# Mohsin S. Khan and Abbas Mirakhor (Editors)

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*Theoretical Studies in Islamic Banking and Finance* represents the work of six economists, five of whom are associated with international banking; the editors, Drs. Mohsin Saeed Khan and Abbas Mirakhor, themselves being employees of the *International Monetary Fund*. The whole enterprise has been put out by the Institute for Research and Islamic Studies based in Houston, Texas. With this background, the authors bring a wealth of policy and practical experience to bear on their project, and also see themselves as "a new generation of Muslim economists, trained in the West and well-versed in analytical and quantitative techniques, [able] to apply modern economic techniques to answer [the] questions".<sup>(1)</sup> The questions and the research program the editors define and delineate has been set out in their Introduction.

Such work, which is designed to complement the writings of Islamic scholars, brings to bear modern analytical tools and concepts on questions such as:

a. What is the theoretical framework underlying Islamic banking and finance?

b. Will the Islamic system be more or less stable than the traditional interest-based system?

c. What will be the effect of an adoption of an interest-free Islamic system on important

macroeconomic variables like saving and investment? and

d. Will monetary policy have a role to play in such a system?

The papers in this volume all address one or more of these questions at the theoretical level.<sup>(2)</sup>

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<sup>1.</sup> From the Introduction to the Khan-Mirakhor book, page xv. From now on, page numbers on their own will refer to the book under review.

<sup>2.</sup> See page x.

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The volume consists of nine papers, four of which have been published before. The Editors see the work as contributing to the second stage in the development of *Islamic economics*, one that "delves more deeply into the theoretical aspects of the sys tem, the [first stage being] concerned primarily with historical-doctrinal issues and with the questions of what the system was and how it could be implemented".<sup>(3)</sup> In a recent review, Shaghil Ahmed follows the same trichotomy-the descriptive, the analytical and the evaluative-and sees this volume as a contribution to analysis.<sup>(4)</sup>

In keeping with this methodological thrust, each author simply takes a particular topic, and more specifically a particular algebraic model within a topic, and then examines the changes in the conclusions that follow by dispensing with a fixed positive rate of return. Thus, in Chapter 2, Mohsin Khan modifies Metzler's<sup>(5)</sup> 1951 macroeconomic model of the IS-LM variety; in Chapters 3 and 8, al-Jarhi and Khan Mirakhor present versions of the general equilibrium financial model of the Tobin Brainard type; in Chapters 4, 5 and 7, Waqar Khan, Sharukh Khan and Haque Mirakhor respectively modify the canonical model of the principal-agent literature; in Chapter 6, Haque-Mirakhor compare the standard deterministic optimal savings model of the Phelps, Levhari-Srinivasan variety with its stochastic counterpart; and finally in Chapter 9, Mirakhor draws the relevance of the standard Tobin-Markowitz analysis of portfolio choice to the Islamic system. The Editors write:

For the most part the main question has been the consideration of what happens to selected economic variables if the rate of interest is eliminated and replaced by some type of profit sharing mechanism. Indeed, it could be argued that removing the term 'Islamic' would not materially affect the analysis or the conclusion of many of these papers.<sup>(6)</sup>

But, of course, at another level, the essays are meant to be much more than routine modifications. They would have to be if the research project is to have any coherence and relevance. If the research strategy consisted simply in asking what happens to the conclusions of randomly-chosen models on the replacement of a positive deterministic rate of return by zero, or in grafting a particular vision of profit sharing on to a conception whose relevance has not been argued for, it would indeed be incoherent. The number of models that can be constructed is limited only by the modeler's imagination, just as the number of essays that can be written out of the words in a particular dictionary is limited by the essayists's imagination and purpose. The point is that the models have to be grounded to the question at hand, and latching onto currently fashionable words or onto currently fashionable models, hardly attenuates this basic point, even though it may make the enterprise more *theoretical* or more *scientific*.

However, I would argue that the research project embodied in this volume is coherent, and that the individual chapters are of interest precisely because in them, and through them, the authors try to articulate their vision of an "Islamic economic system"

<sup>3.</sup> See page x

<sup>4.</sup> See Ahmed (1980), p. 157.

<sup>5.</sup> Incidentally. Metzler's name is misspelt Throughout the volume of Meltzer.

<sup>6.</sup> See page xv.

as well as their vision of the place of financial institutions and banking, in particular Islamic banking, within such a system. In arguing this, I am not alone. Thus al-Jarhi writes,

The conclusions of this paper make it obvious that economies with no interest payments on borrowing and no bank multiple creation of money are *most optimal* between the different institutional arrangements considered. This means that it is *most efficient* if the government initially provides its own money free, lends it free, and imposes a 100/reserve ratio on banks.<sup>(7)</sup>

Waqar Masood Khan finds

that, under a given set of assumptions, the Islamic financial scheme was *superior* to the traditional scheme because of the risk-spreading character of the former. Perhaps the deepest question raised by this research is whether the efforts of Islamization... would be successful or not... [We] *strongly reject* the implication that these efforts should be abandoned.<sup>(8)</sup>

In his own essay, Mohsin Khan allows himself the statements

This model does provide a *reasonable portrayal* of the types of Islamic banking systems that have been put into practice in certain countries... Although it is not intended to be a *fully realistic representation of the complete Islamic banking system*, the model nevertheless is able to highlight the principal issues of concern... The paper [also] demonstrates that the Islamic system may well prove to be *better suited* to adjusting to shocks that result in banking crises and disruption of the payments mechanism of the country.<sup>(9)</sup>

Thus there is a clear prescriptive element here as there must be in any description.<sup>(10)</sup> I shall then assume, despite the editors' initial statement to the contrary, that the adjective 'Islamic' is both relevant and substantively important one for the authors of these essays.

With the establishment of this point, there are several possible ways that I can proceed. One is simply to be a fellow-traveller and examine each model in detail, suggest possible extensions and modifications, simplify the analysis and proofs, view the model from the perspective of other theoretical work, mainstream or otherwise, all of this done with full optimism that the road is not only the right one but one which has the added advantage of being *scientific* and *rigorous*. This is, of course, "normal and incremental science"<sup>(11)</sup> and the procedure that has already been ably followed by Shaghil Ahmed in the review referred to above. I shall not follow it here.

<sup>7.</sup> See page 38. Italics are mine.

<sup>8.</sup> See page 104, italics are mine.

<sup>9.</sup> See pages 17 and 31. Italics are mine.

<sup>10.</sup> See below for a discussion of the prescriptive/descriptive dichotomy.

<sup>11.</sup> The term normal science is. of course, Kuhn's; for detail and explication, see Khan (1962, 1977).

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Instead, I shall focus on the methodological stance which underlies these essays. In my view, such a stance is altogether too confident about progress in the subject through an exclusive reliance on the methods of economic theory-the words "theory" and "theoretical" as terms of approbation and approval run throughout the volume. Accordingly, I shall use the occasion of this review to propose some alternative directions for the development of the subject, and through introspection, also try to articulate what is it in the essays collected here, and in the enterprise more generally, that I find useful, and what is it that I do not. Since the Khan-Mirakhor book revolves around *Riba* in an essential way, I shall orient my ideas according to a theme that can be simply and succintly stated:

I am primarily interested in understanding what is meant by the term *Riba* as used in the Qur'an, that I find this question to be a fundamental and useful one, certainly for Islamic studies if not for other subjects, that at this stage of our intellectual development it is premature to think of prediction and control in the context of this inquiry, that insight into this question can only be had by situating it in the broader context of the human sciences, that economic theory has an important but not exclusive role to play in such a context by providing metaphorical rediscription.<sup>(12)</sup>

I shall develop this theme by laying out some methodological antecedents that rely on the American pragmatic tradition,<sup>(13)</sup> and by recalling for myself some important words and some basic principles pertaining to Islam. I follow this up with an analysis of the term Riba as used in the Qur'an. These three sections allow me to situate the essays of the Khan-Mirakhor book as descriptive attempts to understand Riba. Once I make precise what I mean by this, I supplement these descriptions by alluding to other descriptions on which this book is totally silent, those of von Neumann, Malinvaud, Arrow-Debreu, Samuelson and Lucas. I can then bring together the various strands of my review and re-emphasize that the profoundity and depth of the question of what is *Riba* precludes a definite answer, and that it is the question itself that can be used as one possible guidepost to orient our understanding into an ideal Islamic society, and through it some insight into the overwhelming moral and ethical problems confronting us. Put somewhat more specifically, what I hope to explicate is that in the phrase *Islamic* economics one cannot give meaning to the noun without understanding the adjective, that the meaning we give to the noun will also surely help us in understanding the adjective and that such undestanding can never be final and complete for any generation of scholars.<sup>(14)</sup> It is well, in terms of orientation and introduction, to conclude this section with two quotations that bring out this basic stance.<sup>(15)</sup>

Be patient toward all that is unsolved in your heart and try to love the *questions themselves* like locked rooms and like books that are written in a very foreign tongue... Live the questions now. Perhaps you will then gradually, without noticing it, live along some distant day into the answer.<sup>(16)</sup>

<sup>12.</sup> I venture into the very thickets that Naqvi [(1981) Footnote 1 on page 109] avoids.

<sup>13.</sup> As the reader will note, I am particularly influenced by the writings of Putnam, Quine and Rorty, and also of Paul Dc Man.

<sup>14.</sup> See Anderson's (1990) book for this aspect in Diderot's work.

<sup>15.</sup> The Urdu word justuju captures this Striving better than any term known to me in English.

<sup>16.</sup> From Rainer Maria Rilke as quoted on the front page of Putnam (1990)

Cynics about philosophy, and perhaps about humanity, will find that questions without answers are empty; dogmatists will claim to have arrived at answers; philosophers after my heart will rather wish to convey the thought that while there may be no satisfying answers to such questions in *certain forms*, there are, so to speak, directions to answers, *ways to think*, that are worth the time of your life to discover.<sup>(17)</sup>

In this section, I try to pin down my methodological preconceptions in terms of some basic footholds. The first such foothold that I want to mark out is Quine's 1960 doctrine of the *Indeterminacy of Translation*.<sup>(18)</sup> Such a doctrine is typically introduced through the thought-experiment of an investigator trying to understand a jungle language with agreement only as regards the terms "yes" and "no". Now assume that the investigator, who is one of "us", always obtains the native informant's assent whenever he uses the term *gavagai* for "rabbit". Quine points out that the investigator cannot conclude from this that *gavagai* means "rabbit" since the native may "cut up the world differently" from the way the investigator does, and *gavagai* may instead stand for "rabbithood exemplified" or for "undetached rabbit parts" or for a "temporal slice of a rabbit". Thus the meaning of *gavagai* is determinate only with respect to some particular translation manual and one cannot really give meaning to the question of what *gavagai* really means. Indeed, the same is true of "own" *word rabbit*. As Putnam points out, "a choice of a translation manual is merely a pragmatic affair, a means of correlating one's speech dispositions with those of another linguistic community".<sup>(19)</sup>

The technical essentials of the argument have been explicated by Quine and, following him, by Putnam is terms of a unique isomorphism between languages viewed as sets endowed with well-defined operations. I refer the reader to Putnam's paper<sup>(20)</sup> and to Quine's recent book,<sup>(21)</sup> and merely point out that Quine's doctrine is part of a comprehensive philosophical stance which embraces the Duhem-Quine thesis of holism,<sup>(22)</sup> the underdetermination of theories, the inscrutability of reference<sup>(23)</sup> and ontological relativity.<sup>(24)</sup> Quine draws a parallel between the "empirical under determination of global science and the indeterminacy of translation" -in both cases there is a multiplicity which empirical evidence is insufficient to eliminate but the latter goes beyond the former. Two ways of conceiving the world may be observationally equivalent and yet incommensurable in that the categories of one cannot be translated into those of the other. "What the indeterminacy of translation shows is that the notions

<sup>17.</sup> See Cavell (1984), p. 9.

