



Islamic View on Good Life: Dialogue with Philosophy of Modern Technology

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Abstract

Throughout the colonial and postcolonial eras, the Muslim world has been trying to come to terms with modernity. The process has been conflict-ridden, tending to veer sharply between unquestioning acceptance and strong resistance. This paper reviews the development of the philosophy of technology in the West and explores the idea that the current state of the discourse may present an opportunity for Muslims to enter into a fruitful dialogue with modern technology in their own societies. The paper identifies three developments in the Western discourse that would enable such dialogue: (1) the view that technology is not, as once was thought, value-neutral, but the expression of a society's perception of reality; (2) the concern that technology is no longer regarded as a means to ends but as the end-in-itself; and (3) the idea that technology can and should be shaped by religious-social values. The paper assesses the consonance between these new ways of looking at technology and traditional Islamic values, and considers their implications for Muslims thinkers. It suggests that for the dialogue to take place, Muslim thinkers will need to develop insight into the ontological, epistemological, social and moral issues of technology, redefine fundamental concepts to deal with technology, and work out new ways of entering into dialogue and collaborating with fellow Muslims. The paper concludes that, approached in the right way, the Islamic paradigm of the good life could serve as a model for the rest of the world.

Keywords: Progress, *Maṣlaḥa*, *Maqāṣid al-Sharia*, Philosophy of technology, Value laden-ness of Technology

Abstrak

Teknologi telah menyelubungi kehidupan kita sama ada secara eksplisit ataupun implisit dan menjadi sebahagian daripada budaya hidup dan fitrah manusia. Kesukaran untuk menghubungkan corak teknologi moden dan implikasinya dalam kerangka falsafah adalah ibarat hendak menyedarkan ikan dengan kehadiran air di sekelilingnya. Dunia kita hari ini umpama dunia yang diselubungi teknologi dan pada dasarnya cara kita berhubung dengan dunia persekitaran adalah melalui medium teknologi. Hal ini telah menimbulkan soal etika, epistemologi dan ontologi. Dunia teknologi dicorakkan berdasarkan aturan tertentu dari segi operasi lahiriah dan adat yang bermain di sebalik tabirnya. Justeru, memahami dan mengkaji signifikannya teknologi serta ciri-ciri khususnya ialah syarat penting bagi memahami kedinamikan dunia yang kita diami dan melaksanakan reformasi terhadap teknologi yang selari dengan prinsip, nilai atau kepercayaan selain daripada yang moden.

Kata kunci: Kemajuan, *Maṣlaḥa*, *Maqāṣid al-Sharia*, Falsafah teknologi, Teknologi berisi nilai

Introduction

The Muslim world, ever since it encountered modernity,

during and after the colonial rule, has been trying to come to terms with it. Islamic or Muslim culture has over the years adopted modern science and technology that developed in the western, secular context, in the hope of attaining progress. Modern technology was considered intrinsically value neutral by early Muslim intellectuals. In the contemporary postmodern era, technological progress has almost become nihilistic

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with no predefined ends, goals or telos to direct the scientific and technological pursuits.

In the pre modern era, there were predefined ends which were achieved through appropriate means. These ends used to remain constant over long periods of time reflecting coherence and purposefulness. The pre modern crafts were influenced by the nature of ends toward which they worked and the cultural context in which they operated and acted more as means toward pre-existing goals, ends or objectives. The long standing value-neutrality of technology has been challenged from a variety of perspectives. In the case of contemporary modern technology, means have taken precedence over ends (See Hofmann 2006; Mitcham 1979). They not only shape and create their own new ends but also this process is indefinite. Whatever is possible is turned into an actuality. This makes technology an end-in-itself, a status markedly different from the one it earlier enjoyed, which was that of an instrument. Such an attitude toward technology has ontological consequences for defining human beings as well. The paper's argument is based on the same premise regarding the nature of technology as an end in itself and its appropriation by the Islamic idea of human good or well-being (maṣlaḥa).

Defining and Understanding Technology

Technology is a derivative of the Greek root *techne*. *Techne* meant any art or skill. Those skills could be performed for their own sake as in the case of fine arts or could be practical arts performed for achieving some other end. One element of *techne* in the sense of skill or art was that it was not performed "blindly, without some degree of calculation of means to ends" (Ferre 1988: 25). *Techne* for Aristotle involved having a true consciousness or understanding of the world, not only how it works as in science in order to make more precise instruments and useful things but also the "why" of making those things (Mitcham 1979: 176).

Ferre defines technology as 'practical implementation of intelligence' (Ferre 1988: 26). Technology as understood today has also been defined as making or developing of tools or machines (Monsma 1986: 13), "the making of material artifacts" (Monsma 1986: 17) or the "organization of knowledge for the achievement of practical purposes" (Monsma 1986: 15). The definitions here are quite revealing for our purpose because the term practical here implies that technologies should not be wholly ends in themselves. Hence it restricts technology to the realm of means signaling that it is the defining feature of technology to act as means

and any attempt to turn these into ends will be a fallacy. A culture in which technology assume the status of higher end must also be on the wrong track.

Some historians of technology have traced technology to the Greek word *technologia* which means "the systematic treatment of an art" (Monsma 1986: 11). The term *logos* in *technologia*, shows that episteme or knowledge content of technology is important because it represents the knowledge foundation or base upon which it has been constructed. Technology in ancient world had a status between everyday affairs and pure theory. Thus using specific technology depicts specific features of the world endorsing a special technological way of knowing. This also reflects the relationship of science to technology. Although scientific knowledge and theories form a basis for modern technology, the relationship is not linear,

*"...technology's relation to modern science is strongly reciprocal. Modern science could not be what it is today without the precise instruments of observation, manipulation, and calculation that a refined modern technology provides. Thus it is as true to say that technology is a necessary condition for contemporary forms of science as it is to say that science is a necessary condition for contemporary forms of technology. Epistemologically, a key question may lie in the extent to which scientific knowledge itself is an artifact of our instruments and techniques"*¹

(Ferre 1988: 10).

Generally there have been three approaches when analyzing modern technology (See Mitcham and Mackay 1983: 1-7). The anthropological approach sees technology as part of humanity's greater ability to create culture and civilization. I will be using this understanding, taking technology as a major representative of religious and cultural values, beliefs, ideals and goals and the most dominant cultural institution today. The epistemological approach puts emphasis on the methods and procedures related to the use of scientific and technical knowledge. Although partially true in depicting the nature of modern technology, which is not possible without knowledge of the making process, this approach totally ignores the proper ends that such methodical technology is supposed to serve. This approach is generally adopted

by the Muslim and non- Muslim intellectuals today. It contributes in a way to making the technological enterprise an end in its own right. The social-critical-phenomenologicalⁱⁱ approach represented by Hans Jonas, Albert Borgmann and Jacques Ellul, views modern technology as a cultural phenomenon and the negative effects of modern technology as the defining feature of both thought and action in late modern societies. According to them technology has become a method of performing technologically rationalized and sophisticated actions. In this process means have become ends in themselves. This shows a tendency to counter the cold epistemological approach to technology. There should be a way to harmonize the epistemological and value aspects of modern technology as argued by Ferre,

“Whichever way we define technology it certainly involves questions of values in a vital way. The technology of a society reveals and embodies what at least some members of that society want (or want to avoid), and what they consider legitimate ends and means. Knowledge alone, unharnessed to human valuing, would not result in technology any more than valuing alone, lacking the necessary knowledge, could find effective embodiment....technology is the offspring in praxis of the mating of knowledge with value, epistemology with axiology”

(Ferre 1988: 11).

There is a sociological approach too, that also focuses on the social elements involved in the design and making process of technology. Much of their work involves case studies of specific technologies. However through their case studies of independent technologies, they show the possibility of alternative designs and social values in the development of technologies. How modern technology is understood influences how we evaluate it. Depending on our approach to modern technology, we see it either as a value free instrument for pursuing endless number of objectives which might even be in conflict with one another or as a value-embedded cultural enterprise. It also influences whether modern technology is considered autonomous or subject to adaptation, appropriation and change in a different religious or cultural context.

Philosophical Analysis of Modern Technology

Modern technology in its contemporary, existing form, whether understood from an essentialist perspective,ⁱⁱⁱ or sociological perspective,^{iv} presents a challenge to

core religious values showing its inability to contribute to a way of life that is rich and deep in meaning and to purposeful character reform. It embodies an idea of progress that is not informed by any substantive idea of progress but is reflective of purposelessness and a lack of sense of direction. We can learn from Borgmann’s (2000) phenomenological critique about the emptiness of modern technology to have disengaged us from life reducing the quality and richness of life. Useful devices do not necessarily provide a good life. According to Borgmann,

“The problem is that in providing us with opportunities, modern technology at the same time determines their character. That is, modern technology, applied at every level of the social contexts in which we find ourselves, closes the very questions concerning the formulation and pursuit of happiness.... It enforces a particular set of values”

(Higgs et al. 2000: 72).

The openness provided by a liberal democratic society to its individuals in shaping their ends, leads to making the technological sophistication and advancement, a good in its own right. There is no preplanned conception of good that is realized by modern technology and that gives it direction and foundation, but modern technology assumes life and blood of its own, turning in the process into “the good”. Borgmann records his opinion about this technological leisure and how it is connected to the attainment of excellence in the following way:

“We can measure the worth of typical technological leisure by the traditional standard of excellence in two complementary ways. We can ask what degree of excellence people have in fact achieved; and we can ask how much of their free time people devote to the pursuit of excellence”

(Borgmann 1984: 127).

