

Limits to Information

By amassing every cognitive titbit that our data-banks are capable of processing, the modern cult of information-gathering presents an affront to our human intelligence. Indeed, with unprecedented possibilities for the storage of data, the computer age threatens to replace our traditional notion of knowledge with that of *information*. Empirical data, however, does not constitute knowledge and unless some critical principle of selection and omission informs the storage and access of information, no sense can be imparted to the inexhaustible assemblage of facts around us. Unless we channel the swelling tide of information to the reservoir of our own knowledge, we run the risk of getting drowned in an ocean of meaningless 'facts'. In order to sift the relevant from the irrelevant, therefore, Muslims have to develop their own schemes of classification, as the mental effort of 'constructing' facts precedes their collection, argues, **S Parvez Manzoor**

OVERWHELMED by the immensity of the phenomenal world and the multiplicity of its forms, the *Shaikh al-Akbar* of Muslim mystics, Ibn al-'Arabi, prays in one of his poems: 'Deliver us, Oh God, from the sea of names!'. Any modern disciple of *Doctor Maximus*, however, may also exclaim today with equal anguish: 'Oh Lord, save us from drowning in the ocean of information!'. For, nothing threatens our sanity, overwhelms our imagination and affronts our intelligence as the meaninglessness of 'facts' confronting us as 'information'. With the interface of computer technology and information theory, the unique capacity of the human mind to synthesize and impose epistemic coherence on factual chaos is being taxed to its ultimate limits. Eventually, the toll that the dinosaurian data-banks may take of our intelligence would be our ability to impart *meaning* to our *cognition*; for to perceive everything without selection and omission is, for the human mind, like the overheating and shut-down of the binary brain! It is the 'China Syndrome' of human sanity and the termination point of all its mental activities. Unfortunately, the Information Chernobyl of our age is fast approaching such a point of complete meltdown.

The radical realisation of human finitude is the most chilling emotional experience and the most compelling intellectual testimony of our modern age. Knowledge too has come against the inescapable fact of human finitude. Like everything else, when related to man, it too is seen to have its

limitations and finitude. Knowledge, with a definite article or with a capital K, may be the philosopher's touchstone or the theologian's kerygma, in facing the existential and historic human situation, it loses all its unity and infallibility. Paradoxically, however, it is science, the most Promethean of all human endeavours, that has brought home this realisation - and that too at the moment of its unchallenged triumph. Not only has modern science exposed limitations within the working of reason, and hence of its own method, but it has also brought man face to face with the prospects of never fully comprehending the world around him. By so doing, it has also actualised the question of its own legitimacy. If man perchance is finite, his reason fallible and his knowledge partisan, how could the 'truth' of science be independent of its human interests? In other words, the finitude of the human situation forces man to *choose* only that fraction of the empirical reality which concerns his legitimate interests and *construct* a system of knowledge around it that is proper to his ultimate aims. Thus, instead of the *rationality of science* we now speak about the *sociology of knowledge*: all human knowledge has its history and its social interests. If such is the case with the objective, rational and positivistic science, what legitimacy is there for the amassing of all kinds of 'facts', for the storage of all kinds of information?

The French philosopher Jean-Francois Lyotard has made a master-

ly analysis of the problem of knowledge in the age of computers (*The Postmodern Condition: A Report on Knowledge*, Manchester University press, 1984) which is very pertinent to our theme. Taking note of the technological transformation that has brought about the computerised society, Lyotard feels that the nature of knowledge and learning cannot remain unaffected by this transformation. He further asserts that 'along with the hegemony of computers comes a certain logic, and therefore a certain set of prescriptions determining which statements are accepted as "knowledge" statements'. One consequence of the hegemony of computers, Lyotard conjectures, would be that only those categories of learning that fit into the new channels and are capable of being translated as *information quantities* will become operational (my italics). 'Anything in the constituted body of knowledge that is not translatable in this way', he predicts, 'will be abandoned and that the direction of new research will be dictated by the possibility of its eventual results being translatable into computer language'. The usurpation of the traditional notion of knowledge by that of information is thus the first casualty of the computer hegemony. By all standards, however, it will be an impoverishment and not an improvement upon the traditional concept of knowledge. For, neither information nor science may be regarded as a true form of knowledge. The term knowledge covers far more than a set of denotative statements which is the preserve of information science. Indeed, it includes notions of "know-how", "knowing how to live" and "how to listen" (*savoir-faire, savoir-vivre, savoir-ecouter*). Understood in this way, thus, knowledge is what makes ones capable of uttering "good" denotative statements, but also of forming "good" prescriptive and evaluative utterances. In the final resort, thus, the problem of knowledge cannot be disentangled from the question of values and any facile equation of knowledge with information appears fatal for the creative faculties of a culture.