<sup>18.</sup> See Quine (1960).

<sup>19.</sup> See Putnam (1990), p. 263.

<sup>20.</sup> See Chapter 9 in Putnam (1975) on the Refutation of Conventionalism.

<sup>21.</sup> See Quine (1990).

<sup>22.</sup> This is the claim that "the falsity of the observation categorical does not conclusively refute the hypothesis. What it refutes is the conjunction of sentences that was needed to imply the observation categorical. [**Quine** (1990) p. 13]. Also see Chapter 21 in Putnam 1990 on *Meaning Holism*.

<sup>23.</sup> This is the claim that divergent interpretation of the words in a sentence can so offset one another as to sustain an identical translation of that sentence as a whole. [Calling this indeterminacy of reference would have been better". [Quine (1990), p. 50].

<sup>24.</sup> This is the claim that "there exist thoroughly intertranslatable theories which do not even agree on ontology, that is. on what objects there are". [Putnam (1975) p. 183].

of propositions as sentence meanings is untenable".<sup>(25)</sup> In sum, it is useful to recall Nozick's insightful characterization of Quine "as a theorist of slack",<sup>(26)</sup>

There is another route to the issue of indeterminacy of translation and this is through the field of literary criticism. This opens a vast subject but I would at least like to draw attention to it through the words of Paul de Man.

The translator, per definition, fails. The translator can never do what the original text did. Any translation is always second in relation to the original, and the translator as such is lost from the very beginning. He is per definition underpaid, he is per definition overworked, he is per definition the one history will not retain as equal.

The text is untranslatable: it was untranslatable for the translators who tried to do it, it is untranslatable to talk about it, it is an example of what it states, it is a *mise en abyme* in the technical sense, a story within the story of what is its own statement.

... the moment the translation is really literal, *wortlich*, word by word, the meaning completely disappears.  $^{(27)}$ 

The second foothold that I want to mark out is Bakhtin's 1927 assertion that language is a social construct and Wittgenstein's insight into its contractarian nature. In his discussion of Bakhtin's work, Todorov points out that "even though in the act of sound production or perception, no sociality need be presupposed, it is the production and reception of meaning that truly founds language".<sup>(28)</sup> In the words of Bakhtin,

No utterance can be attributed to the speaker exclusively; it is the product of the interaction of the interlocutors, and, broadly speaking, the product of the whole complex social situation in which it has occurred.<sup>(29)</sup>

I have attempted to bring out the importance and implications of these ideas  $elsewhere^{(30)}$  and there is little point in repeating them here. However, this conception of discourse and texts as a "language game" leads me to the third foothold that I want to mark out.

This foothold concerns the pragmatic conception of truth and reality which implies in its turn a rejection of a multiplicity of dichotomies which prevent progress and understanding. Pragmatists reject absolutes and are impatient with inquiries out to establish the essences, in one form or another. Their account "of the value of cooperative human inquiry has only an ethical base, not an epistemological or

<sup>25.</sup> Quine (1990), p. 102.

<sup>26.</sup> See Hahn-Schlipp (1986) p. 339.

<sup>27.</sup> See **De Man** [(1986) pages 80. 86 and 88 respectively]. I should point out that I have taken the second paragraph somewhat Out of context; however, as the reader will see from below, it serves my purposes.

<sup>28.</sup> See Todorov (1984) p. 30.

<sup>29.</sup> As quoted by **Todorov** (1984). p. 30.

<sup>30.</sup> See Section 3 on *Textual Strategies* in **Khan** (1990) and Section VI in **Khan** (1991a) and to the references therein.

metaphysical one".<sup>(31)</sup> Just as the meaning of a word depends on the choice of a translation manual, so too the meaning one gives to truth and rationality depends not on the methods for "isolating a natural and transcultural sort of rationality which can be used to criticize certain cultures and praise others," but simply on the procedures for justification available to a given society at a given point in time, on the gap between the actual good and the possible better. *Salihat* may mean "good works" in present day Indonesia as well as in the Morocco of the tenth century-what is interesting and of consequence is the meaning given to the phrase at these differing points in time and space.<sup>(32)</sup> In the words of Wittgenstein and Rorty:

So you are saying that human agreement decides what is true and what is false?-It is what human beings say that is true and false; and they agree in the *language* they use. This is not agreement in opinions but in form of life.<sup>(33)</sup>

[The pragmatist] thinks that the very flexibility of the word "true" -the fact that it is merely an expression of commendation-insures its univocity. The term "true," on his account, means the same in all cultures, just as equally flexible terms like "here", "there", good", "bad", "you", and "me" mean the same in all cultures. But the identity of meaning is, of course, compatible with diversity of reference, and with diversity of procedures for assigning the terms. So he feels free to use the term "true", as a general term of commendation.<sup>(34)</sup>

Putnam is more restrained. Whereas he too blieves that, "our norms and standards of warranted assertability are historical products-they evolve in time [and] always reflect our interests and values", he nevertheless allows that "in ordinary circumstances, there is usually a fact of the matter as to whether the statements people make are warranted or not [and that] this is independent of whether the majority of one's cultural peers would *say* it is warranted or unwarranted.<sup>(35)</sup> However, what both Putnam and Rorty<sup>(36)</sup> are clear about is that:

our norms and standards of *anything*-including warranted assertability-are capable of reform. There are better and worse norms and standards.<sup>(37)</sup> From a pragmatist point of view, to say that what is rational for us now to believe may not be *true*, is simply to say that somebody may come up with a better idea. It is to say that there is always room for improved belief, since new evidence, or new hypotheses, or a whole new vocabulary may come along.<sup>(38)</sup>

The dichotomies that I refer to concern science versus ethics or scientific versus non-scientific, reality versus appearance, objective versus subjective, facts versus values, prescription versus description, analytic versus synthetic, theory versus applied,

<sup>31.</sup> Sec Rorty (1991b), p. 23 and 24. Also, more generally, his work quoted below.

<sup>32.</sup> As the reader may be aware, my reference to Indonesia and Morocco is inspired by Geertz's elegant (1968) lectures. This example came up in a conversation with **S. Jilani**; also see below the importance of the term.

<sup>33.</sup> See Wittgenstein (1953), p. 241.

<sup>34.</sup> See Rorty (1991b), p. 23.

<sup>35.</sup> See Putnam (1990), p. 21.

<sup>36.</sup> For a difference between these two thinkers, from Putnam's point of view, see his lecture on *Realism with a Human* Face in **Putnam** (1990).

<sup>37.</sup> See Putnam (1990), p. 21.

<sup>38.</sup> See Rorty (1991b), p. 23 and 24.

positive versus normative, among many others. Many has written at length on the futility of these dichotomies and I have tried to draw the relevance of his ideas elsewhere.<sup>(39)</sup> It suffices to say these distinctions would take me far afield into fascinating issues into the nature of philosophy itself.<sup>(40)</sup>

Given all this, a natural question then arises as to how one is to proceed in terms of decision-making. This leads me to the fourth foothold that I want to mark out-the community. The pragmatic conception of truth and rationality dovetails into the importance of community. Wittgenstein's words quoted above are also relevant here. Kripke interprets it thus.

In Wittgenstein's own model ... if the community all agrees on an answer and persists in its views, no one can correct if ... If the corrector were outside the community, on Wittgenstein's view he has not the 'right' to make any correction.<sup>(41)</sup>

The point, of course, is not to transcend the limitations of one's background in somed sort of desire for objectivity but to strive for as much intersubjective agreement as possible. In Rorty's terms, the need to "extend the reference of "us" as far as we can". It is this attitude towards truth, in which the consensus of the community rather than a relation to a nonhuman reality is taken as central, that I take to be a hallmark of the American pragmatic tradition as well as of the work of Popper and Habermas.<sup>(42)</sup> I find particularly interesting Putnam's view of morality as the expression of a deep-seated human need which must now be fulfilled in a way similar to traditional societies-*by community* or equivalently, by social solidarity.<sup>(43)</sup> The same idea can be looked at in the context of his call for the replacement of the problem/solution dichotomy by the metaphors of *reading* and *adjudication*.

To adjudicate ethical problems successfully, as opposed to "solving" them, it is necessary that the members of society have a scnse of community. A compromise that cannot pretend to be the last word on an ethical question, that cannot pretend to derive from binding principles in an unmistakably constraining way, can only derive its force from a shared sense of what is and what is not reasonable, from people's loyalties to one another, and a commitment to "muddling through" together. When the sense of community is absent or weak, ... then fantasy and desperation have free reign.<sup>(44)</sup>

Finally, I come to a fifth foothold that I want to mark out. This is a derivative of the ideas presented above and concerns what I mean by metaphorical redescription-the

<sup>39.</sup> See Section 2 on *Language and Reality* in **Khan** (1990) and Sections II and III in **Khan** (1991a) and to the references therein.

<sup>40.</sup> In addition to the work of Rorty, see MacIntyre (1971; Part two) and (1984; especially Chapter 7); and Putnam (1981, 1986) and, in particular, Parts I and II in Putnam (1990).

<sup>41.</sup> See Kripke (1982), p. 146.

<sup>42.</sup> See **Rorty** (1991b), p. 23. **Rorty** also continues "1t is important to see, however, that the pragmatist notion of truth common to James and Dewey is not dependent upon either Pierce's notion of an "ideal end of inquiry" nor of Habermas' notion of an "ideally free community".

<sup>43.</sup> See Putnam (1990), pp. 185 and 189. More generally, see Chapter 12 in Putnam (1990) titled *How not to solve ethical problems*.

