KNOWLEDGE: THE QUR'ĀNIC DISCOURSE CONCERNING REASON AND REVELATION AND ITS IMPACT

by

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ABSTRACT

This thesis is a study of the Qur'ānic discourse on knowledge and its impact on the Muslim world. It focuses in particular on the division of knowledge into the Revealed or Religious sciences and the Rational sciences. The thesis asks whether both Revealed knowledge and Rational knowledge are considered religiously praiseworthy and questions what the purpose is in acquiring knowledge. The thesis then examines the impact of the Qur'anic discourse on the Muslim community through the development of the revealed and the rational sciences and through the development of educational institutions. Finally, it asks why it is that in the present day the two branches are isolated from each other when there was clearly a great deal of overlap and cross-fertilisation during the medieval period.

The findings were that the purpose of acquiring knowledge in Islam is to understand God and oneself. It found that within the Qur'ānic discourse the revealed sciences and the rational sciences enjoy a symbiotic relationship. This relationship did not however always manifest in society. The educational institutions did incorporate the rational sciences during times of prosperity but when under political or economic pressure they regressed back to only teaching the revealed sciences.

Contents

1	IN	TROD	OUCTION	5
	1.1	Sco	pe	7
	1.2	Me	thodology	8
	1.2	2.1	Insider Outsider Issues	11
	1.2	2.2	Research Questions	14
	1.2	2.3	Structure of the Thesis	14
	1.3	Not	es	15
	1.3	3.1	Translations	15
	1.3	3.2	Transliteration	18
	1.4	Lite	rature Review	19
	1.5	Intr	oducing the Qur'ānic Revelation	27
	1.5	5.1	Definition and meaning of the word 'Qur'ān'	29
	1.5	5.2	How the Qur'ān was revealed and to whom?	31
	1.5	5.3	The Message of the Revelation	33
	1.5	5.4	The Style and Structure of the Revelation	34
	1.5	5.5	Qur'ānic Exegesis	41
	1.6	Ove	erview of the Sunnah	42
	1.6	5.1	Definition of Sunnah and Ḥadīth	43
	1.6	5.2	The Authority of the Sunnah in Relation to the Qur'ān	44
	1.6.3		The application of Sunnah – the context, the style, love of the Prophet	45
2	Re	ason	and Revelation in the Qur'ān and Sunnah	47
	2.1	Intr	oduction	47
	2.2	Def	initions	48
	2.2	2.1	Al-'Ilm (Knowledge)	48
	2.2.2		Knowledge and Wisdom	53
	2.2.3		Light as a Metaphor for Knowledge	54
	2.2.4		Jahl as the Antithesis of 'ilm	59
	2.2	2.5	Knowledge and certainty	60
	2.2	2.6	The Rank of the Knowledgeable	62
	2.3	God	d's Knowledge	68

	2	2.3.1	The Nature of God	68
	2	2.3.2	God: the source of all knowledge	72
	2.4	Ma	n's Knowledge	75
	2	2.4.1	The Nature of Man	76
	2.5	Rev	relation - <i>Waḥy</i>	80
	2	2.5.1	Categories of Revelation	83
	2	2.5.2	Messengers and Scriptures	86
	2.6	Rea	son	91
	2	2.6.1	Intellect 'aql	91
	2	2.6.2	The Use of the Senses	93
	2	2.6.3	The Natural World	95
	2	2.6.4	History	101
	2.7	The	Purpose of Knowledge	103
	2	2.7.1	Signs Āyāt	103
	2.8	Scie	entific Verses	106
	2.9	Con	nclusions	112
3	Т	he Dev	velopment of the Revealed Sciences	114
	3.1	Juri	sprudence - Fiqh	114
	3	3.1.1	Background to the Establishment of the Schools of Law	115
	3	3.1.2	Founders of the Schools of Sunni Jurisprudence	123
	3	3.1.3	Ibn Hazm (994-1064 CE) and the <i>Ṭāhirī School</i>	134
	3	3.1.4	Fiqh Al-Wāqi'a (Understanding the Reality)	135
	3	3.1.5	Maqāṣid Al-Sharīʿah	139
	3	3.1.6	Ibn Taymiyyah and the Modern Salafiyyah Movement	141
	3	3.1.7	Muḥammad ibn Abdul Wahab (1703-1792)	144
	3	3.1.8	Abdul Aziz bin Abdullah bin Baz	145
		3.1.9	Conclusions Regarding the role of Revealed and Rational Knowledge in	
			idence	
	3.2		Science of Tafsīr - Qur'ānic Exegesis	
		3.2.1	Qualifications of the Exegete (Mufassir)	
		3.2.2	Sources of Exegesis (Tafsīr)	
		3.2.3	The Developed Method of Exegesis (Tafsīr)	
		3.2.4	Problems of Exegesis	
	3.3	The	Science of Ḥadīth	168