Strengthening the values of innovativeness, efficient rationality or calculative intelligence and consumption, the modern technological paradigm seriously neglects and downplays values associated with religious worldview. The reorientation of the technological framework cannot take place from within this precinct. It needs to be overcome from outside, from a different attitude toward life, which in our case would be the Islamic worldview. Modern technology has a specific character and therefore needs a sense of direction and goal. Carl Mitcham calls the specific pattern of modern

technology as its character. According to him, the orientation of modern technology cannot be changed from within, its needs some deeper experience or perspective (which may be religious or metaphysical in nature) from without to act as a source of reflection. Modern technological fruits do not add to development of human character. In a technological culture, people whose character have been formed or informed by technological values, the religious truths and realities do not appeal and they cannot relate to all dimensions of a spiritual reality (Higgs et al. 2000: 143). According to Mitcham, "...maturity in the technological world is seldom an orientation of technology, more often is proclaimed as the fundamental orientation in and toward technology" (Higgs et al. 2000: 142). The norms of technological culture do not allow for substantial character reform. Character building qualities like moderation, self-control and virtuosity do not fit well into a technological culture.

According to Carl Mitcham, the "dispositional context" of technology needs more correction than technology (Higgs et al. 2000: 126). Mitcham highlights the concept of "character" of both technology and human beings and how the two affect each other. Mitcham defines character as a combination of "essence and utility...an integration of nature...and of cultural form" (Higgs et al. 2000: 130). We can say that what Mitcham terms character is the cultural or social part of human nature and has therefore both essential and accidental properties to it. Character is a "manifest realization of inner depths", (Higgs et al. 2000: 131) reflecting a sense of holiness that the character imbibes. This sacredness is translated into the inner logic of external decisions and actions. Character is an apt term to study the relationship and interface between human beings and technology. It is a persistent unifying factor that transcends "microempiricist social deconstructivist examination that can document all the actors and actants involved nor a general deductive nomological examination that can subsume technological particulars under some covering law" (Higgs et al. 2000: 134). The social constructivist position regarding technology like that of Latour, Bijker, Trevor (See Bijker et al 1989), is one that treats technological devices singularly, in a piecemeal fashion without considering the impact it has on character of individuals and that of culture and society. The Islamic religio-legal verdicts (fatwas) also deal with technology by looking at the consequences of individual devices, whether positively or negatively, while disregarding the impact it can have on the overall character of an individual Muslim, his/her ambitions

and goals and the overall social goals that are inspired by the ontology, epistemology and ethics underlying modern technology.

The doctrine of liberalism emphasizes availability of neutral means to achieve different conceptions of good and sides with a view of value neutrality of technology that is instrumentalist and not essentialist in character. Toward liberalism, there is a critique that modern technology does not act as a neutral channel or instrument but is a source of informing and creating conceptions of good through offering certain possibilities and denying others. Modern technology thus shapes or is translated into human and social character before realization. Modern technology is not free from an overarching character but reflects only one paradigm of human character that aims for endless action. Thus modern technology creates in the process its own reality, conceptual frameworks and subsequent moral practical expectations. In the words of Borgmann,

"Technological devices are extremely shallow. One trait or function is predominant; all others are arbitrarily exchangeable and progressively eliminated....We must recover [the human] as a being of absolute depth and learn to realize that if we increasingly surround [human beings] with shallow things, [they] will become shallow also"

(Higgs et al. 2000: 136).

We can say that technology and its accompanying consumerism are the offshoots of the same shallow outlook on life. Feenberg insists that the problem lies, not so much in the technological design as the capitalist culture in which it is nourished and promoted. The problems pointed to in the critique of technology pertain more to the capitalist environment than the essence of technology and hence there is a possibility technology can be designed differently in different social context. But his optimism is challenged by others who believe that liberal capitalist societies are structured to promote a specific brand and form of technological paradigm that is tied to power and monetary interests of certain groups (Veak 2000). There is even a deeper criticism according to which a liberal democracy that prizes procedural good over and above any substantial idea of good should not support any idea of good as a matter of principle. According to Borgmann, what happens in reality is that "...liberal democracy is enacted as technology. It does not leave the question of the good life open but answers it along technological lines"

(Borgmann 1984: 820). All of this amounts to the fact that current paradigm of technology is informed by and strengthened with a specific intellectual, moral, cultural, social, economic and political mindset and does not stand as something universal. Treating it as universal and above cultural predilections puts the values of other religions and cultures at risk. The question of what counts as a good life that has meaning and purpose is usually so embedded in the structure of any culture that it becomes almost transparent, barring any serious effort to understand what makes the life good in that culture. Since in our late modern liberal culture, technology has been granted the status of supreme good, questioning it appears both counter-intuitive and counter-cultural.

Ontological Dimension: Metaphysics of Modern Technology and its Relationship with Human Selfhood

There is a non-utilitarian aspect to technology despite Aristotle and Plato calling it an activity and art of making material things like medicine, agriculture and carpentry, different from episteme or pure science which is about knowing the essence and true reality of things. The metaphysical aspect of technology is found in the final cause or “why” something is made rather than not made and that is not found in late modern technological condition in the absence of metanarratives. The making of artifacts is not limited to efficient cause but to all four causes including the final cause or telos as part of artifact making. According to Plato, in ancient times artisan or carpenter did not make things according to his own will but according to the nature of the material and where it might fit best and what it had been created for (Mitcham 1979: 177). According to this understanding, not only quantitative nature or sensual qualities of matter are to be known but the metaphysical form or nature which helps to know its purpose or telos (final cause), without which matter is not knowable completely. Matter should receive form guided by its nature and not forced upon it, according to the natural capacity of matter (Mitcham 1979: 178). We see here an ordering or hierarchy, not merely playful technology. Prudence was needed in making such crafts. The end or uses were determined in the form, the way artisan made the object, according to its telos. The logos of modern technology lies in the universal rationalization and mathematization that is concerned with mass production and not particulars. The ends are hence not fixed and thus unlimited because they are extrinsic, dependent on the user and because no eidos (essence, form or ends) are kept in mind while making

the objects. This leads to chaos and indefiniteness. This purposeless way of life is represented in high tech gadgets and social media. Ancient or pre-modern techne required wisdom and depth. The ontology of classical techne was different regarding metaphysics of matter unlike modern technology (Mitcham 1979: 185). The metaphysical aspect of technology is captured by Rivers when he writes,

“Technology is a way of interpreting reality. It is a means by which the world is approached, understood, used, and exploited. All analyses of technology, if they are to be meaningful, either presuppose a metaphysical frame of reference, or they must invent one.... Technology is not only influential because humans bring it into being, but because we continue to augment technology's application, which intensifies its place in the world. Technology needs to be understood as the result of our openness to being; it demonstrates that the essence of technology is linked with ontological freedom, which means that what we build and create is the result of what we choose. How we choose and act is defined within specific historical and cultural situations that vary over time and place. Technology reflects and augments these situations. If we change present conditions and the demands they make upon us, then we can change technology”

(Rivers 2005: 564).

The above analysis shows a number of things. One that technology is inherently connected to how we define human beings and what becomes their highly prized attribute and preoccupation. Secondly, the kind of technology we choose and create either helps us or does not help us in our ultimate goals and religio-spiritual endeavor. Third, technology is determined in a way that we cannot intend to change its course without contending to change the intellectual and social circumstances surrounding any given technological framework. However it is not unchangeable in the definite sense, since by altering the surrounding conditions and objectives, we can change the direction of technological enterprise. Technological determinism or unqualified essentialism is challenged by Andrew Feenberg as well as by Social Construction of Technology (SCOT). This view which does not treat technology as fate is closer to Islamic worldview because free choice and decisions in socio-cultural milieu is closer to Islamic ethics.

Martin Heidegger, who is the foremost thinker on technological metaphysics, believes that technology not

just represents historical and cultural features but is an attribute of our humanness (Rivers 2005: 566). Technology is not just about technological devices or objects, rather technological practice of a given culture exhibits the way world is meaningfully perceived and shaped. Meaning of reality is interpreted in the technological doings of a culture. Technological practices are developed and organized around what is considered real and worthwhile (Misa et al 2003: 93). On the one hand there is “social and cultural impact of technical rationality” and on the other hand there is “concrete social embodiment of actual devices and systems” (Misa et al 2003: 95). A comprehensive account of technology should be mindful of both these aspects. Feenberg argues that the problems of dehumanization, alienation and existential loss are characteristics of existing form of modernity and its associated technology (Misa et al 2003: 97). He thinks that “there may be many paths of rationalization, each relative to a different cultural framework” (Misa et al 2003: 102). The problem is not in the essence of technology, but in other social conditions. We need a “conscious construction of technological worlds that support a desirable conception of what it is to be human” (Misa et al 2003: 102). The current model of rationality and form of life it supports is a corollary of liberal capitalist society.

This makes technology an ontological concept and demanding a lot more attention in the Islamic social and value context than it normally gets because it affects the human beings at levels deeper than social action and practices. It embodies the vision of human beings as individuals but more significantly collective view of reality and life. Modern technology is an outward cultural representation of deeper human self, for instance, the present human character that lacks critical self-awareness and self-reflection is aptly represented in the nihilistic technology of today. This technological nihilism is particular to western history and culture which means current technological paradigm represents the human character of a specific thought and culture. However the same model has been adopted by Muslim societies and the same technological gadgets and applications surround the Muslims today, affecting their inner spiritual selves to considerable degrees.