<sup>44.</sup> Sec Putnam (1990), p. 185.

importance of metaphor in particular, and literature in general, as sources of explanation and understanding. However, rather than go into the writings of Rorty,<sup>(45)</sup> or of Putnam<sup>(46)</sup> on this, I quote a historian who apparently does subscribe to the science. non-science dichotomy.<sup>(47)</sup>

We can move the problem back to a ground prior to that on which the emotive, cognitive and moral faculties can be presumed to function. This ground is that of language it self, which, in areas of study such as history, can be said to operate *tropologically* in order to prefigure a field of perception in a particular modality of relationships. This means that historiographical disputes tend to turn, not only upon the matter of what are the facts, but also upon that of their meaning. But meaning, in turn, will be construed in terms of the possible modalities of natural language itself, and specifically in terms of the dominant tropological strategies by which unknown or unfamiliar phenomenon are provided with meanings by different kinds of metaphorical appropriations. If we take the dominant tropes as four-metaphor, metonomy, synecdoche and irony-it is obvious that in language itself, in its generative and prepoetic aspect, we might possibly have the basis for the generation of those types of explanation that inevitably arise in any field of study not yet disciplined in the sense of being liberated from the conceptual anarchy that seems to signal their distinctively prescientific phases.<sup>(48)</sup>

## III

I now take these five footholds-the indeterminacy of translation, the social nature of language, the pragmatic conception of truth and rationality, the importance of community in such a conception and metaphorical redescription as a source of analysisand place them in tandem with some basic principles of Islam. I do this in a tentative way-a deeper discussion of the relationship would take me somewhat a field and into areas in which my competence is more questionable. However, one preliminary difference from Khan-Mirakhor needs to be emphasized. They write:

[The] theoretical studies ... considered here have not dealt with full-fledged Islamic models. The mathematical functions and behavioral assumptions of the models developed so far have only tangentially picked up Islamic characteristics. To correctly analyze the Islamic system, all behavioral assumptions, axioms, hypotheses, theorems, utility and production functions must bear distinctly Islamic imprints. However, this is no easy task [and] it will take time before such rules of behavior can be explicitly built into economic models.<sup>(49)</sup>

This is altogether too strong. Technology is technology, two-plus-two equals four is two-plus-two equals four, water is or is not necessarily  $H_20$ , a point is or is not the limit of shrinking concentric circles, and I cannot see how these conventions<sup>(50)</sup> can be given

<sup>45.</sup> See, in particular, Unfamiliar noises, Hesse and Davidson on Metaphor, and Philosophy as Science, as Metaphor, and us Politics in Rurty (1990).

<sup>46.</sup> See. in particular, is there a fact of the matter about fiction?, and How not to solve ethicalproblems in **Putnam** (1990).

<sup>47.</sup> One of the most sophisticated exponent of this dichotomy is of course. Williams (1987).

<sup>48.</sup> See White (1978) p. 72.

<sup>49.</sup> Sec page xv.

<sup>50.</sup> See in particular. Chapter 2 in Kripke (1984).

Islamic imprints. All we can do, it seems to me, is to mark out some basic footholds in Islamic studies and work towards our purpose keeping these footholds in mind.

The first such foothold, of course, is that the Qur'an represents God's speech to man.

Recite: And thy Lord is the most generous who taught by the Pen, taught Man that he knew not.

By the Pen, and what they inscribe, thou art not, by the blessing of thy Lord, a man possessed.  $^{\rm (51)}$ 

... it is a Reminder upon pages high-honoured, uplifted, purified, by the hands of scribes noble, pious.  $^{(52)}$ 

It is precisely because of this point that "from the earliest times orthodox opinion has rigidly maintained that [the Quran] is untranslatable, a miracle of speech which it would be blasphemous to imitate.<sup>(53)</sup> This leads me directly to the indeterminacy of translation as an important theme for Islamic studies. I have tried elsewhere,<sup>(54)</sup> following Izutsu, to draw the relevance of the *parole-langue* distinction to the Quran and to see it as embodied in the *kalam-lisan* dichotomy. Here I shall underscore that discussion by drawing the distinction between *tafsir* and *tawil*. But first the following verse:

He it is who revealed the Book to you: in it are the clear verses-they are the mother of the hook-and the others are the unclear verses.  $^{(55)}$ 

As for those in whose hearts is swerving, they follow the ambiguous part, desiring dissension, and desiring its interpretation; and none knows its interpretations, save only God. And those firmly rooted in knowledge say, We believe in it; all is from our Lord'; yet none remembers, but men possessed of minds.<sup>(56)</sup>

Arberry comments that "The word translated by 'interpretation' is *ta'wil*. The crucial point in the dispute between the professors of *ta'wil* and their antagonists was the method of construing this famous verse. The version[s] just given expresses the or thodox Sunni view, whereas the Shites and their philosophers took it otherwise:<sup>(57)</sup>

<sup>51.</sup> In his commentary, A. Yusuf Ali writes: "The mystic Pen and the mystic Record arc the symbolic foundation of the Revelation to man... through the Record of the Pen, that meaning unfolds itself, in innumerable aspects to countless generations"; see Footnote 5593.

<sup>52.</sup> All the three passages are from **A. Arberry**, The first is from 96: 3-5, the second from 68:1-2 (Surah Qalam) and the third from 80:13-16.

<sup>53.</sup> From Arberry's introduction to the Oxford University Press edition of his Koran Interpreted.

<sup>54.</sup> See Section V in Khan (1991a).

<sup>55.</sup> From Qur'an 3:7 as quoted in **Rippin-Knappert** (1986), p. 42; also see al-Tabari on the interpretation of Qur'an as presented in this book. Arberry translates the verse this way: *It is He who sent down upon thee the Book, wherein are verses clear that are the essence of the Book, and others ambiguous.* 

<sup>56.</sup> From **Arberry**, Ahmed Ali's translation of the entire verse is also worth reproducing: *He has sent down this book which contains some verses that are categorical and basic to the Book, and others allegorical. But those who are twisted of mind look for verses metaphorical, seeking deviations and giving to them interpretations of their own; but none knows their meaning except God; and those who are steeped in knowledge affirm: "We believe in them as all of them are from the Lord". But only those who have wisdom understand.* 

<sup>57.</sup> A. Yusuf Ali puts the point this way in his footnote 348: "One reading, rejected by the majority of commentators, but accepted by Mujahid and others, would not make a break at the point here marked *waqfa lazim* but would run the two sentences together".

and none knows its interpretations, save only God, and those firmly rooted in knowledge; they say, We believe in it; all is from our Lord'.<sup>(58)</sup>

One may also quote in this context

Though all the trees on Earth were pens and the seas were all inks, with seven more seas to add to it, they would be exhausted before ever the words of God were.<sup>(59)</sup>

This sensitivity to language, and to matters linguistic, dates from the earliest times and rather than pursue these fascinating discussions,<sup>(60)</sup> I turn to my second foothold. This is the plain assertion that "Mohammed was nothing more than a human being".<sup>(61)</sup> Arberry quotes what he calls Gwatkin's acute observation that the "Muslim idea of revelation gathers it up in a book, the Christian in a person.<sup>(62)</sup>

Muhammad is naught but a Messenger; Messengers have passed away before  $\operatorname{him}^{(63)}$ 

With these two basic tenets as a background, I turn to the four classical sources of Islamic law. $^{(64)}$ 

The Qur'an is the only source of law that is written, and it earns its special status by being the exact spoken word of God as reduced to writing by the Prophet, who was himself illiterate, [However] the Qur'an contains relatively few rule-like statements of law, and those it does recount are designated as "the claims of God", all else, the entitlements and obligations of man, being left largely to humanity's own determination so long as people do not overstep the limits set by God.<sup>(65)</sup>

... it did not take long for the discovery to be made that the Koran by itself did not contain the solution of all problems; the meaning of the sacred text was by no means always clear and provision had unfortunately not been made for all contingencies.<sup>(66)</sup>

On many legal topics, of course, the Qur'an is completely silent, In short, the primary purpose of the Qur'an is to regulate not the relationship of man with his fellows but his relationship with his Creator.<sup>(67)</sup></sup>

I go into this point at some length on account of what Khan-Mirakhor write in their introduction:

<sup>58.</sup> See Arberry (1957), pp. 16-17.

<sup>59.</sup> Qur'an 31:27. The translation is from Cragg, Readings in the Qur'an.

<sup>60.</sup> See Weiss (1974, 1977) for an entry into the literature.

<sup>61.</sup> Arberry (1957), p. 11.

<sup>62.</sup> See Arberry (1957), p. 10. Also the subsequent quotation from William Temple.

<sup>63.</sup> Qur'an 3:138. The translation is Arberry's. Also see the first twenty lines of SurahAbasa in this context.

<sup>64.</sup> I am here heavily influenced by Coulson (1964). However, the following statement from Rahman [(1982) p. 150] deserves to be quoted: "The only history of Islamic law, sketchy though it is, is by N.J. Coulson, and a solid and detailed history of legal development must await a treatment of the vast field of this literature that is either unpublished or untreated."

<sup>65.</sup> See Rosen (1989), p. 41.

<sup>66.</sup> See Arberry (1957), p. 11.

<sup>67.</sup> See Chapter in **Coulson** (1964).

Islam provides precise guidelines and rules governing individual rights, property rights, contracts, work, the accumulation and distribution of wealth, and the role of the State.<sup>(68)</sup>

Thus the term "Islam" in Khan-Mirakhor's statement must refer to the supplementation of the Qur'an as a source of Islamic law by three other sources, The first of these is, of course, *Sunnah* and Arberry has to be taken seriously when he says;

In this sense therefore it is not quite accurate to say that the Koran is the only revelation accepted by Islam; the inspired life and utterances of the Prophet were recognized by all Muslim opinion as furnishing a useful and binding supplement, particularly when it came to grappling with the claims of reason.<sup>(69)</sup>

This statement leads one to the extensive literature on how the Qur'an and the *Sunnah* were synthesized over time;<sup>(70)</sup> what is clear is that even the Qur'an and the *Sunnah* had to be supplemented Such supplementation was done through the consensus (ijma') in the community (umma), and by reasoning (especially based on analogy (qiyas) the two other sources of Islamic law. This leads me to the importance of community (umma) in Islam and to my third and final foothold, I cannot develop the full ramifications of this claim other than to reproduce the oft-quoted *Hadith* 

My community will not agree in error.<sup>(71)</sup>

Difference of opinion within my community is a Divine Mercy.<sup>(72)</sup>.<sup>(\*)</sup>

With the establishment of these three footholds-the Qur'an as God's speech to man, the essential humanity of Muhammad and the four sources of Islamic law-I turn to a listing of four important words-*haqq*, *niya*, *'illa* and *ijtihad*.