	3.3.1	Historical Development	168
	3.4 Ḥa	dīth Analysisdīth Analysis	172
	3.4.1	Ḥadīth analysis and Tafsīr	173
	3.4.2	Authentication of Ḥadīth	173
	3.4.3	Criteria for Ṣaḥīḥ Ḥadīth	174
	3.4.4	Criteria for a Ḥasan Ḥadīth	177
	3.4.5	Criteria for a Ḍa'if Ḥadīth	177
	3.4.6	The Probabilistic Foundation of 'Ilm-al-Ḥadīth	178
	3.4.7	Differences in the Madhāhib (Schools of Law)	179
	3.4.8	Disagreements between the Scholars of Ḥadīth	179
	3.5 Sui	mmary of Findings in the Development of the Religious Sciences	181
4	The De	velopment of the Rational Sciences	184
	4.1 De	finitions	187
	4.2 Sci	ence in the Qur'ān	188
	4.3 Ear	liest Scientific Study in the Muslim Community	190
	4.4 Sch	nolarly Underpinnings of the New Sciences	192
	4.4.1	Rationalism leading to an early 'Heresy'	193
	4.5 Fal	safa and its impact on scientific development	196
	4.5.1	Al-Kindi (801-873 CE)	196
	4.5.2	Muḥammad ibn Zakariyā Rāzī (894-925 CE)	199
	4.6 Th	e Neo-Platonists	200
	4.6.1	Al Fārābī (872-950 CE)	
	4.6.2	Ibn-Sīnā (980-1037 CE)	204
	4.7 Re	buttal of Falsafa	206
	4.7.1	Ibn Ḥazm (994-1064 CE)	206
	4.7.2	Al-Ghazālī (1058–1111 CE)	207
	4.8 Sci	ence independent of philosophy	
	4.8.1	Al-Khwārizmī (780-850 CE)	212
	4.8.2	Abu Ali ibn Al-Ḥaytham (965-1040 CE)	
	4.8.3	Abū Rayḥān Al-Bīrūnī (973-1048 CE)	218
	4.8.4	Ibn Khaldūn (1332-1406 CE)	219
	4.9 Lat	er Critiques of Science and Philosophy	
	4.9.1	Ibn Taymiyyah (1263-1328 CE)	
	4.9.2	Muḥammad Iqbal (1877-1938 CE)	223
		3	