This is similar to when Mitcham writes that the character of modern technology cannot be altered unless human character is altered which cannot be done in the midst of present technological obsession, because it prevents self-reflection and moral edification, instead promoting self-delusion and worldliness. Islamic

philosophy of technology should thus have the underlying presumption that once the human self (nafs) is improved and perfected by transcendental religious reason and consciousness it must be manifested in the technology developed within an Islamic culture. This technology on the one hand should be a reflection of that improvement and perfection of self, and on the other hand should further reinforce the human potential for spiritual and moral excellence. In an Islamic paradigm, self-awareness needs to be translated into everyday affairs (mu‘āmalāt). Since these everyday affairs are inconceivable today without using some sort of technology, at least at some stage, a technology envisioned and developed to enhance piety and moral purification, will show the level of spiritual perfection attained and put it into effect in the everyday routine actions and decisions. In Islam, one of the most important dimensions is self-purification (*tazkiyah*) and attainment of God-consciousness (*taqwa*) through reflection and searching for our true authentic selves. This purification does not take place only in rituals like prayer and fasting but gets completed in the practical domain of ordinary affairs, which encompass the rest of dimensions of Islamic life. Also the *tazkiyah* attained through critical self-reflection, exercise of intellect and searching of the soul is to be practically implemented and tested in the domain of everyday affairs (*mu‘āmalāt*) in which technology would fall.

Progress and its Present Reliance on Technology

It is a fact that technological progress occurred throughout human history in all ages but none of the former ages were preoccupied with the idea of progress as that of our own. Progress, through technology, has become the hallmark of our contemporary human condition whereas in earlier societies, it appeared gradually and was more a corollary of activities and happenings guided by other set of values, than being central to the social life. Linguistically “progress means a forward movement, an advancement to a higher stage, an improvement to better conditions change for the sake of change does not qualify as progress” (Rivers 2002: 505). An example is that of automobile which is far superior than a horse carriage in terms of ease of transportation and speed but convenience and speed only became a measure of progress with the use of automobiles and were not the benchmark of human progress earlier. This has been argued by Hans Jonas (2003) too who thinks that technology and its underlying assumptions become an end-in-itself rather

than acting as means toward some trans-technological ends.

Progress according to its Latin and Greek roots means “going forward” or an “advance” of some sort. How that advance is to be judged and measured is not something obvious. The concept of progress is not only modern but it was always there in all pre-modern cultures and civilizations as well as religions. The idea of technological progress was existent in pre-modern and non-modern cultures but the spirit and orientations were different. Only in modernity it was given this high significance and attached to the idea of materialistic, technological advancement and tied to secular humanism and meliorism. This happened when religious notion of progress was abandoned with the abandoning of religion from social lives. The high significance given to the idea of progress in modern thought is understandable because of its confidence and optimism in human reason and the ability of human rationality to solve all sorts of human problems and improve humanity’s overall condition and well-being.

Means and Ends

The idea of technological progress is maximizing and improving the means for their own sake. In this scenario, means become the ultimate ends because technology is concerned with means and is not devised with specific higher ends in mind. The superficial ends that modern technology seems to serve are rather created by technology. Whatever is achievable through the technological means becomes the coveted end and in a way means determine what ends are worthy of being pursued. This approach leads to an exaggerated self confidence in the abilities of human race and promotes pride in human creations. Rivers precisely mentions this fact when he writes,

“Goals affect technology as they affect every other endeavor, and this relationship is applicable regardless of differences among technologies. For example, the preference of ends over means, whatever those ends were, was the value of technology in antiquity. It was the fulfillment of a task that resulted in the completion of a project, such as the building of the pyramids at Giza or the Coliseum in Rome. By comparison, the engagement of means, regardless of the ends achieved..., is the value of modern technology. It is immersed in its own becoming, of being involved in a project whether or not it is ever completed, such as the space program or genetic research”

(Rivers 2002: 520).

Due to idolization of progress, questioning progress is not expected. It is expected that technological progress is good per se. With the onset of modern technology, progress has become not only a means for achieving happiness and human well-being but has been identified as the end, irrespective of happiness or well-being it generates.

Problems of Contemporary Technology: An Overview

Modern technology interferes with human nature, character, purpose and “deworlds” (Higgs et al. 2000: 296) according to Heidegger’s analysis. This threat of technology that plays with the very authenticity of human self is far higher than outward consequences like environmental pollution, diseases, bombs etc. The form of our contemporary culture is through and through technological in which technological way of thinking enjoys a status above spiritual mode of thinking. Since the function of technology is to act as means, when made into an end, the only dimension of human being that is esteemed and celebrated is his/her intelligence and ability to efficiently manipulate and control, reaching to the level of cultural norm in an otherwise normless structure. What is at stake is not just human nature and culture but the whole perception of reality and thus the question assumes an ontological character.

Technological innovation and design entails artificially separating natural objects from their contexts and taking away those qualities that do not have technical utility hence reducing them into tools to be fitted into a technical network (Higgs et al. 2000: 306). This reduction often leads to a reductionist view of reality in a technological society in which remaining dimensions are slowly forgotten and later considered simply absent. Reality becomes technologically mediated and shaped. Technological functioning requires a particular social and cultural environment for its support. According to Feenberg, in the past, “using technology was associated with a way of life; it was a matter not just of productivity but also of character development”. It got ‘broken when capitalist deskilling transformed workers into mere objects of technique’ (Higgs et al. 2000: 311). Because of the prevalent outlook, technology is now based on “narrow functionalism” which is thought to be the main feature of modern technology.

“The greatest problem that technology creates is the obstruction of self-reflection about the nature of being.

Being has been replaced by busyness, by a self-generating activity of everydayness, which fills up each day with mindless diversion. It makes life trivial. Although completely consumed by the present moment, we have forgotten the importance of being's presence. The absence of self-reflection is the result of technology's ability to encourage our preoccupation with things. Excessive consumerism, which is one of technology's negative effects, has a direct and immediate effect when confronted with technology. We dissipate our energy; we waste our time; we live unexamined lives....Technology inhibits deep thinking because it is concerned primarily with activity, not contemplation. Because thinking is fundamental to self-awareness, technology is an obstacle to self-identity. It is a threat to internality. This threat is intensified the easier technology makes our lives"

(Rivers 2002 518).

David Strong also talks about this superficiality of technological lives and sees religious communities too as being enfolded by it,

"Divinity, in any sense, whether Christian or pagan, monotheistic or polytheistic, is entirely missing. We may attend Mass and speak of our religious beliefs, but if our paycheck, the shopping mall, and television and what is advertised on it, and net surfing occupy the time of our life, our life bespeaks a deeper atheism"

(Higgs et al. 2000: 335).

Goals such as self-realization can now only be conceived through consumption. This amounts to an inversion of the very ideal of self-realization. The greatest problem occurs when consumers of technological society believe that they can pursue their own ideas of good life. They often do not realize that the value framework guiding modern technological advancement changes the conception of good so that surplus time and resources are used not for predetermined ends but for ends erected by technology itself. Modern technology sets the standard for defining what counts as genuine enrichment of individuals and cultures. Means turn into ends because the amount of human intelligence and smartness that created technological artifacts is celebrated more than the ends for which those are used. "How" something is done assumes a normative dimension instead of "why" it is done. Means have taken over the ends.

Technology leads to a world that "demands less and less of us in terms of skill, effort, patience, or any kind of risk-the logic of device results in a disburdened and disengaged way of life" (Higgs et al. 2000: 30). Technology being fashioned in a specific way and following the logic of innovation, creativity and efficiency carves human beings with the presumptions and ways of thinking that are harmonious to the "technological values". Thus contemporary human character is mostly shaped by modern technology and therefore cannot genuinely challenge or rectify the current paradigm of technological progress and advancement. It appears to be a hermeneutic circle in which implicit human understanding of self, knowledge and nature of goodness is transformed over into technological devices, which on an explicit level then condition and shape human thought and practices that further move ahead in the direction of improvising those devices with a certain view of the world and life. Technology is thus not value-neutral but is closely tied to values, beliefs, human character and ideals that surround a certain historical era, a translation of human condition which further condition and strengthen those character traits, forming an alliance in which there is a mutual interchange between human beings and technology. Human beings adopt the very conceptual framework that underlies technology, turning technology as the arbiter of perceptions of reality, an agent of transforming reality and a guide for designing ends and ideals. One can assert that the phenomenology of everyday life of a modern technological society is quite different to how life is experienced without it. Modern technology designs a form of life unmatched by earlier or other forms and ways of conducting and experiencing the life and its meaning (Winner 2004).

So far "...neither Russian nor Chinese communism, neither Islamic fundamentalism nor so-called Asian values have inspired a fundamentally distinctive stock of devices" (Higgs 2000: 300). Muslim intellectuals and jurists need to deliberate on this issue to provide a genuine alternative to the ongoing crisis of meaning in the area of postmodern or late modern technological advancement. Alternatives provided by others are usually one dimensional. A merely pragmatic or instrumentalist approach to technology and to the idea of progress in general, the kind championed by Hickman, is based on a conception of well-being that is partial, having to with solution to this or that problem in human life but does not address the overall human condition. The pragmatic understanding of technology is antifoundational and in the words of Hickman "is

constructed by common political or social action to solve common problems” (Higgs et al. 2000: 100-101). Similarly the sociologists of technology also look at the details of specific technological appliances and lack the holistic perspective. Although the holistic bent is more visible in the phenomenological approach taken by Hans Jonas or Albert Borgmann but Muslim scholars need a fresh appraisal from their religious perspective. In the absence of objectives (maqāsid)-based paradigm for technology, the legal judges or muftis treat technological devices in a piecemeal fashion not taking into consideration their underlying moral presumptions and the direction they provide and facilitate for human beings, bringing about a condition of their own. Philosophers of technology like Larry Hickman have proposed an ongoing contextual evaluation of technology (Higgs et al. 2000: 96). If we look at the Islamic objectives (maqāsid) theory, that too is an intellectual effort to suit eternal Islamic principles to new spatio-temporal situations, requiring an evaluation of new epistemological and social context to find out its compatibility or incompatibility with the Islamic life-world.