*Haqq* is a crucial word because of the implications towards the definition of truth and reality that it carries in an Islamic context.

*Haqq* means [not only] "right", "duty", "claim", "obligation", but [also] "truth", and "duty". Indeed, because it is this obligational linkage is so crucial to [the] concept of how reality is itself constructed, it comes as no surprise to learn that attachments to *Allah* himself are viewed as contractual in nature<sup>(73)</sup> and that He is the ultimate embodiment of this relational reality and is thus referred to, among his other names, as *al Haqq*.<sup>(74)</sup>

<sup>68.</sup> See page xi.

<sup>69.</sup> See Arberry (1957), p. 11.

<sup>70.</sup> See in particular, Chapter 4 on ash-Shafi'i in Coulson (1964).

<sup>71.</sup> As quoted in Rosen (1989), p. 42. Also quoted in Coulson (1964) p. 77.

<sup>72.</sup> As quoted by Gibb (1963), p. 174.

<sup>\*</sup> There is no *hadith* with this text, see Muhammad Nasir al Din al Albani, *Daif al jami' al Saghir wa Ziyadatuh*, *Hadith*, No. 230, Vol. 1, page 111 (Beirut, al Maktab al Islami, 1979). However, this particular text not being *hadith* does not necessarily mean that the essential point made therein is not correct. (Editors)

<sup>73.</sup> See this theme developed in Khan (1990) in the section on Markets in the Qur'an.

<sup>74.</sup> See Rosen (1989), p. 13.

The question of "intention" underlying a particular action plays a unique and singular role in Islamic culture, and particularly in Islamic law.<sup>(75)</sup> Rosen draws attention to the fact that the word for intent in Arabic, *niya*, means not only "will," "volition", "plan", "design", but also "simple", "sincere", and "naive". All of this feeds into the fact that

Islamic law remains resolutely pragmatic and local. It does not seek to refine the concept involved or to make it artifact in a neat system of codified categories. Rather, the concept retains its general shape and like other aspects of this system is projected, as it were, downwards. Just as human traits mean nothing unless attached to individual persons, the concept that is applied by the *qadi* must be filled in, and indeed can only exist, through its individuated instance. The categories of Islamic legal thought, like those in other domains of this culture, are frameworks that delimit, not structures that govern.<sup>(76)</sup>

The third term that I consider is *'illa*. Saleh does not find "an entirely satisfactory English equivalent" for the term but notes

In the context of *qiyas*, which will be seen to play a decisive part in widening the *Riba* prohibition, a common *`illa* should connect together the two elements of the analogy, object as well as subject. A mere resemblance between attributes is not sufficient. The *`illa* should represent the compelling factor which has motivated or is intended by the legal rule; it should be plain and consistent. [Furthermore] the legal rule ... should be of general application and not restricted to a specific case<sup>(77)</sup>.

My final term is *ijtihad*, which Coulson translates as:

"effort" or "exercise" of one's own judgement [or] in its widest sense, the use of human reason in the eleboration of the law. *Qiyas*, then, is a particular form of *ijtihad*.<sup>(78)</sup>

It is precisely in the context of *ijtihad* that the writings of the Egyptian jurist Muhammad 'Abduh and the Pakistani philosopher-poet Mohammed Iqbal become relevant; both of whom argued that the exercise of *ijtihad* was not only the right but also the duty of present generations of Muslims.<sup>(79)</sup>

I am now in a position to ask what is the nature of an (presumably ideal) *Islamic economy* and the status of *Riba* within such an economic system. Description, for malization, analysis, textualization, interpretation are all intertwined at this stage in a many-layered labyrinth, each successive stage giving insight into the ones that are to follow as well as into the ones that I have gone before. But first, I need to turn to the question as to what is *Riba*? I begin with the Qur'an.

<sup>75.</sup> For this, see especially Chapter 3 in Rosen (1989) and the references therein.

<sup>76.</sup> See Rosen (1989), p. 56.

<sup>77.</sup> See Saleh (1989), pp. 14-15.

<sup>78.</sup> See Coulson (1964), pp. 59-60.

<sup>79.</sup> See Coulson (1964), p. 202 and more generally the entire book in this context.

## IV

The word *Riba* is mentioned five times in Surah *AI-Baqarah*, once in Surah *Al* 'Imran and once in Surah *An-'Nisa-'*, all of these are from the Medinan period.<sup>(80)</sup> In Surah *Ar- 'rum* of the Makkian period, the derivative *Riban* is used instead. As such, the textual references are entirely manageable and it is well to begin by laying out this material. I begin in the chronological order.

That which you lay out for increase (*riban*) through the property of (other) people will have no increase (*yarbu*) with God: but that which you lay out for charity (*Zakat*), seeking the Countenance of God (will increase): it is these who will get a recompense multiplied.<sup>(81)</sup>

Next, I turn to the other Medinan Suras, but in reverse numerical order.

That they took *Riba* though they were forbidden; and that they devoured men's substance wrongfully; we have prepared for those among them who reject Faith (kafirin) a grievous punishment.<sup>(82)</sup>

O ye who believe (*amanu*)! Devour not *Riba* doubled and multiplied; but fear God (*ittaqu*); that ye may really prosper.<sup>(83)</sup>

The entire section<sup>(84)</sup> from Surah *Al-Baqarah*, is worth reproducing in full.<sup>(85)</sup>

Those who spend of their wealth in the way of God, day and night, in secret or openly, have their reward with their Lord and have nothing to fear (*khawf*) or regret.

Those who live on *Riba* will not rise (on Doomsday) but like a man possessed of the devil and demented. This is because they say *bai'* is like *ribd* but *bai'* has been sanctioned and *riba* forbidden by God.

Those who after receiving direction from their Lord desist, shall be pardoned for the past; their case is for God (to judge); but those who repeat (the offence) are companions of the fire (*ashab an-nar*) where they will abide for ever.

God blots out *Riba* but freewill offerings (*sadaqat*) He augments with interest (*wa yurbi*);<sup>(86)</sup> God loves not the ungrateful (*kaffarin*) and the sinners (*athim*). Those who believe (*amanu*) and do deeds of righteousness (*salihat*)<sup>(87)</sup> and perform the prayer (*salat*), and pay the alms (*zakat*) - their wage (*ajar*) awaits them with their Lord, and no fear (*khawf*) shall be on them, neither shall they sorrow.

<sup>80.</sup> I am justifying these statements on the basis of Fouad (1945) and Panel of the Arabic Language (1981).

<sup>81.</sup> See 3039. The translation is from A. Yusuf Ali.

<sup>82.</sup> See 4:161. The translation is from A. Yusuf Ali.

<sup>83.</sup> See 3:130. The translation is from A. Yusuf Ali.

<sup>84.</sup> Section 38 according to A. Yusuf Ali.

<sup>85.</sup> The passage produced below is culled from the translations of Ahmed Ali A. Yusuf Ali. A. J. Arberry and M. M. Pickthall without being bound in its entirety to any one. Moreover 1 have also inserted the key Arabic terms in order to facilitate the analysis that follows.

<sup>86.</sup> Pickthall has translated this sentence as follows: God hath blighted Riba and made almsgiving fruitful.A. Yusuf Ali also uses the term "fruitful" and translates sadaqat as "charity".

<sup>87.</sup> A Yusuf All translates salihat as "good works".

Obelievers (*amanu*), fear you God (*ittaqu*) and forego *Riba* that is outstanding, if you are indeed believers (*muminin*). If you do not, beware of war on the part of God and His Apostle. But if you repent, you shall keep your principal. Oppress none (*la tazlimuna*) and no one will oppress you (*la tuzlimuna*).<sup>(88)</sup>

If a debtor is in want, give him until his circumstances improve; but if you forego (the debt) as charity (*tasdaqu*) that will be to your good, if you really under stand.<sup>(89)</sup>

Have fear (wattaqu) of the day when you go back to God. Then each will be paid back in full his reward (ma kasabat) and no one will be wronged (la yuzlamuna).

Now the obvious question arises as to what is *Riba*. As a first pass, I shall adopt the following characterization.<sup>(90)</sup>

### **Proposition** 1

*Riba* is associated with  $kufr^{(91)}$  and with zulm.<sup>(92)</sup> Those who partake of it are considered at him rather than mu'minin<sup>(93)</sup> and without taqwa.<sup>(94)</sup> Its practice is to be opposed to sadaqilt,<sup>(95)</sup> and to he contrasted with bai'. It is not consistent with salihat, with the giving of zakat and the observing of salat. Its practitioners will be ashab annar forever.

Note that in Proposition 1, there is only one term, *bai'*, which is primarily commercial in nature; all other technical (!) terms being ethical. In the text itself, *ajar* and *kasab* have a commercial significance. However, what I am trying to do in this review is precisely to explode this commercial/ethical dichotomy; *Riba* is an example *par excellence* where such a dichotomy does not hold.<sup>(96)</sup> I now turn to a semantic analysis of Proposition 1.

V

For the basic methodology of semantic analysis that I have in mind, it is best to begin with the words of Izutsu himself.

The analytical method I am going to apply to the Qur'anic data ... is to make the Qur'an interpret its own concepts and speak for itself... What is central to my inquiry is not so much the material as the method of linguistic analysis applied to that maternal.<sup>(97)</sup>

<sup>88.</sup> Arberry translates this as "unwronging and unwronged".

<sup>89.</sup> Arberry's translation is as follows: And if any man should be in difficulties, let him have respite till things are easier; but that you should give freewill offerings is better for you, did you but know. Arberry translates tasdaqu and sadaqat as freewill offerings, taking care to distinguish the terms from zakat which he translates as alms.

<sup>90.</sup> By its very nature, the characterization in Proposition 1 is not complete. This is also the reason why I use the terms "proposition" rather than "definition".

<sup>91.</sup> In the text above, the words kafirin and kaffarin are both used.

<sup>92.</sup> In the text above, the words *tazlimuna*, *tuzlamtina* and *yuzlamuna* are all used.

<sup>93.</sup> In addition to this word, amana is used also twice in the text.

<sup>94.</sup> In the text above, the word *ittaqu* is also used twice.

<sup>95.</sup> The word tasdaqu is also used once in the above text.

<sup>96.</sup> **Torrey** (1892) documents, albeit sketchily, other examples; see, in particular, his discussion of the commercial sense in which *zulm* is used.

<sup>97.</sup> See Isutzu (1966), p. 3.