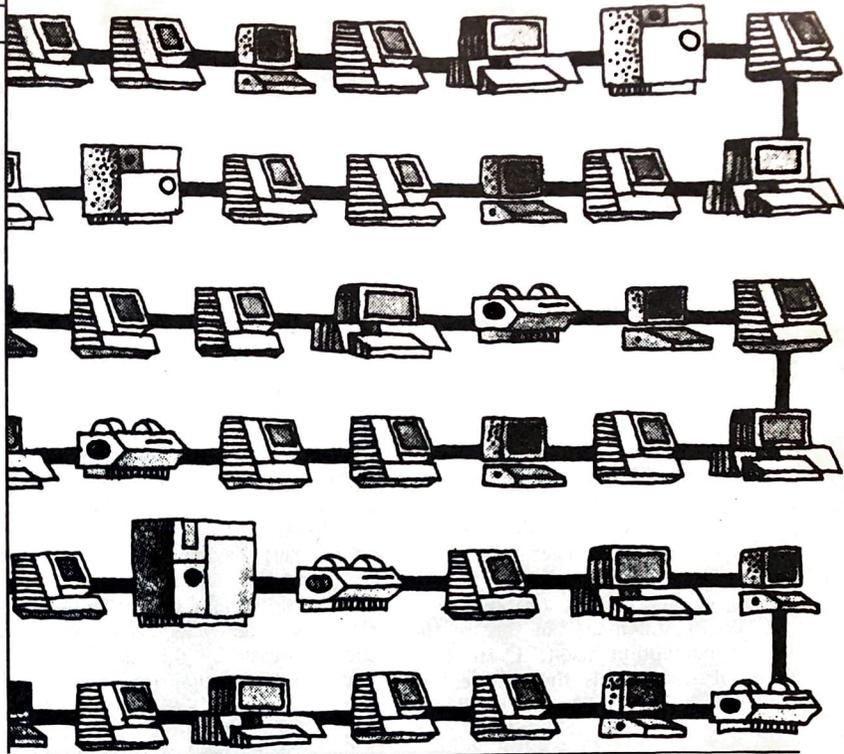
The most devastating argument against the indiscriminate amassing of information, however, comes from the psychology of perception and its attendant theory of knowledge. It also stems from an erroneous apprehension of the nature of induction and scientific discovery. Earlier, one could believe, as for instance did the champion of induction, mathematician Karl

Pearson, that 'the classification of facts, and the formulation of absolute judgements upon the basis of this classification - judgements independent of the idiosyncracies of the modern mind - is peculiarly the scope and method of modern science'. Today, however, such a neat dichotomy of 'facts' and 'judgements' would be considered naive, to say the least. Indeed, following Karl Popper, modern theorists of science deny the possibility of induction altogether. Facts are neither devoid of a *a priori* theoretical premises, nor are they finite in such a way that any practising scientist has the time and the patience to first collect the relevant ones for his inquiry and later discover their pattern and significance. It is a basic tenet of psychology of perception today that hypotheses precede observations; that to 'perceive' something is to impose 'pre-conceived' mental order upon it. Intents, thus, are prior to actions and there can be no facts without values so to speak. Facts are 'taken' not 'given'; 'made' not 'observed' as even the etymology of the term itself implies. What is true of ordinary perception also holds for scientific inquiry: theory precedes practice and values *make* facts. In sum, the perception of reality is an intentional mental effort, an act of will in which the active partner is the perceiver himself. It is not accidental, then, that in scientific jargon one now speaks of the 'Social Construction of Reality' and prefers historical, paradigmatic, models of science to the objectivist and rational ones. Whatever the novelty of modern scientific theories, however, Muslims too were aware of the dialectical relationship between facts and values, theories and observations, and did even construe this complementarity in terms of the 'synthesizing' and 'analyzing' functions of the intellect. Jalaluddin Rumi, for instance, propounds this insight in his incomparable style and diction as:

