to rob it of its originality and its creative character. God is an organizing (and not a formless) principle of unity, a synthetic activity which holds together and focalizes the dispersing disposition of the living organism for a constructive purpose. To predicate this power to a finite humanity is to fail to acknowledge the finitude and creature status of the human species. This transcending power belongs to an ultimate ego, a centralizing unity (i.e., God) to whom time is pure duration and not serial, and to whom nature (including space) is not a mass of pure materiality occupying a void but rather a structure of events, a systematic mode of behavior. "Nature is to the Divine self as character is to the human self . . . from the human point of view it is an interpretation which, in our present situation, we put on the creative activity of the Absolute Ego. At a particular moment in its forward movement it is finite, but since the self to which it is organic is creative, it is liable to increase, and is consequently boundless in the sense that no limit to its extension is final" (ibid., 54).

Thus, consider the following statement made by the geographer Urry (1985): "The social world should be seen as comprised of space-time entities having causal powers which may or may not be realized depending on the patterns of spatio/temporal interdependence (between them)." From the point of view of an Islamic epistemology, the statement is problematic, incoherent, or meaningless if space-time entities, the accordance of causal powers to them, the contingency of the exercises of these powers, and the enactment of time-space coincidence necessitated by the contingency are not predicated on the idea of God as the ultimate reality.

By involving God, however, we will not be causing humanity to vanish in the face of God's immanence. We, the finite egos, are part and parcel of Him — the Absolute Ego. Our life is organic to His being. But this does not mean the loss of our egohood or freedom. God has of His own accord chosen human beings, the finite egos, as participators in His life. An Islamic epistemology therefore has no difficulty in reconciling real space and time (they are possibilities of the Ultimate Ego) with the regional ontology of human spatiality (as the latter is envisaged in structuration and contextual theories). Indeed, conceiving space as a necessarily dynamic and infinite continuum because it is a possibility of the profoundest reality is the very essence of an Islamic epistemology. It is thus to God's immanence that the micro-, meso-, and macroscales of social realities are to pertain, and it is to His transcendence that we are to attribute or predicate the holistic and coherent linkages of these multiscalar constitutions of social realities.

Can the same coherence (and holism) be achieved by structuration theory? The answer to this question brings us to the theory's third problem, that of justifying the intelligibility of theoretical realism, because it is in this philosophy that structuration theorists seek to find the solution.

Realism affirms that the world is a reality independent of the human mind. It regards the world as differentiated, stratified, and made up of events, mechanisms, and structures. Structures are sets of internal relations which are necessarily autonomous, naturally causative, and realize themselves through mechanism (Gregory 1988, 388). But what actually is the nature of these internal relations which have the capability to cause events? Since they are not idea, are they pure abstract movement? Are they energy waves, matter in its energy state, or what? This is one of the most dissatisfying aspects of this abstract philosophy.

The truth of the matter is that realism does not mean more than the admission of an objective reality independent of the mind and consciousness. It can prevail because scientific discoveries have not proved the nonexistence of an independent objective reality. Rather, they have shown that the material aspect is not a necessary element of it. Whether the world is attributed to potency, motion, or anything else other than matter is harmless to realism and cannot

prove idealism, as long as the world has an objective reality that exists independently of the mind and consciousness (Al-Sadr 1987, 96).

It is not clear where realism stands in clarifying the ultimate nature of reality in structuration theory. For "if we accept an objective reality of the world, do we stop with objectivity at the limit of sensible matter, which would thus be the common cause of all the phenomena of existence and being, including the phenomena of consciousness and knowledge: or do we stop beyond it to a further cause, an eternal and an infinite cause, as the primary cause of what we know of the world, including both its spiritual and its material realms?" (ibid., 149-50). Realism wants to distance essentialism from social phenomena. This indicates that it has not agreed to the existence of an immaterial eternal cause. But it also wants to distance structuralism because that theory displaces the human subjects altogether. So the prospect of structuration theory (and its modified versions) to satisfy our curiosity as to the nature of the ultimate reality that it envisages will greatly depend on its (their) conceptual treatment of the human subjects or, to paraphrase Gregory (1988, 4920), its ability to provide a satisfactory account of the "differential constitution of human subjects as knowledgeable authors in different types of societies."

From the Islamic point of view, however, realism's silence or indifference when it comes to explaining the nature of what it considers to be the ultimate reality bespeaks of the constraint of a secular worldview. This constraint will not get better even when maximum vitalism is accorded to human agency to enable the philosophy to account for the structures' differential mechanism.

As it is, we manage to get from structuration theory (via realism) the following situation: because a) structures and mechanisms are not the ultimate reality, since human agency may relegate their dominance; and because b) human subjects are not the ultimate reality, since structures and mechanisms may obstruct them; there is, therefore, c) no ultimate reality. Human geographers can judge for themselves whether structuration theory and its like, having placed themselves in this predicament, could provide the proper solution to the current epistemological impasse in the discipline. From the Islamic point of view, however, it is clear that, as it is, it cannot do so, for without recognizing and affirming the reality of God, it would always be lacking an operational basis upon which to unify knowledge.

#### **Summary and Conclusions**

This paper has sketched some problematic aspects of recent developments in human geographical thought. It has also provided a brief account of the articulation of structuration theory as a major attempt by human geographers to solve the epistemological impasse that results from conflicting philosophies

in the discipline. To evaluate the possibilities of the theory to surmount the problem at hand, the paper takes an Islamic standpoint. The evaluation is not intended to be exhaustive, but rather as ground-breaking only. For example, only some of the theoretical aspects of the structuration paradigm have been dealt with. The practical or prescriptive (praxis) aspects have been totally ignored, as their treatment is far beyond the scope of this paper.

The Islamic evaluation of the theory indicates some points of incoherence in its epistemology. It implies that if human geographers are really serious about salvaging the integrity of their discipline by means of structuration and similar theories, a total departure from secular philosophizing is imperative.

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