The Possibility of Religious-Social Shaping of Technology (SST)

The sociologists of technology have shown that technology is a product of both technical and social factors, in both its design and use. Instead of only technology shaping society that is determining the uses and outcomes, the social groups shape the character of technologies toward their goals. They affect the design and innovation process (Campbell 2010: 50). SST acknowledges that religious and social groups appropriate technology differently to reinforce their social or religious life and practices. One of the main tenets of SST thesis is that multiple choices are inherent in the design and development of technological innovations and hence user groups can shape technology to their ends. These may have irreversible consequences but there are choices nevertheless Silverstone, Hirsch and Morley talk about "domestication" of technology and the "moral economy" which designates how moral cultural beliefs and values of strongly bounded communities determine their choices of moral and social goods and services (Campbell 2010: 50). Technology is thus shaped by this culture and people who utilize it according to their specific lifestyles. In the same vein, Woolgar (1991) asserts that specific uses of technology are inscribed or configured into the artifact's design because any

technology is designed with some user or users in mind. The way users and their choices are perceived is what affects the design of the artifact. In a way the technology once used, defines and shapes the identity of the user, which might be constrained by technology as well. Accordingly,

“Technological artifacts are understood as "texts" that are inscribed with meaning and value, which are the results of the negotiation process that occur in the design process and at the stage of implementation by users. Technologies are seen as containing a script that delegates specific responsibilities and actions to the users.”

(Campbell 2010: 51).

This opens up the possibility that Muslim scholars and intellectuals, once having understood the connotations of contemporary technological culture, could come up with their own religio-ethical code to determine the contours of technology designed for and practiced in an Islamic milieu. It has been argued in the foregoing discussion that technological culture stultifies the growth of real religious need to grow in piety, genuine sense of wonderment toward God, and thankfulness leading to character enhancement. There is also a problem of defining and distinguishing genuine, authentic needs from the created needs of an inauthentic nature. Nasr (2007: 108) writes that a consumer society consumes more than it needs because false needs are created.

The concept of human good or welfare (*maṣlaḥa*) is understood in an Islamic culture as the criterion for articulating social necessities (*darūriyyah*), needs (*hājiyyah*) and enhancements (*taḥsīniyyāh*). These conceptual tools are needed to address the issue of determining the needs and right technological means for fulfilling those. Both the needs and means could be established by referring to the Islamic objectives or goals (*maqāsid al Sharia*).

Technology based on Islamic Orientation

Since modern technology is permeated with its own conception of good life, the problematic in Islamic context is how the understanding of human good (*maṣlaḥa*) in an Islamic ethico-legal discourse can come to terms with the technological set of values and associated ideal of progress. Muslim jurists when assessing the nature of modern technology often resort to the maxim that paints too optimistic picture of

technology, making its uncritical adoption inevitable for attaining human progress. This leads them mostly to interpret human good (*maṣlaḥa*) within the technological framework and develop and issue opinions (*fatāwā*), regarding diverse technological procedures and devices, accordingly. This makes them take a particularistic approach toward the fruits of modern technology without paying due consideration to the concatenated effect modern technology may have for individual and social Muslim lives. I propose that the critical evaluation of modern technology should form one of the discourses within the disciplines of Islamic Jurisprudence (*fiqh*), principles of Islamic Jurisprudence (*uṣūl al fiqh*) and Islamic objectives (*maqāṣid al Sharia*). This can be done by broadening the scope of Islamic objectives (*maqāṣid al Sharia*) to incorporate the critical discourses on contemporary modern technology and come up with an understanding of human good (*maṣlaḥa*), both physical and spiritual, commensurate with those critical insights. This should lead to a critical adaptation of modern technology instead of uncritical adoption. As a result specific cases related to modern technology could be decided in the light of that understanding.

Elaborating on Maṣlaḥa and Maqāṣid

Maṣlaḥa can be translated as interest, good, benefit, utility (Auda 2008: 120). It is generally translated as public interest but the translation closer to the meaning is “well-being, welfare and social weal”viii (Opwis 2005: 182). *Maṣlaḥa* is from s-l-h meaning “being and becoming good” (Salvatore 2007: 156). *Maṣlaḥa* is a theological notion. It differs from utility in that it links good in this world to that in the hereafter. For instance the acts of worship (*‘ibādāt*) earn pleasure of God but also prevent mischief and hence bring about individual and social benefits of the world and blessings in the hereafter. Sociologically it does not limit utility to material utility and not to a sum total of utility of its agents (Salvatore 2007:156-57). When it is said that the *Sharia* on the whole, aims at securing *maṣlaḥa* of human beings, it means securing their benefit and protecting them from harm, corruption and evil. Shatibi mentioned *maṣlaḥa* as the “only overriding objective of *Sharia* which is broad enough to comprise all measures that are beneficial to the people, including the administration of justice and “*‘ibādāt*” (Kamali 2006: 29). Shatibi does not restrict worldly interests to only material ones. In his comprehensive understanding “whatever supports human life and well-being and ensures that people obtain whatever they need in the

physical and non-physical dimensions, thereby enabling them to experience blessing on all levels” (Shatibi n.d.: 2:25). Benefit thus includes physical, emotional, intellectual and spiritual benefits. Human beings are short sighted and in their limited vision, they might prefer worldly goods over spiritual enhancement. This is the reason why the *Sharia* does not leave the evaluation of interests to human will and want.

The term *maqāṣid* has been used by the jurists “to refer to purposes, objectives, principles, intents, goals, ends and telos” (Auda 2008: 246) of the *Sharia*. They are the purposes for the fulfillment of which the *Sharia* has been revealed in order to secure the benefit of humankind (Raysuni 2006: xxiii). Ibn Ashur defines the *maqāṣid* comprehensively as:

“The general objectives of Islamic Law are the meanings and wise purposes on the part of the Lawgiver which can be discerned in most or all of the situations to which the Law applies such that they can be seen not to apply exclusively to a particular type of ruling. Included here are the occasions for the Law’s establishment, its overall aim, and the meanings can be discerned throughout the Law. It likewise, includes objectives which are not observable in all types of rulings, although they are observable in many of them”

(Raysuni 2006: xxii)

The *maqāṣid* due to their theoretical nature are concerned with discerning the purposive meaning of *Sharia* for different historical, social, philosophical, spiritual and personal contexts. They represent Islamic ethics in its abstraction. They also reflect how the Islamic values and ideals can be expressed theoretically without being severed from concrete life context, providing guidance for moral challenges of contemporary culture. Hence, if we define *Sharia* as a comprehensive ethical system of values and prescriptive norms, the understanding of human good or wellbeing (*maṣlaḥa*) based on religious objectives (*maqāṣid*) will have repercussions not only for the personal aspect of human life but also for science, technology, economics, politics and environment. As a result, economic or technological decisions cannot be taken in isolation from moral and spiritual concerns. Similarly, morality and spirituality will find expression not only in prayer and devotional practices but also in mundane activities, social interactions and transactions (*mu‘āmalāt*).

Islamic Objectives and Technological Culture

What is recommended within the Islamic objectives' paradigm, in terms of cultural and social values, appears not to be fulfilled by current technological paradigm. The Islamic objectives (*maqāṣid*) need to be further elaborated and delineated in a way to outline those values that could regulate and give direction to the overall structure and form of technological enterprise and goals in keeping with contemporary discourse, including critique of current technological structure and rationale and proposals for reform of technology and alternative routes of designing technology. A notion of progress needs to be worked out from within the *maqāṣid* paradigm that could prescribe limits to technological advancement and arbitrate what counts as progress in terms of human fulfillment and spiritual enrichment and guide the scholars and jurists in their assessment of individual technological applications. Modern technology has become an almost inevitable part of Muslim societies. The conceptual questions of science engage and directly affect the beliefs and perceptions of fewer Muslims, mostly intellectuals. When the scientific worldview affects general Muslim populace, it is through technological artifacts and the corresponding worldview. An Islamic discourse on modern technology is highly called for in this scenario.

Islam talks about life in a holistic way. In assessing technology, the interconnections of disciplines and their non-severable relationship to core Sharia objectives (*maqāṣid*) and values, must be maintained. Usually the philosophical issues surrounding technology are the ones having to do with the purpose, ends, goals and objectives of human life as well as the defining of good life. Until and unless these issues are not integrated and analyzed from within an Islamic value framework, we cannot come up with an Islamic understanding of technological progress which is almost equivalent to progress in our contemporary world. This also involves examining the possibilities of modifying and reorienting the technological culture. If there are social values playing their part right from theory choice and assumptions to the designing of technological artifacts and their use and further applications, along with the results of the studies that show that there is always more than one way of solving technical problems, for instance through the idea of interpretive flexibility, it might be worth asking how we can determine what are significant problems for a Muslim culture and society and what suitable technological means could be employed to address those. The underlying objectives (*maqāṣid*) remain the same, but their interpretation may change to apply those to contemporary situation and needs. To

apply the classically evolved objectives (*maqāṣid*) to contemporary intellectual, spiritual, moral, social and technological culture, a profound and insightful comprehension of contemporary social and intellectual climate is necessary. This process is the religio-intellectual reasoning (*ijtihād*) that involves simultaneous (and often interdependent or overlapping) understanding and interpretation of the unchanging *maqāṣid* as well as the social realities to apply the former to the latter.