I leave it to the reader to look at Izutsu's work in detail; I shall simply list some of his basic conceptual footholds. He emphasizes the difference between "basic and relational meaning,<sup>(98)</sup> and the consequent distinction between etymology and semantic analysis. He also presents a view of vocabulary being a multi-strata structure, these individual strata being "semantic fields", each with their own "focus-word." Another one of his important distinctions is between synchronic and diachronic semantics. Finally, one may mention the seven cases according to which any passage assumes an importance for his semantic analysis; namely, contextual definition, synonyms, contrast, negative form, semantic clusters, parallelism and secular meanings.<sup>(99)</sup>

In simpler and non-technical language, what I intend through Proposition 1 is to understand the meaning of *Riba* by examining it solely in its Qur'anic context. How ever, in contrast to Izutsu, I hope to demonstrate that such an enquiry is not really sustainable, leave alone being the only way of gaining insight into the meaning of the term. Indeed this whole essay can be seen as an attempt at charting out the several levels at which the meaning of the term can be pursued.

Izutsu does not present a semantic analysis of the word *Riba*- and in keeping with the first phrase of my Proposition, I begin with what he has to say about *kufr*.

*kufr*... forms the very pivot round which revolve all the other negative qualities, [and] it occupies such an important place in the whole system of Qur'anic ethics that a clear understanding of how it is semantically structured is almost a prerequisite to a proper estimation of most of the positive qualities. Even the concept of faith or belief, as the highest ethico-religious value in Islam, may best be analyzed not directly but rather in terms of *kufr*, that is, from the negative side.<sup>(100)</sup>

In the first two chapters<sup>(101)</sup> devoted to such an analysis, Izutsu (1966) concentrates on the inner structure of the concept and identifies the element of ingratitude in the term, and by opposing it to *Iman*, meaning "faith" or "belief", he also identifies it with disbelief. What is interesting in the context of *Riba* is that the term is being used in both of these senses. Izutsu also relates the term to *shirk* meaning polytheism, to *dalla* meaning "going astray", to *takabur* meaning arrogance, to *istahza'a* meaning mockery and to *jadalu* meaning contentiousness. He has a subsection on the "heart of the kafir", and in the earlier (1959) version of his book, had titled this chapter, *Kufr*, *The Greatest of All Sins*. The direction of analysis that I have taken is very clear. *Riba* is associated with *kufr* and in trying to track down what *Riba* means, I must track down what *kufr* means.

Now, in the second of the two chapters referred to,<sup>(102)</sup> Izutsu identifies *fasiq*, *fajir* and *zalim* in the semantic field of *kufr*. Once I obtain a "working knowledge" of *kufr* and *zulim*, I can turn to the next two important words in my Proposition, namely *athim* 

<sup>98.</sup> See Isutzu (1964), Chapter 1. 111.

<sup>99.</sup> See Isutzu (1966), pp. 38-40.

<sup>100.</sup> See Izutsu (1966), p. 119.

<sup>101.</sup> Out of eleven.

<sup>102.</sup> Izutsu (1966), Chapter VIII.

*and mu'minin*. In trying to understand what a *mu'min* is, I am led to Izutsu's chapter on the "Islamization of old Arab virtues" in which generosity, courage, loyalty, veracity and patience play a particularly prominent role;  $^{(103)}$  to his chapter titled "The Believer", where *taqwa'* or *khawf* are discussed in a subsection on "The Fear of God". Finally, I am led to his discussion on "Good and Bad", in Islam where the term *ithm* is contrasted with *salih*.

*Salihat* is the plural of *saliha*, the antonym of say *yi'at*, *salih* being the adjective and *aslah* a the causative verb-form.<sup>(104)</sup> Izutsu writes

The strongest tie of semantic relationship binds *salih* and *iman* together into an almost inseparable unit. Just as the shadow follows the form, wherever there is *iman* there are *salihat* or `good works', so much so that we may also feel justified in defining the former in terms of the latter, and the latter in terms of the former. The *salihat* are 'belief' fully expressed in outward conduct. And so it comes about that the expression.

alladhina amanu wa-'amilu al-salihat,<sup>(105)</sup>

is one of the most frequently used phrases in the Qur'an.<sup>(106)</sup>

This question of the equivalence of the terms, *iman* and *salih*, leads directly to a problem and a consequent divergence of opinion. The *Khawarij* school of thought suggests that one is inconceivable without the other, whereas the *Murji'ah* view emphasizes a distinction on the grounds that the use of two different terms is "irrefutable evidence that these are in fact two different things [and that] faith does not need any other element to be perfect". Of course, all of this takes me back to the meaning and interpretation of the phrase "good works". In the context of the present discussion, it is clear that the practice of *Riba* does not constitute *salihah*, but when one poses the question as to what are *salih* deeds, what is of interest is the extent to which *Riba* constitutes and exhausts the meaning of such deeds.

Up till this point, I have still not considered the terms *sadaqat*,<sup>(107)</sup> *bai*',<sup>(108)</sup> *zakat* and *salat*, and yet the only two chapters of Izutsu's book that I have not discussed pertain to "religious hypocrisy" and to "the basic moral dichotomy in Islam". In the latter, Izutsu considers the contrast between the companions of Paradise from the *ashab annar*, a term which concludes my Proposition. Of course, the chapters and the book of Izutsu is hardly the point; what I am trying to emphasize is that a quest which starts as an attempt to understand the meaning of *Riba* from an ethical perspective very quickly reveals the centrality of the concept in the Qur'anic world- view and takes on a rather open-ended quest for understanding the Qur'an itself.

<sup>103.</sup> These are all titles of subsections of Chapter V in Izutsu (1966).

<sup>104.</sup> See Section 1 of Chapter XIII in Izutsu (1959).

<sup>105.</sup> Izutsu (1966), translates this as those who believe and do salih deeds; see p. 204.

<sup>106.</sup> See Izutsu (1966), p. 204.

<sup>107.</sup> For *sadaqat*, **Watt** [(1967) p. 62] writes "the precise meaning here is uncertain: perhaps morning gift" Elsewhere (pp. 45 and 107) he translates the terms as "freewill offerings".

<sup>108.</sup> See Schachts entry in Houtsma (1936), also Torrey (1892).

In this sense, this section reveals its own inadequacy. If one is committed to a pure textual analysis, one increasingly finds oneself in a labyrinth where everything is related to everything else. If even a simple (!) word such as *bread* carries different connotations when translated across space into German or Flemish,<sup>(109)</sup> how much more the difficulty in a term such as *Riba* when translated across time. It is clear that the context has to be brought in and one proceeds through a *tatonnement*<sup>(110)</sup> -from text to context to text, from model to reality to model. It is what Anderson calls "the dynamic process of interactive interpretation" in which an initial position is put for ward precisely in order that it may be transcended.

## VI

I remain with the question as to what is *Riba*, and turn to two of the translators of the Qur'an that I have been following. This gives me some insight into the "usual" and "conventional" meaning of the term. Ahmed All's note on *Riba* is as follows:

*Riba* (root RBW). *Raba*, *yarbu*, multiplying, increase, swell, expand (beyond the natural or original size) as in 22:5; excess such as surplus that comes to the surface like scum, as in 13:17, *rabiyun*, increased hold that overpowers, as in 69:10; *arba*, more than the other, as in 16:92. All this points to unnatural or artificial increase.<sup>(111)</sup> By suffocating a person's freedom of action and independence-another meaning of *Riba* being asthma-it results in oppression, and is condemned in strongest possible terms and forbidden.<sup>(112)</sup>

After pointing out that the word acquired a special significance in the Qur'anic order by virtue of the fact that there exist other "possibilities of exploitative manipulations of people's needs and constraints", Ahmed Ali looks towards pre-Qur'anic vocabulary and talks of the difficulty of translation-his discussion seems somewhat under stated in the light of my Section II above.

Today, in the clash of Islamic thought and Western practice, the word has become a subject of polemics, mainly through corruption in the process of translation. The Arabic of the Qur'an is pre-Qur'anic in its etymological and historical perspectives, and the sense of many words is altered when rendered in terms of modern Arabic.<sup>(113)</sup>

Watt also translates *usury* both as "increase" and as a "way of taking advantage of the critical circumstances in Medina at the time of the battle of Uhud".<sup>(114)</sup>

<sup>109.</sup> See Paul de Man's [(1986), p. 87] discussion.

<sup>110.</sup> For a discussion of the importance of the idea of Tatonnement in diderots work, see Anderson (1990); but especially pages 19-20, 36, 43, 206-209.

<sup>111.</sup> Ahmed Ali points out what we have seen above in Section IV that the word "is first mentioned in a Makki Surah 30:39 as lending money on interest to increase one's capital through others wealth; and is explained at 2:275 as the opposite of trade and 3:130 as doubling and redoubling".

<sup>112.</sup> Ahmed Ali (1991), p. 50.

<sup>113.</sup> Ahmed Ali (1990), p. 50.

<sup>114.</sup> The first is in the context of Surah Al-Baqarah and the second the context of Surah Al-Imran; see Watt (1967), pp. 45 and 55 respectively.

### A. Yusuf Ali if anything, gives an even broader connotation to the term.

[*Riba*] is the opposite extreme of charity,<sup>(115)</sup> of unselfishness, striving and giving of ourselves in the service of God and our fellow men.<sup>(116)</sup> It is any increase sought through illegal means, such as usury, bribery, profiteering [and] fraudulent trading. All unlawful grasping of wealth at other people's expense is condemned. Economic selfishness and many kinds of sharp practices come under this ban. The principle is that any profit that we seek should be through our own exertions and at our own expense, not through exploiting other people or at their expense, however we may wrap up the process in the specious<sup>(117)</sup> phraseology of high finance or City jargon. But we are asked to go beyond this negative precept of avoiding what is wrong. We should show our active love for our neighbour by spending of our own substance and resources or the utilization of our own talents and opportunities in the service of those who need them. Then our reward or recompense will not be merely what we deserve. It will be multiplied to many times than our strict account. <sup>(118)</sup> The definition [of Riba] I would accept would be undue profit made, not in the way of legitimate trade, out of loans of gold and silver, and necessary articles of food, such as wheat barley, dates and salt (according to the list mentioned by the Holy Apostle himself). My definition would include profiteering of all kinds, but exclude economic credit, the creature of modern banking and finance.<sup>(119)</sup>

Referring to the passage from Surah *AI-Baqarab* whose translation I have reproduced in Section IV above, Yusuf Ali refers to the repetition of the theme of "the sharp opposition between legitimate trade and usury [and] the contrast between charity and unlawful grasping of wealth" and remarks that the passage brings out the further concessions that creditors are asked to make on behalf of debtors.<sup>(120)</sup>

It is clear that both translators hold the view that *Riba* is condemned in the strongest possible terms and forbidden, but this prescription is somewhat lame if the crucial question as to the meaning of the term is not resolved.<sup>(121)</sup> However, at this stage, an added dimension to the enquiry suggests itself. This is an economic aspect embedded in the question of an *unjustified price*. What does economic theory have to say about a particular price being unjustified. What is a price anyway? What is a commodity? What is an agent? What is interest? It should be noted that neither Ahmed Ali nor A. Yusuf Ali are economists by training, and underlying their definitions and discussion, there is the technical undercurrent. This takes me to my next section.