With men of form, the word is: Synthesis by Analysis (*Tafsilha Ijmalha*)

With men of meaning, the word is: Analysis by Synthesis (*Ijmalha Tafsilha*)

Attacking the problem of 'knowledge' by increasing the information-content of our social system is like putting the cart before the horse. Increased information, especially if it is of the indiscriminate and imported kind, will not lead to any sharpening of our perception; on the contrary, it might even dull it. Indeed, if we start observing 'facts' through foreign eyes, we run the risk of loosing our Islamic



personality, because the foremost trait of that personality is that its perception of the world, its observation of 'facts', precedes from its own values. In other words, *the 'fact' of Islamic cognition and perception is the 'value-bias' of Islam*. Inasmuch as other systems of cognition and perception do not presume the value-bias of Islam, their social construction of reality, their observed facts, are at odds with those of the Islamic personality. All of this seems quite elementary and self-evident, and yet there is a widespread illusion, both in the world of Islam and without it, that 'empirical' facts are independent of ideological value-contents. Let this illusion be dispelled once for all, at least within the forum of Muslim epistemological debate, and let it be asserted with unflinching certainty that the basis of *all* empiricism is subjectivism. Further, Muslim 'epistemologists' must also insist that the Islamic epistemological option in no way implies renouncing the empirical path, but only the resolve to treading one of its own; for, there is not one but umpteen paths leading to the reality of the world. Islamic epistemology, in other words, demands a carving of the empirical world for its own ultimate goals. Hence, prior to collecting 'facts' that are not Islamically construed, Muslim thinkers must face the intellectual challenge of 'Islamizing' Muslim perception itself. For, we need hardly deny that through centuries of internal sloth and external confusion, the Muslim mind today is unable to perceive the reality of the

world Islamically, just as its intellectual tools are incapable of constructing meaningful Islamic facts. Hence, only a genuinely Islamic perception can attack, mentally speaking that is, the immeasurable reality of the world and break it into meaningful empirical facts. Only the collection of the facts of Islamic cognition and perception constitutes 'information' for the Muslim; the rest is merely a sea of names.

The task of 'Islamizing' modern Muslim perception, notwithstanding the abstract tenor of the above argument, is not a vacuous academic exercise. No, it relates to numerous practical, down to earth, projects which the Umma is currently engaged in, from the revision of educational curricula to the setting up of information services. In fact, the seemingly abstract, elusive and academic discussion above impinges on so many vital areas of Muslim civilisational activities that deferring the urgent intellectual task that it summons for the sake of attending to 'more immediate and pressing' needs of the Umma would be a very short-sighted policy which is sure to add more to the plight of the Muslims than redressing it. Intellectual problems of that fundamental prominence are not a matter of academic luxury or a form of black magic reserved only for the practioners of that unholy craft. No, when the stakes are as high as the survival of the Islamic personality and that of its authentic mode of cognition and articulation in the world, there can be no

shirking of the collective responsibility. Nor can there be any debate about the urgency and need of the intellectual effort, for not to engage in it would be fatal for our historical tradition. In short, the seemingly remote problems of perception and cognition must be seriously, earnestly and collectively probed by Muslim thinkers, for they reach to the heart of the Muslim plight: its de-Islamized perception and consciousness.