Islamic Idea of Progress and Development

The Muslim scholars often start evaluating modern technology by its own standards, even interpreting the religious texts to be aligned with the technological ethos, mostly because they consider modern technology to be a value neutral tool. Even when they criticize some of its applications, even that is based on the presumption that those are wrong or immoral applications of a neutral instrument. In Islam there is a lot of emphasis on the spiritual culture formed by a balanced believing community (*Ummat al Wasq*) because Islamic values cannot be understood and realized without a certain dispositional character in a society. Modern life is built around technology in such a way that 'prior to reflection, technology transforms character' (Higgs et al. 2000: 146). In the Islamic debate on objectives it will have to be seen whether particular technologies can be detached from the overall technological character and its embedded notions of progress and well-being and whether modern technology as a whole can be reformed to serve as a means for other higher ends instead of occupying the central place of the most valued end in itself. The meaning of progress therefore should not be presumed but needs to be worked out from within the *maqāṣid* paradigm and spelled out clearly to maintain its idiosyncrasy.

Islam's main goal is religious progress and spiritual enlightenment that leads toward *tazkiyah*, *taqwā* and *falāh* in the eternal life. *Taqwā* is the "moral conscious of the divine" (Moosa 2004: 239). Ibn Taymiyah (d. 1328) also cited the cultivation of piety and God consciousness (*taqw* Moosa 2004) as the defining objective of Sharia, all other objectives embodying it in one way or the other, restoring deeper ethical dimension to the letter of the law (Raysuni 2006: 37). The purpose of Sharia as cultivating God consciousness (*taqwā*) also resonates when Nanji (Nanji 1993: 108) writes, while discussing Islamic ethics, that *taqwā* is the human quality that "captures the ideal ethical value in the

Quran” and hence in the “wider social context, taqwa becomes the universal, ethical mark of a truly moral community”. This means that Sharia is not just the name of a set of rigid laws but rather the main goal of Sharia is to bring people closer to God and help them live a purpose oriented life, the purpose being, attaining the pleasure of God. The rules and laws are there to help bring to fruition this objective of Sharia. Shatibi mentions that the objective of enacting Islamic law was to restrain human desires and put them in check so they do not transgress God’s prescriptions (Attia 2007: 106). Tazkiyah is the spiritual purification and growth not only on individual plane but entails entire community or social life. It is the growth and development where material development is accompanied and aided by the ‘pursuit of meaning’ in a Muslim society (Sardar, 1996: 47-8). Tazkiyah is a more holistic concept of spiritual purification and growth than progress or development. From an Islamic viewpoint, development not only encompasses physical resources, capital, labor, education and skills’ but also ‘human attitude, incentives, tastes and inspirations’ (Sardar 1996: 49). Focusing on the former aspects leads to a neglect of human enrichment from within. This appears to be a corollary of the technological means and its problematic philosophical basis that leads to such a consequence. *Falāḥ* is the idea of progress not just in the worldly life but also in the otherworldly life which is believed to be more real and eternal. *Falāḥ* is development in a comprehensive manner inclusive of “moral, spiritual and material aspects”. As mentioned in the Quran (23: 1-11), the “*muflih*” is the one who has integrated the belief in otherworldly life in his/her character to such an extent that he/she is no longer interested in any meaningless (*laghw*) activity and their belief is represented in all their worldly transactions and the way they approach them.

The predominant Muslim mindset takes the idea of technological development as a good-in-itself and an unproblematic way of achieving the Islamic objective. Muhammad Umer Chapra (2008: 1-2; 29-37), despite emphasizing the importance of real human well-being (*fawz* and *falāḥ*), mentions technological advance in non-controversial terms. This is despite his mentioning that self-reported subjective well-being of people in many developed countries has failed to rise despite strong rise in their income. This is only indicative of the attitude of many Muslim scholars, both theorists and jurists, writing on the issues of *maqāsid* and *ijtihād*, toward modern technology.

There is an element in Islamic understanding of worldly life where material advancement is considered not antagonistic to seeking moral and religious excellence, but rather conducive to it in a certain way. This is because without having a sufficient peace of mind and physical convenience people cannot strive toward the goal of higher excellence. But what is necessary to achieve the goal of spiritual excellence and closeness to God, is to be determined circumstantially and contextually and here these concepts of the *maqāsid* paradigm need a fresh assessment in the light of critique of technological progress. This dimension of worldly enhancement and civilizational advancement through development of modern science and technology has been advocated by thinkers writing on the subject of Islamic objectives (*maqāsid*). Not much critical reflection on technology has been done within these discourses. Enhancement of earthly life, in all its various facets from curing disease to developing sophisticated computers, can only be considered a “means” or proximate end toward the end of spiritual salvation and moral excellence. However it is not an intrinsic end and thus technological progress per se, for the sake of innovation or merely for improving worldly human condition cannot be adopted within the Islamic framework, especially when the whole underlying understanding of what constitutes human improvement in the technological arena, is in conflict with core Islamic beliefs.

Contemporary Islamic scholars, who focus on the objectives (*maqāsid*), also talk of progress in terms of technological advancement and development. It is essential therefore to differentiate between progress and development. Development and progress is often used interchangeably to denote invention and improvement of tools and machines. Development does not necessarily mean progress. Progress is comprehensive and encapsulates all aspects of human person and civilization. Any change or improvement in human condition is to be considered progress from an Islamic objectives’ viewpoint if it is goal oriented and contributes toward the attainment of *tazkiyah* and *falāḥ* whether directly or indirectly and protects the human soul from corruption and deviance. With modern technology accelerating at unprecedented pace, change itself has become the highest value, whether it is for better or not. Within the Islamic perspective, change is something not to be celebrated for its own sake if it does not contribute to the attainment of substantive ends. Since development entails some kind of increase, if we conflate progress with development, phenomena like

sickness and death will become negative signs of lack of development unlike how these are assumed in an Islamic context to be good (*khayr*) as found in numerous references in the Quran and authentic *hadith*.

The Islamic idea of innate human nature (*fitrah*) is important for classifying the concepts of human good (*maṣlaḥa*), benefits and progress. In assessing modern technology in the above mentioned way, the Muslim scholarly concern should also be, whether modern technology, with its certain presuppositions, tends to distort the human nature (*fitrah*) created by God that has to be preserved in this life in its wholeness and purity^x. Technological lifestyle might have the potential of interfering with Islamic notions and practices of piety and single minded devotion to God, not just by its fast pace and consumerism but also by celebrating innovation as sometimes the ultimate destiny decreed by God, thereby manipulating concepts of knowledge, moral goodness, progress and prosperity in the social arena. Since in an Islamic milieu, everything can come under the canopy of worship, in order to make technological pursuits a form of worship, these must synchronize with the *maqāṣid*.

If useful devices do not necessarily provide a good life, we have to analyze within an Islamic context, how we define good life to be able to set guidelines and limits to the advancement of technology in Muslim culture by revisiting the primary sources, Quran and Sunnah as well as classically developed conceptual tools like the *maqāṣid al Shari'a*, to see what insights and prescriptions we can get from there, regarding the patterns of our technological lives. Since modern technology is permeated with its own conception of good life, the problematic in Islamic context is how benefits and interests for a *maṣlaḥa* -oriented good life in a religio-legal discourse could come to terms with the technological set of values. Because the good life in Islam is about character building or purification (*tazkiyah*) of the soul (*nafs*), social conditions that require skill and patience are far more effective in bringing about those ideals than the mere pursuit of efficiency that is tied to technological consumption.

As shown in the analysis of philosophers of technology, the norms of technological culture do not allow for substantial character reform. Thus character building qualities like moderation, self-control and virtuosity, roughly translatable as ingredients of *tazkiyah*, do not fit well into a technological culture. Therefore the breach of understanding and applying a set of Quranic verses and prophetic traditions to a social reality informed by an entirely different social mindset is not so much a

problem of anachronism, a distance in time and place as argued by some, than a contemporary audience shaped by technological character in their evaluating standards. The objectives (*maqāṣid*) paradigm tries to connect the two worlds through eternal principles. But interpreting and applying those principles to a technological culture without being affected by the dominant discourse is difficult and it often appears that Islamic principles are no longer relevant in the technological domain.

This suggests that the social and cultural context from which the idea of technological progress has emanated is one that is not rooted in submission and accommodation to Creator but to celebrating the human instead of glorifying the divine. To equate this kind of technological progress with human well-being as enshrined in the *maqāṣid* that were developed and articulated by Muslim scholars, is not only misplaced but also detrimental to understanding the *maqāṣid*, by confusing technological with moral and religious progress. In an Islamic culture, technology should neither be indifferent to, nor damaging to the higher goals of Muslim individuals and society. Different technologies, those in earlier, pre-modern cultures represented different worldviews and different assumptions of what counts as improvement and progress and different valued goals toward which these cultures aimed. In the contemporary idea of technological progress, technological means are not justified by moral or religious ends. The ends are justified and venerated because they have been reached through the technological means. Since modern technology and its use tampers with the self-understanding and self-assessment of human beings and hence with the very standards with which progress is judged or measured, understanding it is important for genuine articulation and application of the *maqāṣid*. Due to its scope, the *maqāṣid* paradigm is supposed to establish that criterion through which the overall impact and worth of modern technology is to be measured and analyzed.