<sup>115.</sup> I have removed a comma after "striving".

<sup>116.</sup> See A. Yusuf All (1934), p.156.

<sup>117.</sup> In the text, the word spacious is used; I am assuming this to be a typographical error.

<sup>118.</sup> See A. Yusuf Ali (1934), p. 1062.

<sup>119.</sup> See A. Yusuf Ali (1934), p. 111.

<sup>120.</sup> In particular, they "are asked to (a) give up even claims arising out of the past on account of usury, and (b) to give time for the payment of capital if necessary, or (c) to write off the debt altogether as an act of charity;" see A. Yusuf Ali (1934) Footnotes 326 and 327.

<sup>121.</sup> See Ahmed Ali (1990), p. 50. or Yusuf Ali (1934), p.111. The latter adds that "There can be no question about this prohibition [but when we come to the definition of *Riba* there is room for a difference of opinion. Hazrat Umar. according to lbn Kathir, felt some difficulty in the matter. as the Apostle left this world before the question was settled. This was one of the three questions on which he wished he had more light from the Apostle, the other two being *Khilafat* and *kalalat*."

## VII

I now turn the question of what is *Riba* into the more "technical" question of what is *usury*? Spiegel's entry in The New *Palgrave: A Dictionary of Economics* is a good starting point, but even a cursory look at it forces one to the conclusion that the term is used either synonymously for *interest* or to refer to *unjustified* and *exorbitant* interest, be it in the context of medieval or modern economic thought. It is fitting that a cross-reference to the entry on *usury* is *just price*.<sup>(122)</sup> Thus, however I cut it, I have to make contact with "economic science" and ask what is *interest*, and try to spell out conditions under which it is *justified* or *unjustified*, *exploitative* or *non-exploitative*.

The entries under *i* are not helpful in this regard-there is no entry on *interest*, but rather on *interest* and *profit* and on *interest rates*.<sup>(123)</sup> However, the author of the former concludes with the statement that:

the relationship between the rates of interest and profits can thus be considered one of the most open and controversial subjects of political economy.

The other entry is more mechanical, and its author more technically oriented. After specifying that the rate of interest depends on a variety of factors, <sup>(124)</sup> he writes,

A complete treatment of interest rates would account for all of these factors, but in fact it is hard enough to handle any one of them adequately. This entry considers one factor, the term of maturity for default-free bonds ... the determinants of interest rates ... are not discussed.

Malkiel's entry under *t* on the *term structure of interest rates* is more useful for my purposes, but after the necessary preliminaries, he too points elsewhere.

The most recent work has considered the problem of explaining the term structure as one of intertemporal general equilibrium theory.

Thus I am thrown onto a branch of economic theory which "explains" the allocation of resources as achieved through the interaction of *economically negligible* agents, consumers and producers, each of whom pursues their own self-interest, precisely defined. This theory gives an answer into whether such decentralized decision- making is consistent in the aggregate and, in particular, whether the allocation of resources so achieved is a *good* one? It is concerned with various formalizations of good and it is through these formalizations, the constructions of the so-called welfare economics,<sup>(125)</sup> that the intellectual case for a regime of unfettered and unregulated free markets is made. It is this branch of the subject that gives coherence to the question of what is a *just price* and to the related question of what are *justified and unjustified* rates of interest? It is thus only proper and correct that for an answer to the question of what is *interest*, I turn to general equilibrium theory.

<sup>122.</sup> See the importance of cross-referencing in the work of Enlightenment authors in Anderson (1984, 1990).

<sup>123.</sup> Hirschman's entry on *interests* is not relevant to my inquiry.

<sup>124.</sup> As possible factors, the authors mentions "the maturity of the loan, the credit-worthiness of the borrower, the amount of collateral, tax treatments of interest payments for both parties, and special features such as call provisions or sinking fund requirements."

<sup>125.</sup> See Arrow-Scitovsky (1969) for a sample of this work.

However, the surprise here is that the *concept of interest* in this theory is somewhat ancillary to problem at hand.

The irrelevance-in-principle of the concept of interest to the problem of efficient allocation over time is clearly implied, if not explicitly stated, in Lindahl's penetrating exposition of capital theory. That the point has not generally been realized is perhaps due to the difficulty of dissociating a problem from the means of its solution worked out by a monetary economic organization.<sup>(126)</sup>

Correspondingly, the common argument that the rate of interest is necessary in order to find the prices of capital goods is entirely unfounded. The chain of reasoning is precisely in the opposite direction: the supporting prices for an efficient production plan are found first, and the implied rates of return, or the rate of return if all the [implied ones] happen to have a common value, inferred later.<sup>(127)</sup>

Once the *commodity space* is precisely specified,<sup>(128)</sup> one can define a *private ownership economy* and a *competitive equilibrium* for such an economy. Such an equilibrium yields prices and allocations as being determined by consumer preferences, technologies, endowments and profit-shares. Such an allocation of resources has several desirable properties and it is these which give meaning to the terms *exorbitant*, *justified* or *exploitative*. Interest rates are simply rates computed from this equilibrium price system, and they are *exorbitant*, *justified* or *exploitative*. What begins as a quest for the determination of *interest* turns in a few steps into a quest for the understanding of equilibrium prices.

It would take me too far afield to go behind these statements. The point is that they are crucial to the enterprise of an interest-free economy and hence crucial to the Khan Mirakhor enterprise. I shall also make two further points. First, the normative properties of equilibrium of a *competitive economy*-what I have elsewhere called the ADMA construction-are based on assumptions, principally *universality of markets* or stated in different words, *perfect delineation of property rights*.<sup>(129)</sup> Second, this ADMA construction, by focussing our attention on certain aspects and by ignoring others, forces us to see the problem in a particular way. This represents both its strength and its weakness. It is a metaphor with a purpose-ideally suited for analyzing static interaction but not so ideally suited for other settings involving time, uncertainty and agent interdependence. Once the metaphor is altered, or to put the point in slightly different way, once any of the underlying assumptions are relaxed, the so-called welfare theorems come crashing down.<sup>(130)</sup> But the ADMA construction is simply one metaphor-there are others equally justified, equally mathematical and equally

<sup>126.</sup> See Koopmans (1957), pp. 113-114.

<sup>127.</sup> Sec Dixit (1978), p. 14.

<sup>128.</sup> The precise specification of a commodity space represents a heroic leap but like all such leaps its defense depends on the problem being pursued; sec **Khan** (1989).

<sup>129.</sup> ADMA stands for Arrow-Debreu-McKenzie-Aumann; See section 5, 6 and 7 in Khan (1990) and his references.

<sup>130.</sup> For an explication of thesc ideas, see Khan (1990) and his references.

scientific!<sup>(131)</sup> What is interesting is that just as in the case of the term *Riba*, the question of the meaning of interest also turns into another open-ended inquiry. In the remainder of this section, I substantiate this assertion.

I begin with von Neumann who also considered the question of what is *interest.*<sup>(132)</sup> He cut through the interdependence of general equilibrium theory and focussed primarily on technology. He formulated the notion of a *balanced* rate of growth under which the stock of each commodity grows at a common rate. He then focussed on the *maximal* balanced rate of growth and proved that corresponding to it, there exists a system of prices, a price per commodity, which also grows at this *identical* rate. Note that even though this is a rate computed from the equilibrium price system, the price system itself is not obtained through the interplay of demands and supplies. In saying that the interest rate is identical to the maximal balanced growth rate, von Neumann gave his answer to the question of what is the rate of interest.<sup>(133)</sup>

Von Neumann worked with an idealized economy (which model of an economy is not idealized?) in which there are no non-produced means of production, exhaustible or otherwise, and everything is produced from within the system. In his redescription of the von Neumann world, Malinvaud relaxed his restriction, and rather than focus on a path with a maximal balanced rate of growth, he considered the more general concept of *intertemporally efficient paths*. He then proved, under the so-called *non-tightness* condition, the existence of a price system which yields *rates of interest*, this system of interest rates depending crucially on the commodity which is chosen as the numeraire. If an intertemporally efficient path also happens to be balanced in the sense given to it by von Neumann, Malinvaud could also compute the rate of interest and relate it to the common rate of growth of this path. In technical terms, this is the famous "eigenvalue lemma" of Malinvaud and Starett.<sup>(134)</sup>

Of course, a natural question arises to what becomes of Malinvaud's result if the *non-tightness* assumption on technology does not hold-ignoring the fact so far this condition has not been given a satisfactory interpretation in terms of decentralized decision-making anyway. The point is that without this condition there are no Malinvaud prices and no associated rates of interest. Hence one falls back on the approximation theory of Radner and others<sup>(135)</sup> on deeper questions on the meaning of a price system.<sup>(136)</sup>

<sup>131.</sup> I have already described elsewhere the CNH construction obtained by relaxing the assumption of agent interdependence where CNH stands for Cournot-Nash-Harsanyi; see Sections 8 and 10 in **Khan** (1991).

<sup>132.</sup> See Koopmans (1964) expository paper and the references therein.

<sup>133.</sup> For details and explication see **Dore et al**. (1989) and the references therein. A generalization of von Neumann's model is available in **Gale** (1956). but also see **Hulsmann-Steimetz** (1972), **Soyster** (1974) and also **Gale** (1973).

<sup>134.</sup> For details and explication. in addition to the work of Malinvaud, see Gale-Rockwell (1975, 1976) and Starett (1970).

<sup>135.</sup> See Radner (1967), Kurz-Majumdar (1972), and the references therein to the work of McFadden, Peleg, Yaari and others.

<sup>136.</sup> I have functional-analytic questions in mind here-is a price system simply a continuous linear function on the space of commodities or do we need to put in more restrictions. Without such restrictions, there need not be any rates of interest corresponding to a price system.

In one of his two forays into economic theory, the philosopher Ramsey also considered the question of what is *interest*. He did so in the context of how much to save/invest, and how much to consume. Ramsey's formalization of the problem-his metaphor-was an order intermediate between the conception of general equilibrium theory and that of von Neumann. He assumed a single commodity which could be eaten or turned into capital, and also a single function representing the welfare of society over time. Unlike von Neumann, he worked with a conception of time that is continuous rather than divided into discrete time periods. The technical details of Ramsey's original formulation need not concern me here-in any case, his analysis has been extended in various directions. What is interesting is that once one allows for a non-stationary population, the Ramsey-Cass-Koopmans rule requires that in the steady state, the rate of interest should be equal to the rate of population growth plus the planner's rate of time preference.<sup>(137)</sup> This is another answer to the question of what is *interest*.