The first point to emerge out of the insight concerning the dialectical relationship between facts and values, observation and judgement, perception and cognition, is that the most paramount intellectual problem facing the Muslim thinker concerns *the determination of the neotic criteria of 'Islamicity'*, not only of a rational proposition or statement but that of the act of perception itself. Even if in more abstract terms the task entails articulation of a fully developed epistemology of Islam with all its trappings, in a more practicable fashion, it may also be understood as a project leading to an authentic *classification of knowledge*. No doubt, Muslim thought today is inordinately preoccupied with the problem of knowledge and method. Epistemology and methodology have assumed the role of theology and ethics in its discourse. True enough, it is ultimately symptomatic of the 'identity-crisis' of the modern Muslim mind, but it also derives in no small measure from the experience of modernity, along with its spiritual discontents and its epistemological uncertainties, which is universal in our age. In facing the mental challenges of modernity, however, Muslim thinkers today are giving due attention only to the sociological dimensions of the dominant, western, paradigm of knowledge and the history of its institutions. Their epistemological probings have yet to take due cognizance of the ideological implications of its classification schemes. However, the way the unity of the human experience is broken into knower and the known and the manner in which it is further segmented into various 'sciences' and 'disciplines' is integral to the ideology of every epistemological system. In fact, classifying knowledge into various disciplines tentamounts to breaking the reality of the world into meaningful facts: it is to epistemology what perception is to cognition. By all standards, thus, it is a theme deserving of urgent Muslim attention.

That the classification of knowledge is so fundamental to epistemology,

indeed to the dialectics of perception and cognition, may be dramatically illustrated by referring to certain observations made by the late Michel Foucault. Coming across a classification of animals according to a certain Chinese encyclopaedia, Foucault was startled by its total violation of all 'rational' principles of taxonomy known to the Western tradition. According to the Chinese scheme animals are divided into: '(a) belonging to the Empror, (b) embalmed, (c) tame, (d) sucking pigs, (e) sirens, (f) fabulous, (g) stray dogs, (h) included in the present classification, (i) frenzied, (j) innumerable, (k) drawn with a very fine camelhair brush, (l) *et cetera*, (m) having just broken the water pitcher, (n) that from a long way off look like flies'! Quite naturally, the ordered list, giving fourteen sub-categories of the category 'animal', has all the trappings of a rational analysis but, by every canon known to us, it subverts reason itself. For Foucault, this was a revelation of the limitations of his own system of thought which could not imagine any kind of *space* where all these varieties of animals could coexist. It seemed to defy the age-old western distinction between the Same and the Other. That this discovery was the starting-point of Foucault's classic study *Les mots et les choses* (rendered in English as *The Order of Things*) need not concern us here; what we must take note of, however, is that the perception of 'sameness' and the conceptualisation of 'class' or 'category' is the most fundamental fact of cognition and its primary ordering principle. Classification scheme, thus, is the most effective instrument of an epistemological system through which its ideology is propogated and maintained. For Islam, most of the subversive influence of alien epistemologies comes just through their classifications, through their categorisations of knowledge and through their hierachisations of disciplines. To be oblivious of this fact is to rob the Islamic epistemological enterprise of its critical dimensions. A few concrete examples will amply testify this.

By any standards, bibliographical guides ought to belong to the least ideology-infected genre of academic writings. And, by and large, they are indeed so. However, bibliographies present us with serious problems of bias that are structural and not personal. Thus, even if we disregard the common practice which accepts the promotion of personal pals and cronies as 'legitimate', we still have