Happiness and Well being

If human welfare is the end and technology only a means to achieve that, then there is a need to rethink and restate what truly stands as well-being from an Islamic *maqāṣid* perspective. This is required because the notions of happiness and welfare are heavily loaded. Feldman argues in his book 'What is this thing called happiness' (188-89) that sometimes people can be quite satisfied with their lives but cannot be considered as being really happy. This is because they have been led

to a belief about their happiness due to social conditioning and false consciousness. The issue of defining true and authentic human happiness and satisfaction falls in the realm of *maqāṣid*. If social conditioning could make people happy without having true welfare, the same could be true for technology. Muslims might feel happy and contented but that could be something taking them away from their original vocation in life. According to the Quran and Sunnah, which are the reference points for Muslims, true welfare is one that seeks to promote *tazkiyah*, *taqwā* and *falāḥ*. All human activities derive their justification and merit by relating to these goals and helping in their attainment. In an Islamic context, happiness and satisfaction take their meaning and legitimacy from these values and ideals. Through their lens, welfare, harm and benefit are to be evaluated. Current understanding of human welfare within the *maqāṣid* paradigm, fails to make this distinction and follows more the pattern of economic whole life satisfactionism where health, leisure and standards of education are quantified into welfare. Muslim scholars think that the kind of technology and infrastructure required for achieving this kind of social satisfaction is one warranted by the Sharia. But the kind of welfare understood from Islamic perspective does not need the kind of modern technology that has a consumerist and nihilist idea of human life, existence, happiness and limited idea of welfare. When seen from Islamic vantage point, it is more an inauthentic happiness and not true, genuine, happiness and welfare, false satisfaction derived from rampant use of technology.

The classical notions of *maṣlaḥa* and *maqāṣid* have provided Islamic jurists for elaborating on Islamic notion of well-being. A study of how *maqāṣid* were mostly understood and applied reflects that they focused on individual and external, palpable good, those that could be quantified to an extent. Although people like Ibn Taymiyyah have extended such concepts as piety and God consciousness (*taqwā*) to be the objectives (*maqāṣid*), they have not been put into practice, perhaps because of their qualitative and complex nature in addition to the outward manifestations of religion like defensive war, preservation of life, wealth, intellect and honor, that could be chalked out more explicitly and studied whether people are having enough or necessary amounts of these goods. What is necessary for people to become satisfied is debatable and the criterion of necessity has changed remarkably since the advent of modern technology. We see that in the Islamic milieu there is already present the ethical precept that human

beings by nature are never contented and their desires are never satiated. We can conclude that in a technological culture this human discontentment instead of being decreased, gets enhanced. The good from an Islamic perspective must include both individual and social dimensions as well as both the mundane and divine elements in various areas of social lives.

Defining Human Needs

Individual and social needs that call for technological applications arise in a historical and cultural context. There is an intellectual and spiritual (or aspiritual) environment in which certain needs are grounded establishing what is going to be interpreted as a human need. The need is decided according to how human and social purpose is conceived prior to articulation of need and subsequent technological innovation. This articulation need not be explicit and may take place at an implicit level which seeks to inform the outward decisions and choices. It is “to say that we may want something long before it is developed, such as a more precise tool or a sophisticated mode of or advanced medicine, but certainly we could not need it unless a historical or cultural environment in which this need is grounded appears first” (Rivers 2002: 511). This is to say that “invention is the mother of necessity”, quite aptly applies to our times in which the marketing makes any and every new technological gadget desirable and needed. Therefore Muslims cannot make the needs that arose in western history and culture as their own by somehow bringing relevance from their primary sources and fitting those within the *maqāṣid* paradigm. What is essential (*darūrī*) in terms of *maqāṣid* needs to be defined philosophically by having a whole philosophical background of modern technology. Concentrating too much on technological solutions without considering other aspects like religious, social or cultural, may lead to a civilizational failure of the Muslims. Since technology is culturally conditioned, there are alternatives to contemporary technological paradigm and Muslims need to see if the choices rejected by the dominant paradigm might not be useful for their socio-religious objectives^{xi}. Modern technology represents one cultural way of interpreting the world and coming to terms with it. This model is not one informed by spiritual choices and Islamic values.

Technology and Humanity

Since contemporary technology has evolved from and reflects a crisis of meaning, emptiness and existential

angst (nihilism) it does conflict with Islamic values and higher goals of self-reflection, deep and critical thinking and knowing God (*tafakkur/ tadabbur*) and then acting accordingly in the world with that God-consciousness. That is why technology in its current form promotes mindless consumerism. This consumer culture is also pumped by capitalist mode of thinking that is preoccupied with wealth, profit and growth only. When devising Islamic philosophy of technology, it should be such that the Islamic values form its core and are strengthened by the technological applications. Technology inhibits and prevents deep thinking by making life so easy that we lose the richness and depth to analyze purposes and aims. Ease or convenience is usually considered a good means for fulfilling the objectives (*maqāṣid*) and comes under necessary and complementary interests (*darūriyyāt* and *ḥājīyyāt*) and opening of means for reaching higher ends (*fath al dharā'i*). However, when looked at in particular concrete instances, it becomes contradictory to Islamic idea of spiritual and moral welfare. When seen in totality, ease brought about by technological means might be a reason for closing the means (*dharā'i*), where extra conveniences and the means toward them should be tapered in order to prevent moral and spiritual lethargy and listlessness and waste of precious time and energy. The negative value or effects technology engenders is that it fills life with mindless and trivial pursuits and distractions leading to consumerism. Consumerism also acts as the only solace to empty minds and souls and we know that people tend to console all their psychological distress and existential emptiness through consumerism. Modern technology provides functional means that are intrinsically detached from ultimate ends, preventing in this way, the actualization of metafunctional ends and does not act as means for realizing those ends. It places functional aspect of means over and above its moral dimension. Functionality of life becomes a moral goal for technology and for humans.

Realization of human nature (*fitrah*) according to the Islamic understanding is constrained by modern technology. Character of individuals and cultures should unfold in accordance with the transcendental or divine element of human nature. These are ontological questions of selfhood that are attached with the question of technological practices. Modern technology affects the notions of selfhood, what it means to be a human on an everyday level, opening up existential questions as to what pursuits are worth spending the life into. It appears that those who are less efficient in fabricating,

innovating and consuming modern technology are lesser humans, both ontologically and morally. This kind of revamping and reevaluation of human self, according to technological standards, has led to spiritual crisis that has been pointed out by sociologists, like Daniel Bell (1976: 40). It is wishful to think that human beings can acquire the depth and refinement of character required to reform technology from within the modern technological culture. In order to reverse the tide some more comprehensive outlook is needed. Heidegger and Marcuse look forward to poetic and aesthetic mindset to challenge the technological framework (Feenberg 2005). Muslim scholars, intellectuals and jurists need to see how religion could be fused into a technological way of living without a compromise of its eternal worldview and religious ideal of progress in terms of refinement of human character and morals and upward movement toward God consciousness.

There have been arguments that experiences made possible by modern technology can enhance life in their own ways (Higgs et al. 2000: 242) but they are understood as enhancement only because the very understanding of enhancement has been modified by the technology and technological experience in the postmodern world. Postmodern discourse with its stress on crisis of modern values demands entirely new perspectives and solutions to postmodern human condition. Muslim jurists/theorists have not moved in their assessment of modern technology beyond the paradigm of modernity which is insufficient to describe our contemporary culture and diagnose its ills. Postmodernism "illuminates certain contemporary realities...resonates to experience...and is an important part of the contemporary critical lexicon..." (Higgs et al. 2000: 253). Borgmann classifies the postmodern condition into two types; hypermodernism in which the vices of modernism are intensified and postmodern realism in which technology as a way of life is to be transcended to be used for ends deemed worthwhile, cherished and real (Borgmann 1992: 82). In the absence of critical thought human beings, including Muslims, are led more and more toward hyper modernism.

The Maqasidi Paradigm

Excellence when transported within an Islamic ethico-legal context can be understood as perfection of human knowledge and morals in the light of divine knowledge and guidance leading to pursuit of virtue in individual and collective lives. The dynamic nature of human interests was endorsed by classical Muslim jurists to facilitate the excellence. The objectives' framework has

the potential to transcend the atomism and reductionism characteristic of piecemeal interpretation of both the scriptural injunctions and technological apparatuses, developing a holistic viewpoint to see the interconnection between technology and morality and assessing the total impact of modern technology operating in a postmodern cultural situation. Due to a lack of understanding of modern technological culture, the terms like (all inclusive pursuit of) well-being, happiness, integrity, harm, corruption, that are fundamental to the discourse on *maqāsid*-based technology, are used widely without being clearly defined or stated. While referring to modern technology, these terms are used for technological tools and devices, without having gone through an in-depth analysis. There is a concept of 'legislative vacuum' that refers to those cases for which no organized parameters are found in Islamic law. This vacuum has been expanding in modern life due to rapid lifestyle changes (Attia, 2007: 10). Technology might fall in the "realm of judiciously ambiguous action (*dā'irah al-shubuhāt*)" (Attia 2007: 41). This is the realm in which rulings might change according to circumstances such that what is permissible under normal circumstances might become forbidden and vice versa.

Contemporary writers on the objectives have tried to broaden the scope of objectives. Attia argues that it is not enough to merely prevent intoxication in order to preserve human faculty of reason. Rather promoting knowledge and activating people's thought are other prerequisites for protecting people's intellects (Attia 2007: 63). This can be extended to include factors, such as modern technology, that has a numbing effect on people's thought or which interferes with character development and God consciousness by promoting an idea of worldly progress irreconcilable with Islamic objectives. Al-'Izz tried to establish that the purpose of all Islamic forms of worship (whether ritual or non-ritual) is "to teach human beings to hold God in awe, to magnify and revere Him, to rely upon Him entirely, and to entrust all things to Him" (Attia 2007: 114). These qualities are an essential part of the makeup of Muslim character which must be informed by faith and strive toward righteous actions. The character of technology often tampers with these ultimate ends by substituting indefinite efficiency, innovation, creativity and progress in its place.