In opposition to von Neumann and Malinvaud, Samuelson went in the other direction and considered a pure exchange economy in which there is neither any production nor the possibility of storing commodities from one period to another. This is the "overlapping generations" metaphor in which there is a single agent born in each time period and one who lives only for two periods. Each agent is endowed with a desirable non-storable commodity, say chocolates, but only in the agent's first period. The point is that in this stylized setting, there is no coincidence of wants-when one agent, the young, has something to trade with, the other agent, the old, does not. There can be no decentralized decision-making based only on a narrow and myopic view of self-interest. The price system, to exist, has to be supplemented by social institutions. Samuelson's analysis has been the source of an impressive amount of further work<sup>(138)</sup> -what is relevant for my purposes are the extensions which allow for production and population growth and relate the rate of interest in this idealized economy to the rate of population growth.<sup>(139)</sup> This is another answer to the question of what is *interest*.

All of the work that I have mentioned so far allows for uncertainty only implicitly through the interpretative device of *contingent commodities*. This is simply an expansion of the commodity space whereby a particular commodity in different contingencies is regarded as a different commodity. This further stretches the fiction of complete markets. In an influential construction, Lucas considered the question of what is *interest* in a context where uncertainty is explicitly taken into account. Lucas worked with a setting of a finite number of trees each of which yields fruit at uncertain rates according to a given stochastic law and each of which is jointly owned by a continuum of infinitely-lived identical agents. This is the reinterpretation of the Ramsey planner as a "representative agent". Lucas introduces shares in each tree-these yield uncertain dividends and are fully traded-and considers consumption paths which maximize the present value of the expected stream of consumption. The question is the price of these shares or securities and to the extent these prices capture and reflect the available information. And, of course, once we have the evolution of these prices over time, we

<sup>137.</sup> See Cass (1965), Koopmans (1967) and the references therein.

<sup>138.</sup> See Geanakopolos' entry on overlapping generations models in The New Palgrave.

<sup>139.</sup> See especially Diamond (1965) and Cass-Yaari (1966).

have a corresponding rate of interest. This basic metaphor of a continuum of representative agents has been extended in a variety of directions<sup>(140)</sup> -those extensions are hardly the point. What is important is that these so-called recursive methods give another answer to the question of what is *interest*.

All of this work is essentially a testimony to the power and versatility of the Hahn Banach theorem, which states essentially that two disjoint and convex<sup>(141)</sup> sets can be separated by a line (!) in the sense that one set lies on one side of the line and the other set on the other side. This purely (!) geometric insight<sup>(142)</sup> orients the work and yields other questions and problems. Of course, any insight works both initially as an opening and eventually as a blinder-Weitzman used the Hahn-Banach theorem to sharpen in particular setting the solution to Ramsey's planning problem, whereas Cass' theorem on the complete characterization of efficiency is an argument based on *ab initio* principles.<sup>(143)</sup> In saying this, I am still wedded to the idea of equilibrium. One may equally well strike out in other directions which emphasize disequilibria.<sup>(144)</sup>

In an earlier paper, I asked what is a model a model of? Now I am thrown on to the complementary question of what is a model for-to control and predict or to under stand.<sup>(145)</sup> The book under review is a book about the design of institutions-in this case it involves interpretation and understanding as much as it involves prediction and control. For this, it is clear that we must have a variety of models and a variety of metaphors. We must also be aware that each such model carries within it the seeds of its own failure-it is put forward to reveal the importance of what it omits and ignores. As such, I do not and cannot criticize the authors for ignoring some of the mathematical constructions that I have cursorily introduced in this section-it is clear that models and metaphors may come and go but the basic questions remain.

The mathematician, the geometer especially, represented for [Diderot] the systematizer *par excellence* whose work dooms him to an ivory tower first of fame (earned for the dazzling symmetry on his construction) and then oblivion (be cause this symmetry is never borne out by nature).<sup>(146)</sup>

## VIII

The basic theme of my review was to understand the meaning of the term *Riba* as used in the Qur'an and to emphasize that this is of necessity an open-ended enquiry.

The modern *modele ideal*, however, is continually shifting (although almost imperceptibly at any one point in time) so as to stay 'ahead' of the actual state of nature. It is thus the opposite of a Platonic form which is always the same, embedded in a utopian past, never recuperable. The modern *modele iddal* is never attainable because its very nature is to adapt to the adaptations made to it.<sup>(147)</sup>

<sup>140.</sup> See the work of Lucas and his co-authors quoted in the references below.

<sup>141.</sup> Recall that a set is convex if the line joining any two arbitrarily chosen points from a set lies in the set.

<sup>142.</sup> This bypasses the question of the extent to which functional analysis is a part of geometry.

<sup>143.</sup> See Weitzman (1973) and Cass (1972a and b), Mitra (1979) respectively.

<sup>144.</sup> See Goodwin (1990), Radner (1991) and their references.

<sup>145.</sup> I am indebted to Ashraf Ghani for emphasizing this question

<sup>146.</sup> See Anderson (1990) p. 17.

<sup>147.</sup> See Anderson (1990)) p. 208. It is worth drawing the readers attention to the similarity of this passage to the quotations from Putnam and Rorty presented in Sections 2 and 12 in Khan (1990). Also see Footnote 14 above.

If I am to paraphrase the words of Diderot,

If *Riba* teaches you to understand the Qur'an, the Qur'an teaches you to understand *Riba*. If the economy teaches you to understand *interest*, *interest* teaches you to understand the economy.<sup>(148)</sup>

At the same time,

Tout change, tout passe, il n'y a que le tout qui reste".<sup>(149)</sup>

In the introduction to this review, I also wanted to articulate why I think these *Theoretical Studies in Islamic Banking and Finance* are valuable. I can now summarize my two-fold answer. In the first place, the Khan-Mirakhor book continues and sustains a conversation into what is *Riba*-of course, not a "value-free, scientific and theoretical" conversation but an important one nevertheless. In the second place, the authors of the book have a certain innocence and naivete' in their writings that I find most refreshing. As I argued in the introduction, the authors put their value judgements, certainly implicitly but also explicitly, squarely on the table. They are not defensive about Islam and do not judge it to "be some fraudulent new version of some previous experience.<sup>(150)</sup> They are not condescending towards Islamic studies. As the Editors themselves state, they constitute "a new generation of Muslim economists",<sup>(151)</sup> a generation that presumably negates Marx when he writes.

they cannot represent themselves; they must be represented,<sup>(152)</sup>

but one that hopefully also emphasizes human solidarity by avoiding postures of the kind that

# "we" are this, "they" are that.<sup>(153)</sup>

I would only add two cautionary flags-for want of a better term, they may be seen as my criticism of the volume. The first is not to neglect evidence internal to Islam.<sup>(154)</sup> The second is my continuing plea<sup>(155)</sup> for an interdisciplinary approach to Islamic studies-one in which economists, historians, literary critics, mathematicians, philologists, philosophers, anthropologists and other practitioners of *les sciences de l'homme* all join in. It is a mistake to adopt an attitude in which "an Orientalist no longer tries first to master the esoteric languages of the Orient; [but] begins instead as a trained

<sup>148.</sup> Diderot's sentence is "If Vernet could have taught you to see Nature better. Nature on her part could have taught you to see Vernet well"; see Anderson (1990), p.208.

<sup>149.</sup> See Anderson (1990) p. 40. Anderson translates the French passage as "everything changes, every thing passes away, only the whole remains".

<sup>150.</sup> Said (1978), p. 59.

<sup>151.</sup> See Footnote 1 above.

<sup>152.</sup> Quoted on the front page of Said's Orientalism.

<sup>153.</sup> Said (1978), p. 237

<sup>154.</sup> Said writing about the celebrated orientalist Sir Hamilton Gibb's penchant of referring to Muslims as Mohammedans observes, "The curious things about these statements is that they are assertions made about Islam, not on the basis of evidence internal to Islam, but rather on the basis of a logic deliberately outside Islam". See Said (1978) p. 280. Also see Said (1978) especially p. 237 and Said (1981) for descriptions and models of the oriental mind.

<sup>155.</sup> Khan (1991a) is another and prior call for an interdisciplinary approach.

social scientist and "applies" his science to the Orient" - something which has been referred to as "specifically an American contribution".<sup>(156)</sup> Said's words on Massignon apply well to what I have in mind.

What he wished deliberately to avoid was what he called T analyse analytique etstatique de l'orientalism", a Sort of inert piling up, on a supposed Islamic text or problem, of sources, origins, proofs, demonstrations and the like. [He wished to cross disciplinary and traditional boundaries to penetrate to the human heart of any text".<sup>(157)</sup>

## References

Ahmed, S. (1989) Islamic Banking and Finance, *Journal of Monetary Economics*, 24:157-167. Ali, Abdullah Yusuf (1934) *The Holy Quran*.

Ali, Ahmed (1988) Al Qur'an, Princeton: Princeton University Press.

, (1990) Al Qur'an (third printing with corrections) Princeton: Princeton University.

Anderson, W. (1984) *Between the Library and the Laboratory*, Baltimore: Johns Hopkins Press. \_\_\_\_\_\_, (1990) *Diderot's Dream*, Baltimore: Johns Hopkins Press.

Arberry, A. J. (1957) Revelation and Reason in Islam, London: George Allen and Unwin.

Arrow, K. J. (1971) The Role of Securities in the Optimal Allocation of Risk Bearing, *Review of Economic Studies*, 31: 91-96.

Arrow, K. J. and Hahn, F. H. (1971) General Competitive Analysis, San Francisco: Holden-Day.

- Arrow, K. J. and Scitovsky, T. (1969) (eds.) Readings in Welfare Economics, Illinois: R.D. Unwin. Cass, D. (1965) Optimal Growth in an Aggregative Model of Capital Accumulation, Review of Economic Studies, 32: 233-240.
- \_\_\_\_\_, (1972a) On Capital Over accumulation in the Aggregative, Neoclassical Model of Economic Growth: a Complete Characterization, *Journal of Economic Theory*, **4**:200-223.
- \_\_\_\_\_, (1972b) Distinguishing Inefficient Competitive Growth Paths: a Note on Capital Over accumulation and Rapidly Diminishing Future Value of Consumption in a Fairly General Model of Capitalistic Production, *Journal of Economic Theory*, **4**: 224-240.
  - \_\_\_\_, and Vaari, M. (1966) A Re-examination of the Pure Consumption Loan Model, *Journal* of political Economy, **74**: 200-223.
- Cavell, S, (1984) Themes out of School, San Francisco: North Point Press.

Coulson, N. J. (1964) A History of Islamic Law, Edinburgh: Edinburgh University Press.