to reckon with the role of classification as the major perpetrator of the ideological bias. One may, for instance, look at one of the 'standard' works of this kind (for example Charles Adam's (ed): *A Reader's Guide to the Great Religions*, New York, 1977), to realise the extent of the subversive thrust of alien classification schemes. Despite the fact that the work is quite sober and scholarly in every respect and that its editor, Charles J Adams, is a knowledgeable, even sympathetic, student of Islam, the Muslim reader finds himself more misled than led by this Guide. Hence, as the epistemological premise of the work is secular-humanism, one expects that its treatment of the diverse religious traditions of the world would be evenhanded and equally skeptical of all 'para-rational' theological and metaphysical claims. Such, however, is not the case. To start with, the classification scheme, indeed the concept of 'religion' and the discipline of 'Comparative Religions', has arisen out of the Western experience of Christianity and is ill-suited to the comprehension of other great traditions. For the host tradition as it were, thus, it avoids all the 'embarrassing' questions about the historical authentication of its dogmatic claims, making a tidy compartmentalisation between the desk of the historian and that of the theologian. It is not accidental, then, that the believing Christian bibliographer is 'on the offensive', bypassing the issue of historical criticism with his own categories of 'The Christian view of History' and 'Christian historiography'! Insisting that 'it is also important to know Christians have responded to the demands that Christ has made upon them', he skillfully manipulates the bibliographical data to present all the traditional topics of Christian interest - and as seen by the Christian eyes, one may add. Everything that belongs to the syllabi of the traditional divinity schools is here, but vain may one search for any 'critical' perspective on the history and dogma of the Church. Even Christian 'demythologisers' like Bultmann are passed over in silence. The uninitiated reader gets the impression that everything is rosy in the Eden of Christian faith. Of the serpent of historical skepticism there is no trace here. As for those who would rather inhale the air of acute crisis that hangs over Christianity today, that makes modern Christian theologians *assert* absolutely nothing, the 'sound' guide provides no outlet.

The Muslim material, by contrast, is

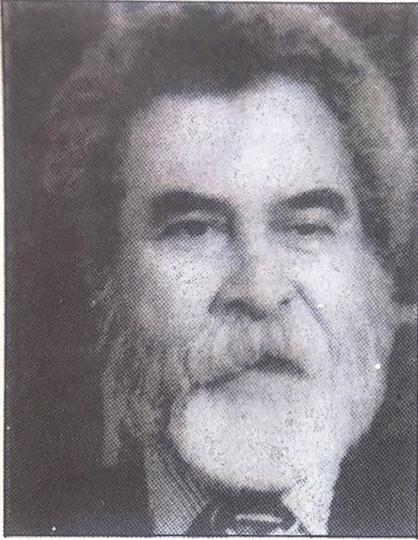


Ibn Sina: Not only was he very good at surgery, he also produced a number of classification schemes

presented (by Charles J Adams himself) with much intellectual timidity, emotional strain and apologetic embarrassment. There is a consistent separation between 'Muslim works' and 'Critical studies', as if of all the religious traditions of the world, Islamic 'dogma' alone is at odds with the tenets of reason; as if there is no 'critical' dimensions to Muslim discourse and as if western 'critical' approach is totally devoid of its dogmatic premises! The classification is based entirely on the hierarchy of themes suited to the 'critical' taste of the outsider. Unlike the Christian who insists on presenting 'the Christian response to demands by Christ', what Muslims themselves regard as the salient dimensions of their faith are not deemed worthy of the 'academic' guide. Clearly, behind the academic face and its bibliographical mask lurks the body of an alien whose sense apparatus differs from our own. Two other examples may further substantiate this point: Towards the end of the now classic book on *Arab Painting* by Richard Ettinghausen, a few pages are devoted to abstract designs whom the author calls: 'Beyond the Material World'. Similarly, David Talbot Rice's well-known survey of *Islamic Painting*

has its final chapter on 'Non Representational Painting'. Now, this hierarchy of 'figural painting' over 'abstract painting' is part of the European artistic tradition and is exactly the reverse of what Muslims consider as the proper relationship between the two. Had the Islamic artistic tradition been presented from a perception that is indigenous to it, the bulk of the book would have been devoted to 'abstract designs' and only an appendix would have included figural paintings. Indeed, one is not sure whether 'painting' as a sub-category of art constitutes a 'fact' of Islamic cognition, nor can we be certain that the most valuable achievement of the Islamic genius, its 'abstract designs', should be ranked below figurative paintings (I am not even sure whether the western notions of 'design' and 'abstraction' faithfully represent the 'facts' of Islamic perception). Obviously, the fact of 'painting', which is a construct of western consciousness and a discipline of its art history, is not the same fact for Muslim perception and tradition. Thus, the way knowledge is segmented, classified, categorised and hierarchised is the *sine qua non* of all epistemology. This brings us to the knotty problem of 'Islamic dis-