The role of good perception in assessing the surrounding social milieu is evident in the rules of analogical reasoning (*qiyās*), where a significant portion of *ijtihād* lies in correlating a new situation to an earlier

one and judging if the same ratio legis ('illah) is present or not. The objectives and their meanings vary according to when they are studied. This is because "Islamic law (*fiqh*) is a result of human reasoning and reflection (*ijtihād*) upon the scripts, attempting to uncover its hidden meanings or practical implications. *Fiqh* is an understanding. Understanding requires good perception. And perception is a force by which one could associate holistic pictures and meanings to mental cognition (*idrāk 'aqlī*)" (Auda 2008: 46). The worldview embraced by a jurist and his appraisal of the surrounding philosophical and social milieu do influence how s/he defines and determines general interests and welfare. Taha J. al-Alwani has highlighted the need for interpreting the scriptures while being cognizant of the fact that this understanding is affected by cultural experiences and knowledge paradigms (Auda 2008: 173). Jasser Auda's "*Maqasid al-Shariah* as Philosophy of Islamic Law; a systems approach", testifies to the fact that philosophical insights can be a source of revamping the objectives (*maqāsid*) and also that the objectives theory should be mainly concerned with holistic structures and functions of the Islamic Sharia as a whole, thereby treating all enterprises, especially modern technology, in a similar way. *Maqāsid* should not look at the discreet elements of Sharia but the deeper set of values that it embodies and advances. Understanding contemporary technological context is necessary for conducting *ijtihād* so as not to apply rulings that are not meant for our times, place, conditions and circumstances, including ethical, epistemological and ontological circumstances.

Some of the objectives (*maqāsid*) outlined by contemporary scholars like Al-Tahir ibn Ashur (d. 1973), Yusuf al-Qaradawi and Taha al-Alwani have been the preservation of "pure natural disposition" (*fitrah*), true faith, human dignity and rights, the oneness of God (*tawhīd*), moral values and purification of soul (*tazkiyah*) and development of human civilization Auda 2008b: 7-8). The problem lies in understanding the true meaning and manifestation of all these objectives. What actually counts as the preservation of true human nature and what can be termed as wrongful intervention needs to be explored to know what is demanded by the Sharia from Muslims living in a postmodern, technological culture. Because the objectives act almost as the theoretical and value foundation for Islamic life, the question of human well-being and excellence and how these can be defined, must be asked within its parameters. The same objective may be realized in two circumstances through two different means. Depending

on people's predilection and tastes, Muslim scholars have treated similar means differently in different spatio-temporal settings. In one case what might lead toward good can in the second case might be a cause of repealing that very good. Therefore one cannot generalize from a ruling given for a specific situation in time to be applied universally or taken as a universal principle.

There have been deliberations by past jurists on the probability of means causing harm. This potential for causing harm could be a basis for blocking the means^{xii} (*sadd al dharā'i'*). However, this has been subject to debate with some scholars, who believe that the harm must be certain and not just speculative. The principle accepted by most of the scholars is that everything is permissible until clearly forbidden. This means a thing cannot be forbidden on presumptions and indirect derivations. However one thing that was usually present in the debates even if not acknowledged was "means and ends are subject to variations in economic, political, social, and environmental circumstances, and not constant rules" (Auda 2008: 127). To this list we can add philosophical and moral circumstances of modern technology too, although the degree of speculation would be greatest in judging the potential harm caused by modern technological culture. This is because the variables involved in this case such as personal integrity, dignity, piety as well as ontological meaningfulness and lack of direction are theoretical and not quantifiable where a one to one correspondence can be chalked out. Issues like technology need an assessment of contemporary reality, on its ethical, philosophical and social levels. Muftis try to take the lead from classical and modern fatwas about progress and material conveniences and apply it to modern technology without understanding the current dialectic. This situation needs to be redressed.

How a Maqasidi Technology would look like?

There have been arguments made against the increased automation created by technology that not only takes away livelihood but causes loss of self-esteem and individuality for individuals. One has to see whether this argument also holds in a *maqāsid* based assessment of technology. We might say that *maqāsid* also tend to create the environment for a wholesome development of human beings, with opportunity for the growth of their intellectual, spiritual, ethical, aesthetic abilities, compassion and creating a sense of meaning of the worldly life. It is not about automation but more about cherishing the crafts, valuing it and considering it a

blessing. According to Hossein Nasr modern technology is not an extension of medieval technology. It changes the relationship between man and his creation. The creation of an object used to have spiritual content, love and devotion whereas using ready made things does not provide inner satisfaction and leads to excess consumption (Nasr 2006: 97). Premodern technologies were combined with art, those things were meaningfully made, unlike our throw away consumer culture, where nothing is valued.

With all technologies, there is a culture of obsolescence, where everything comes in, to be discarded after a while. People from industrialized world have become used to always look for something new and exciting. Even novelty is taken for granted and it does not lead to genuine thankfulness and servitude to God. There is a routinization of novelty where it is presumed widely that this phenomenon of new technological creations will go on indefinitely. Modern technology accentuates and makes possible human greed and avariciousness. That is why Nasr (2006: 125) thinks that environmental problems are not only result of bad engineering or economics but the underlying cause is human attitude toward life. Unless the paradigm of how modern humans think and live, changes, there could be no change in the character of technology. We need to have an inner transformation, a different way of looking at ourselves, happiness and satisfaction, not as endless wants turning into needs but in terms of purpose of human life.

From the *maqāsid* perspective we can judge that computer technology enhances medical diagnosis and leads to health which falls in the category of promoting life and survival. It also adds to creativity and production of more scientific knowledge. In this way it promotes the values of life, creativity and knowledge. But we also know that many diseases are in a way product of technological culture, its fast pace and consumer culture. So the overall quality of people's life is not improved. It is a paradox that the same technological conditions create problems and then resolve them. "Attempts to control environmental damage (caused by modern technology) are made with ever more technology, rather than simple human acts renouncing the damaging technologies, but each "technical fix" leads to another round of problems calling for ever more technological fixes" (Ferre 1988: 130). This shows the character of modern technological culture where the solution to existing problems is not as important as doing it through technological sophistication, which reflects the inversion of means

and ends, leading to a vicious cycle. The *maqasidi* perspective needs to take into consideration all these dimensions. In a *maqāsid* oriented technology no transgression against prescribed limits should be acceptable, such as exploitation of nature just for amusement or on account of unnecessary and unneeded expression of creative innovation.

Nasr has argued that Muslims should develop their own critique of modern technology. According to him (2006: 56-9) modern science and technology is a holistic enterprise where the various parts are interlinked. One cannot uncritically accept one part and leave the others. Guns, computer, cell phones and airplanes all go together. One technology is dependent upon and leads to another and then along with it to specific patterns or forms of life. In the process, modern technology imposes its worldview upon human beings. For technological worldview, every problem has a technological solution. Modern technology has “value system”, “a certain manner of being”, “a certain way of acting” and “a certain conception of time”. Only if modern western science could be integrated into the Islamic tradition of science and then create technologies on that basis, could those have an Islamic character. Alternative technologies need to be developed based on Islamic view of nature influencing the practice of agriculture, medicine and pharmacology. Nasr (2006 107-13) strongly recommends an intellectual-spiritual critique of modern technology focusing on the loss of spiritual aspect and emphasizing that modern technology is not culturally neutral. Rather it has a specific understanding of man, the world around, God and the spiritual world. These presuppositions need to be replaced by Islamic cosmology and ethics in order to create technology according to Islamic objectives (*maqāsid*).

Ethics, Technology and Islamic Objectives

For ethical critique of modern technology and for relating the Islamic ethics or ethics of *maqāsid* to the problematic of technology we must first determine if technology is an ethical issue and why. There have been debates on the ethical implications of specific technologies like nuclear bombs, stem cell research, cloning etc. But is the question of technology as a whole and its goals and purpose open to ethical questioning and pondering? We need to justify why technology as an enterprise has ethical connotations and ramifications, requiring the intervention of *maqāsid* based ethics for its solution. According to Ferre,

“Technology raises in acute form all the traditional aesthetic and ethical questions of beauty and ugliness, ends and means, good and evil, right and wrong-vastly amplified- often, because of the incomparable potency that modern technology has given to human decisions. More than simply traditional, some of the ethical questions in the philosophy of technology may reasonably be considered new in kind simply because of the qualitative changes wrought by quantitative considerations...there is a further range of unprecedented ethical questions that require wise answers-urgently-since technology has opened or will foreseeably soon open genuinely new possibilities for action about which earlier generations never needed to deliberate” (Ferre 1988: 11).