- Cragg, K. (1988) Readings in the Qur'an, London: Collins Litturgical Publications.
- De Man, P. (1986) The Resistance to Theory, Minneapolis: University of Minnesota Press.
- Debreu, G. (1959) Theory of Value, New Haven: John Wiley and Sons.
- Diamond, P. A. (1965) National Debt in a Neo-classical Growth Model, American Economic Review, 55: 1126-50.
- Dixit, A. (1978) The Accumulation of Capital Theory, Oxford Economic Papers 29:1-29.
- **Dore, M., Chakravarty, S.** and **Goodwin, R.** (eds.) (1989) John von Neumann and Modern Economics, Oxford: Clarendon Press.
- Eatwell, J., Milgate, M. and Newman, P. K. (eds.) (1987) *The New Palgrave: A Dictionary of Economics*, New York: Macmillan.
- Fouad, M. (1945) Al-Mo'jam al-Mofahras li-Alfas al-Qur'an al-Kareem, Cairo: Abdel Baki Publishing Company, al-Sharq Printing Corporation.
- Gale, D. (1956) The Closed Linear Model of Production, in: Kuhn, H. and Tucker, A. (eds.) Linear In equalities and Related Systems, Princeton: Princeton University Press.

<sup>156.</sup> Said (1978), p. 290.

<sup>157.</sup> Said (1978), p. 267.

\_\_\_\_\_, (1972) Comment, *Econometrica* **40**: 391-392.

- \_\_\_\_\_, (1973) On the Theory of Interest, American Mathematical Monthly 80: 853-868.
- \_\_\_\_\_, and **Rockwell, R.** (1975) On the Interest Rate Theorems of Malinvaud and Starrett, *Econometrica*, **43**: 347-359.
- \_\_\_\_\_, and **Rockwell, R.** (1976) The Malinvaud Eigenvalue Lemma: Correction and Amplification, *Econometrica* **44**:1323-1324.
- Geertz, C. (1968) Islam Observed, Chicago: The University of Chicago Press.
- Gibb, H.A.R. (1963) The Community in Islamic History, *Proceedings of the American Philosophical Society* **107:**173-176.
- Goodwin, R. (1990) Chaotic Economic Dynamics, Oxford: Clarendon Press.

Hahn, L. E. and Schlipp, P. A. (eds.) (1986) *The Philosophy of W. V. Quine* (Open Court, La Salle). Houtsma, M. T., *et al.* (eds.) (1936) An Encyclopedia of Islam, Leiden: E.J. Brill.

- Hulsmann and Steinmetz, V. (1972) A Note on the Non-existence of Optimal Price Vectors in the General Balanced Growth Model of Gale, *Econometrica* **40**: 387-389.
- Izutsu, T. (1959) The Structure of Ethical Terms in the Koran, Japan: Keio Institute of Philological Studies.
  - \_\_\_\_, (1964) God and Man in the Koran: Semantics of the Koranic Weltanschuung, Japan: Keio Institute of Cultural and Linguistics Studies.

\_\_\_\_, (1966) Ethico-Religious Concepts in the Qur'an, Montreal: McGill University Press.

- Khan, M. Ali (1987) Perfect Competition, in: Eatwell, J., Milgate, M. and Newman, P.K. (eds.) 1987, The New Palgrave, New York: Macmillan.
- \_\_\_\_\_, (1989) In Praise of Development Economics. Pakistan Development Review 28: 337-384.
- \_\_\_\_\_, (1990) On the Languages of Markets, paper presented at the Seventh Annual General Meeting of the Pakistan Society of Development Economists, *Pakistan Development Review*, forthcoming.
- \_\_\_\_\_, (1991a) Distributive Justice and Need Fulfilment in an Islamic Economy: A review, Journal of King Abdulaziz University: Islamic Economics, Vol. 3.1991. pp. 97-117.
- \_\_\_\_\_, (1991b) Trade and Development in the Presence of an Informal Sector: a Four Factor Model, paper forthcoming in **Basu**, **K**. and **Majumdar**, **M**. (eds.) *Capital*, *Development and Planning: Essays in Honour of Sukhamoy Chakravarty*.
- Koopmans, T. C. (1957) Three Essays on the State of Economic Science, New York: McGraw Hill.

\_\_\_\_\_, (1964) Economic Growth at a Maximal Rate, *Quarterly Journal of Economics*, **78**:335-394.

(1967) Objectives, Constraints and Outcomes in Optimal Growth Models, *Econometrica* **35**:1 - 15.

- Kripke, S. (1984) Wittgenstein on Rules and Private Language, Cambridge: Harvard University Press.
- Kuhn, T. S. (1962) *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press. \_\_\_\_\_\_, (1977) *The Essential Tension*, Chicago: University of Chicago Press.

Kurz, M. and Majumdar, M. (1972) Efficiency Prices in Infinite Dimensional Spaces: a Synthesis, *Review of Economic Studies* 39:147-158.

Lucas, R. E., Jr., (1978) Asset Prices in an Exchange Economy, Econometrica 46:1429-46.

- \_\_\_\_\_, (1978) Equilibrium in a Pure Currency Economy, *Economic Inquiry* **16**: 203-220.
- \_\_\_\_\_, and **Stokey, N.** (1987) Money and Interest in a Cash-in-advance Economy, *Econometrica* **55**: 491-513.
- **MacIntyre, A.** (1971) *Against the Self-Images of the Age*, London: Gerald Duckworth and Co. Ltd.

, (1984) After Virtue, Indiana: Notre Dame University Press.

- Malinvaud, E. (1953) Capital Accumulation and Efficient Allocation of Resources, *Econometrica* 21: 233-268. Corrigendum in *Econometrica* 30: 570-573.
  - \_\_\_\_\_, (1961) The Analogy between Atemporal and Intertemporal Theories of Resource Allocation, *Review of Economic Studies* **28**:143-160.

(1965) Interest Rates in the Allocation of Resources, in: Hahn, F.H. and Brechling (eds.) *The Theory of Interest Rates*, London: MacMillan Publishing Co.

- , (1967) On the Rate of Interest Rate of Efficient Proportional Growth Programs, in: **Malinvaud, F.** and **Bacharach (eds.)** *Activity Analysis in the Theory of Economic Growth and Planning*, London: MacMillan Publishing Co.
- Mitra, T. (1979) Identifying Inefficiency in Smooth Aggregative Models of Economic Growth: a Unifying Criterion, *Journal of Mathematical Economics* 6: 85-111.

Naqvi, S. N. H. (1981) Ethics and Economics: An Islamic Synthesis, Leicester: The Islamic Foundation.

**Panel of the Arabic Language** (1981) *Mo'Jam Alfazal-Qur'an al-Kareem, Majma'al-Logha al-Arabiyya*, Cairo: Dar al-Sharooq Publishing Company.

Putnam, H. (1975) Mind, Language and Reality, Cambridge: Cambridge University Press.

- \_\_\_\_\_, (1981) Reason, Truth and History, Cambridge University Press.
- \_\_\_\_\_, (1986) Rationality in Decision Theory and in Ethics, Critica 54: 3-16.
- \_\_\_\_\_, (1987) The Many Faces of Realism, Open Court.
- \_\_\_\_\_, (1990) Realism With A Human Face, Cambridge: Harvard University Press.

Quine, W. V. (1960) Word and Object, Cambridge: MIT Press.

\_\_\_\_\_, (1990) In Pursuit of Truth, Cambridge: Harvard University Press.

Rahman, F. (1982) Islam and Modernity: Transformation of an Intellectual Tradition, Chicago: Chicago University Press.

Ramsey, F. P. (1928) A Mathematical Theory of Saving, Economic Journal 38: 543-59.

Radner, R. (1967) Efficiency Prices for Infinite Horizon Production Programs, *Review of Economic Studies* 34: 51-66.

\_, (1991) Intertemporal General Equilibrium Theory in: McKenzie, L.W. and Zamagni, S. (eds.) Value and Capital: Fifty Years Later, New York: New York University Press.

Rippin, A. and Jan Knappert (1986) *Textual Sources for the Study of Islam*, New Jersey: Barnes and Noble Books.

Rosen, L. (1989) The Anthropology of Justice, Cambridge University Press.

- **Rorty, R.** (1979) *Philosophy and the Mirror of Nature*, Princeton: Princeton University Press. \_\_\_\_\_\_, (1981) *Consequences of Pragmatism*, Minneapolis: University of Minnesota Press.
- , (1989) Contingency, Irony and Solidarity, New York: Cambridge University Press.
- \_\_\_\_\_, (1991a) Objectivity, Relativism and Truth, New York: Cambridge University Press.
- \_\_\_\_\_, (1991b) Essays on Heidegger and Others, New York: Cambridge University Press.
- Said, E.W. (1978) Orientalism, New York: Vintage Books.

\_\_\_\_\_, (1981) Covering Islam, New York: Pantheon Books.

- Saleh, N. A. (1986) Unlawful Gain and Legitimate Profit in Islamic Law, Cambridge: Cambridge University Press.
- Samuelson, P. A. (1958) An Exact Consumption Loan Model of Interest, with or without the Social Contrivance of Money, *Journal of Political Economy* 66: 467-482.
- Sen, A. (1974) On Some Debates in Capital Theory, Econometrica 41: 328-335.
- Solow, R. M. (1963) *Capital Theory and the Rate of Return*, Amsterdam: North Holland Publishing Co.
- Soyster, A. (1974) The Existence of Optimal Price Vectors in the General Balanced-growth Model of Gale, *Econometrica* **42**:199-205.
- Starett, D. (1970) A No Capital Gains Theorem for Proportional Programs, *Harvard Institute for Economic Research*, Paper No. 71.
- **Todorov, T.** (1984) *Mikhail Bakhtin: The Dialogical Principle*, Minneapolis: University of Minnesota Press.
- Torrey, C. (1982) The Commercial and Theological Terms in the Koran, Leyden: E.J. Brill.
- Udovitch, A. (1985) Islamic Law and the Social Context of Exchange in the Medieval Middle East, *History and Anthropology* **1**:445-465.

Watt, W. M. (1967) Companion to the Qur'an, London: George Allen and Unwin.

Weiss, B. G. (1974) The Medieval Muslim Discussions of the Origin of Language, ZDMG 125: 33-41.

\_\_\_, (1977) Language and Tradition in Medieval Islam: the Question of al-Tariq iIa Ma'rifat al-Lugha, *DiWelt des Islam*, **26:** 91-99.

Weitzman, M. L. (1973) Duality Theory for Infinite Horizon Convex Models, *Management Science* 19: 783-789.

White, H. (1978) *Tropics of Discourse: Essays in Cultural Criticism*, Baltimore: Johns Hopkins Press.

Williams, B. (1987) Ethics and the Limits of Philosophy, Cambridge: Harvard University Press.
Wittgenstein, L. (1953) Philosophical Investigations, New York: Macmillan Publishing Company.