ciplines'. Muslim civilization's head-on clash with secular modernity, in essence a conflict between God-infused and God-indifferent forms of cognitions, has pushed the problem of knowledge to the top of the Muslim intellectual agenda. Of the most notable epistemological Muslim critiques of modernity, the one advanced by Professor Naquib Al-Attas was the earliest and the most imaginative. Perceiving the most subversive weapon of modernity to be its doctrine of secularism, Al-Attas proposed a 'psychological', albeit very fundamental and comprehensive, remedy in terms of a radical 'de-westernization' of the Muslim mind and of its educational system. The project of emptying Muslim consciousness of its acquired secularised cognition would have to be undertaken at a truly Islamic university, was the essence of Al-Attas' prescriptive cure (see his: *Islam and Secularism*, Kuala Lumpur, 1978; later, revised, edition printed as, *Islam, Secularism and the Philosophy of the Future*, London, 1985.). Afterwards, the late Professor Isma'il R Al-Faruqi also sought a solution on similar lines and called his project as the 'Islamization of Knowledge' (IIIT, 1982). Undoubtedly, there is considerable overlapping of the two epistemological schemes even if, in terms of detail and planning, the two approaches do exhibit some minor differences. Be that as it may, there does exist now among modern Muslim scholars a rudimentary form of consensus about the need to create a comprehensive body of knowledge on authentic epistemological principles. Only minor disagreements persist in this regard and these too only on matters of strategy and priority, not of goals and objectives. Fazlur Rahman, for instance, believes that the task of reforming Islamic education is paramount, 'and unless some solution to this is forthcoming, it is futile even to raise the question of the Islamization of knowledge' (*Islam and Modernity*, Chicago, 1982, p 134). For him, the primary focus of Muslim effort should be not on the execution of some abstract project but towards the establishment of an authoritative body because it is 'the upholders of Islamic learning who have to bear the primary responsibility of Islamizing secular knowledge by their creative intellectual skills'. (The problem of authority in knowledge, as we shall see later, was the main cause of earlier disputes in Islam and the most cogent rationale for the traditional bifurcation of knowledge into its



Al Attas : the credit for the theory of 'Islamisation of Knowledge' goes to him

'salvational' and 'secular' categories.)

In all these discussions, what is left in abeyance, or is deferred to later efforts, or only perfunctorily addressed, is the issue of classification and the categorisation of new disciplines. No doubt, Al-Attas offers his updated version of the traditional pair of 'religious' and 'rational' sciences (p 202 of the new edition); Al-Faruqi also presents his 'syllabus for a two-year university course in Islamic civilization (pp 57-58); even Fazlur Rahman makes some profound reflections on 'Reconstruction of the Islamic Sciences' (pp 147-162), nonetheless, the chasm separating these abstract schemes and reflections from any actual classification which the Muslim informant scientist may use in his undeferrable work remains unbridged. More than that, most of these insights concern either the traditional (*naqliyya*) religious disciplines or have to do with the more value-laden social and humanistic sciences. Concerning the natural world, notwithstanding all the furore about 'Islamic science', Muslim thought finds itself in a complete vacuum. There is neither an inkling of a Muslim classification nor a trace of an Islamic method for the study of the natural world! Given this dreadful epistemological void, what chances are there for the Muslim informant scientist to perceive the natural world in terms of the 'facts' of Islamic cognition and store them according to the 'order' of Islamic classification? Obviously, despite all

the talk of Islam being a 'complete way of life', in their heart of hearts Muslim thinkers do believe that the Islamic option to knowledge is valid only for the moral and human spheres. However, not only does such a de-divinized perception, which posits the ethical neutrality of the natural world, (After all, the essence of the scientific method is to isolate the *is* of the universe from its *ought*) re-introduce the problem of secularism at the very core of Islamic thought, it is also in dire contrast with the earlier efforts of the Muslim thinkers with whom the dichotomy of the traditional and the rational sciences was not a matter of *rationality* but of *authority*.