That is the goals that constitute a good life and the means whereby to achieve those goals are both the central concern of religious as well as non- religious ethics. In the literature on ethics we find discussions on means and ends or intrinsic and extrinsic goods. Within the religious worldview intrinsic goods are the ultimate aims or objectives that are religious or spiritual in nature whereas the extrinsic goods are the means for realizing those ends (Ferre 1988: 76). We can broadly say that the Islamic discourse on *maqāsid* is a religio-ethical discourse for defining the good life in accordance with God’s will. The *maqāsid* that classical and contemporary scholars have developed and interpreted are religio-ethical objectives or ends that could be reached through a multiplicity of permissible or recommended means, routes or channels. One thing is for sure that according to Islamic juristic (*fiqh*) understanding only the correctness of ends does not make a given means permissible or appreciable. Rather the correctness of the principles and means through which an end is realized need to be right and good too. In addition to the requirement of being moral in its own right, the extrinsic good or means derives its goodness or moral character from being an agent toward realizing the higher end. Eating is not good per se but only good, rather compulsory in Sharia if it is done to survive because life is a precious gift from God. Also the food eaten has to be the permissible (*halāl*) and not forbidden (*harām*). The goods like survival, health, social friendship, if not pursued for the sake of some higher end or objective acquire a non-moral status of just being means and not extrinsic good, because they are no longer means toward higher ends. That is why the condition of faith or aiming for the intrinsic good is a must for the acceptance of good deeds (extrinsic good) in the Islamic *Sharia*. We can say that the means need

to be right and the ends good from an Islamic perspective. Enhancing survival, health and comfort are right means if they are intended toward contemplation and worship of God. In Islam, means (technological or otherwise) get a moral status in virtue of the intention why they are carried out and for what ultimate ends.

In the domain of non-religious ethics the question of how to determine benefits or goods and harms is a difficult one. In the absence of any substantive religious morality it usually comes down to a consequentialist assessment in which goods and harms involved are expressed in quantifiable terms. This in its extreme form can take the shape of hedonistic calculus. With regard to the assessments of particular technologies, on more practical levels, it is usually done in the form of cost-benefit or risk-benefit analyses (Ferre 1988: 80-1). This approach of quantifying the beneficial and harmful consequences however suffers from its limitation because there are many intangible values that cannot be quantified. When we look at the *maqāṣid* paradigm, the same problem of determining and assessing potential harm and benefit is encountered. But the religious and spiritual values in accordance with the Islamic objectives are not abandoned there because of a difficulty of quantifying them. Still the problem remains as to how to weigh the tangible versus the intangible and vice versa. Ethico-spiritual values such as patience, gratefulness, wonder, awe and bewilderment toward Allah, that lead to character enhancement and beautification cannot be added or subtracted like those of material comforts and luxuries, mortality rate etc.

The values that contemporary technology embodies are such that they are of an abstract nature and the positive and negative effects and consequences cannot be codified through some social surveys and interviews. One, it is the overall impact and direction of technological endeavor that is causing stir among intellectuals and two it is the overall value informing framework of modern technology that needs to be questioned. Within the *maqāṣid* paradigm the same difficulty exists. Although the *maqāṣid* were established as a theoretical tool for jurisprudence and legal reasoning, throughout the ages their various concepts have acquired more of an external, concrete sense rather than being used as paradigmatic. For instance, the five *maqasid*, those of religion, intellect, wealth, progeny and life are usually discussed in their concrete manifestations. Similarly in the operation of auxiliary tools like *sadd al dharā'i* (closing of permissible means) and *fath al dharā'i* (opening of permissible means), the means are appropriated in terms of manifest

consequences. Abstract and theoretical repercussions have been traditionally discounted in favour of concrete ones which form the basis of legal verdicts. This is understandable if seen within the spirit of Islamic Sharia, as the temperament of the religion is to act as practical guide for people in their everyday particular matters. It is a juristic tool and thus needs to be pragmatic and practical. However the Sharia is also meant to address wider issues, provide orientation, direction and focus to individuals and communities at large. Shatibi (d. 1388) also pointed out that the Islamic ethico-legal principles need to be formal and abstract to have a wide scope of universal application (Shahzad 2009: 20). This requires the *maqāṣid* to enter into the relatively abstract domain. Especially when in the case of contemporary technology we cannot work out a sheet of possible benefits and harms of all existing and potential technologies. Rather as the critical discourse on technology shows, the whole technological framework is in need of religio-moral orientation and reform, in accordance with some higher objectives, ends and values. For this, the *maqāṣid* discourse needs to expand its horizon and scope to include broader issues of devising fundamental set of values and principles to set future course of technological progress.

The enterprise of technology is such that it is next to impossible to evaluate technologies and their combined effects on their external consequences. One has to be involved more with the underlying philosophy of technology which if wrong would produce harm both the visible, on the level of ecological imbalance, nuclear wars etcetera and the invisible and intangible like spiritual crisis, loss of meaning, listlessness and chronic boredom. Put humorously "Would it be worth giving up drinking milk for a week after a nuclear "incident" in a neighboring state? Would it be worth going on my next business trip by train to avoid high altitude radiation from cosmic rays?" (Ferre 1988: 52). Questions like these sound humorous because of the difficulties in enumerating and enlisting all the possible harms and benefits of multiple technologies and their combined effects. In such a situation what sounds most feasible is to look at the basis for developing those technologies. If the axiological basis is problematic it is going to lead to undesirable consequences and an overall loss of meaning. Barbour raises the questions that in monetization of benefits, the life of an adult and a child might become valueless (Ferre 1988: 82). If it is hard to calculate the existing benefits and harms, the potential benefits and harms of future are definitely almost impossible to calculate beforehand. Technologies are

future oriented and if not driven by sound religious and moral principles, have a tendency to turn into ends-themselves, generating ever new innovations and possibilities along with that. If we cannot predict all the consequences that various technologies would produce, we can know although imprecisely, the direction technological enterprise is going to take if it follows a certain worldview or its lack thereof. Religious good is not marketable and tangible like the material goods. The apparent failure to even calculate precisely the combined effects of non-moral or non-religious goods points to the fact that the substantive religious good should act as the arbitrator in deciding the need and extent of extrinsic good or means.

Conclusion

The paper has given an overview of the problems characterizing contemporary technology and its associated technological culture. The resulting intellectual and social situation makes demands on Muslim thinkers to develop insight into the ontological, epistemological, social and moral issues of technology and redefine fundamental concepts to deal with the technological dilemma. This task can be attained via collective *ijtihad* where traditional scholars may collaborate with other Muslims grounded in Islamic knowledge along with a socio-critical insight. I propose the objectives (*maqāṣid*)-paradigm to be helpful in this task. However a *maqāṣid* based orientation toward technology requires that the *maqāṣid* be stated in a current vocabulary to be able to set limits and guidelines to technological enterprise in Muslim societies and be a model for rest of the world.

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NOTES

ⁱ I use the phrase "contemporary modern technology" to allude to the fact that in its inception and initial stages modern technology was inspired and driven by ends and ideals (See Waters 2006; Noble 1999; Monsma et al 1986; Davis 2006). It is now in the contemporary post-modern condition, with the challenges it has posed to modernity's conception of selfhood and self-fulfillment or well-being leading to human progress, that modern technology has been stripped off of any final objectives or ends. In the discussion ahead, when using the term "modern technology" I will be referring to contemporary manifestations of modern technology.

ⁱⁱ The social-critical and sociological approaches will be discussed in detail in later sections.

ⁱⁱⁱ Perspectives that treat modern technology as following an internal (cultural) logic and not susceptible to be modified unless that essential logic is questioned and changed. This perspective leans toward deterministic autonomy of technology, where human intervention does not seem to be able to do much in changing the direction of modern technology. It is also close to being pessimistic, witnessed in the works of Martin Heidegger, Jacques Ellul, Hans Jonas and Lewis Mumford. Modern technology according to them moves in a trajectory where it is self-serving, oppressing humanity and human nature in the process.

^{iv} The sociological character is elaborated by sociologists of technology. See the works of Andrew Feenberg, the idea of Social Construction of Technology (SCOT) proposed by Trevor Pinch, Wiebe E. Bijker. See also works by Steve Woolgar and Sandra Harding on similar theme. There are also other writers who talk about interpretive flexibility in technological design and execution from different standpoints (See Campbell 2010, for a detailed study of social and religious shaping of technology). The sociologists of technology emphasize the non-determinist nature of technology.

^v Self-control in an Islamic context can be translated as *taqwa* and virtuosity as *tazkiyah*. These concepts will be discussed in the relevant sections below.

^{vi} This is in contrast to Islamic objectives (*maqāṣid*) that are based on a substantive conception of good and thus value ladenness of means is a corollary of the belief system

^{vii} See the works of Andrew Feenberg.

^{viii} I will be using the term *maṣlaḥa* in the sense of overall well-being and welfare of human beings inclusive of their spiritual or moral well-being. I will not use the term public interest as it is restrictive. *Maṣlaḥa* pertains not only to social good but also to individual well-being and personal development. Many Islamic injunctions address and deal with individual moral upliftment and treat it as an essential ingredient to curbing social ills as has been evidenced in Quranic verses and hadith related to backbiting, slander, use of abusive language. To retain the import of the term I will use the original Arabic term without translation. It is important for my purpose to emphasize the holistic welfare dimension of the term to understand its ramifications for gauging technological progress and welfare.

^{ix} See also Ivan Illich on development.

^x See the works of Seyyed Hossein Nasr, Muzaffar Iqbal and William Chittick.

^{xi} See "Epistemological Bias in the Physical and Social Sciences" by Elmissiri

^{xii} Blocking the means in the Islamic law entails forbidding, or blocking, a lawful action because it could be means that lead to unlawful actions. Jurists from various schools of Islamic law agreed that in such case leading to unlawful actions should be more probable than not', but they differed over how to systemize the comparison of probabilities (Auda 2008).

Technology is not only the name of gadgets, instruments, applications that is specific actions but symbolizes an abstraction, mode or way of being, doing and acting in the world. How we define technology is important for how we then evaluate it. Whether the terms classically devised for particular actions could be applied to technology understood in the above sense is a question worth asking.