Our Islamic tradition justifiably prides itself in the reverence for knowledge. Indeed, the most seminal concept of Islamic civilization is '*Ilm*' that signifies the comprehensive and unitary notion of 'knowledge. Early in Islamic history, however, another dimension was added to the concept of '*ilm*': in addition to its pristine sense, it came also to denote specialised disciplines, even individual pieces of information. Thus, we find in the earlier Arabic literature the plural form '*ulum*' which does not occur in the Qur'an. A third notion that knowledge is the sum total of individual disciplines also gained currency. Hence, we have Muslim writers constantly enumerating the list of individual discipline till they reach, as reported by the sixteenth century Turkish encyclopaedist Tashkopruzadeh, the forbidding number of 316! More notable than the enumeration of '*ulum*' was the Muslim tradition of treating the unity of disciplines as axiomatic and constructing systems of classification to preserve the hierarchy and order of sciences. Though nearly every Muslim thinker of repute did propound his own classification scheme, the ones by Al-Kindi, Al-Farabi, Ibn-Sina, Al-Ghazali and Ibn-Khaldun have come to be regarded as the most notable. Common to all these classifications is the bifurcation of all knowledge into revelational or transmitted ('*ulum naqliyya*) and 'rational' ('*ulum aqliyya*) science. Though this division has been uncritically accepted as the classifying principle of all Islamic knowledge, there were indeed many other systems as well. Al-Ghazali, for instance, presented not one but five different systems of classification based on the criteria of: (1) methodology, authority and argumentation, (2) epistemic principles on which the disciplines are based, (3) necessity and probability,

(4) juristic obligations, and (5) ultimate aims. Another work of seventh century Hijra classifies knowledge into seven categories. Others have divided the sciences according to whether these were theoretical or practical, whether their topics were established by sensory experience and deduction or whether these were intuitively apprehended by the soul, some have even arranged knowledge according to an hierarchy of honour (Ibn-Sina)!

Moreover, as Aziz Al-Azmeh has perceptively clarified, the basis of the traditional divide between transmitted (*Naqliyya*) and positivist ('*Aqliyya*) sciences was not *rationality* but *authority* (*Arabic Thought and Islamic Societies*, London, 1986, pp 155ff). Earlier Muslims, it appears, were more aware of the 'sociology of knowledge' principle than we give them credit for. In their classifications, neither did they deny the principle of rationality within the corpus of transmitted sciences (Al-Ghazali, for instance, contended that reasoning in the field of *fiqh* was different from reasoning in the domain of 'foreign' sciences), nor did they regard rational sciences to be autonomous of human authorities of the Ancients and earlier 'Masters'. The problem of human authority, thus, is extremely crucial to Islamic thought and is the basis of traditional classification schemes. In the light of this, it would appear that Fazlur Rahman does display a sound Islamic instinct when he calls for the establishment of some authoritarian bodies of scholars and educational institutions prior to 'Islamizing secular knowledge', because unless that thorny issue is settled, Muslims cannot hope to proceed on with any systematic epistemological reforms.

Given the significance of this endeavor and the richness of our tradition in this regard, the task of the classifying modern knowledge can no longer be deferred. Indeed, it is one strategy by the adoption of which abstract visions and psychological cures can come to fruition in concrete institutional projects. As the act of Islamic perception precedes and presupposes that of the collection of facts, it is the duty of every Muslim thinker to prepare the ground for the information scientist. Muslim information scientist would need all the creative energies of the Umma if he is to fulfill his duty properly. Unless he is given a perceptive, imaginative and critical classification scheme, thus, he is bound to be swept away by the flood of information - as we are sure to drown in the sea of endless names!