	4.10	Conclusions	226
5	The	e Transmission of Revelatory and Rational Knowledge	229
	5.1	Introduction	229
	5.2	The First Islamic Institutions	231
	5.3	First Institutions for the Rational Sciences	233
	5.3	.1 The Academy of Jundaysābūr (Est 638 CE)	234
	5.4	Creation of the first Madrassas	236
	5.5	Promotion of Rationalism by the Ruling Dynasty	238
	5.6	House of Wisdom (<i>Bayt al-Hikma</i>) (Est 832 CE)	238
	5.7	The Mainstreaming of the Colleges of Revealed Science	241
	5.8	Libraries	242
	5.9	Medical colleges	243
	5.10	Madrassas of the Ottoman Empire	245
	5.11	Madrassas of the Safavid Dynasty	248
	5.12	The University of Azḥar	249
	5.13	The Indian Subcontinent	250
	5.1	3.1 Origins of the Dars-i-Nizamīya	253
	5.1	3.2 Impact of the British Colonisation of India	255
	5.1	3.3 Darul Uloom Deoband	259
	5.1	3.4 Darul Ulūm Nadwat al ʿUlamā	261
	5.14	Education in Saudi Arabia	262
	5.1	4.1 The Export of Wahhabi-Hanbali Thought	265
	5.15	The Muslim Community in the UK	266
	5.1	.5.1 Cohesion of the British Muslim Community	269
	5.1	.5.2 Reason and Revelation in the Education of British Muslims	270
	5.16	The Establishment of a Muslim Priesthood	272
	5.17	Conclusions	273
6	Cor	nclusions	279
	Glo	ossary	284
	Bib	oliography	288

1 INTRODUCTION

Muslims in the media have been defined as uncivilised people who do not share the values of the west such as freedom of speech and sexual equality. Islam is often accused of being a medieval religion with monolithic values and barbaric practices including honour killing, forced marriage, and capital punishment. Both non-Muslims and some Muslims have called for Islam to undergo an 'enlightenment' where reason will play a greater role to make the religion more compatible with western secular values. Jim Khalili, Professor of Public Engagement in Science and Physics at the University of Surrey and President of the British Humanist Association states:

There is no doubt that to the ear of many non-Muslims around the world today the term Islam too comfortably evokes a negative stereotype that contrasts with our Western secular, rational, tolerant and enlightened society. This lazy view can make it difficult to acknowledge that a thousand years ago the roles were reversed. Think of the crusades: Which side back then was the more enlightened, civilised, the good guys? Even those in the west who have a vague awareness of the contribution of the Muslim world to science, tend to think of it as no more than a reheating of Greek science and philosophy with an odd bit of originality subtly added like eastern spice to enhance the flavour.

(Al-Khalili, 2012, p. xix)

Earlier in his introduction he further states:

In fact, for a period stretching over seven hundred years the international language was Arabic. For this was the language of the Qur'ān, the holy book of Islam, and thus the official language of the vast Islamic Empire that, by the early 8th century CE stretched from India to Spain.

(Al-Khalili, 2012, p. xviii)

If this was the case, then what has led to the Muslim community becoming so seemingly divorced from the rational sciences? Religious schools, both full-time and supplementary

evening classes for teaching the religious sciences, are thriving. Muslim countries however, seem to have few noted scientists and lag well behind the western world in the rational sciences.

My motivation for this study was the desire to find out the reason for this contemporary divide between the rational and the religious sciences. I wanted to know whether this was born out of the Qur'ānic paradigm or were some other factors responsible for this development. Where Arabic was once the international language of science it seems to have been restricted to the religious realm.

I suspected that the religious institutions were to blame and considered that this might be rooted in the Qur'ānic discourse. I was aware that the acquisition of knowledge is a deeprooted concept within the Muslim psyche hearing around me many sayings such as "The seeking of knowledge is obligatory for every Muslim," (Ibn-e-Maja , 2005, p. 133 Vol 1) and the verses of the Qur'ān that extolled the people of knowledge such as "can they who know and they who do not know be deemed equal?" Qur'ān 39:9 (Asad, 2003, p. 797). This led me to question whether the knowledge spoken of was purely religious knowledge. I therefore resolved to find the underlying cause of this issue.

The question that I am concerned with here is what kind of knowledge is it that is being passionately discussed? This study attempts to uncover the knowledge that is being propagated in both the Qur'ān and the Sunnah and how this has been understood by the scholars of Islam.

1.1 Scope

The concept of knowledge is a vast topic within the domain of Islamic Studies. This thesis focuses on the theme of knowledge in the Qur'ān and specifically looks at revelatory and rational knowledge with a view to understanding their relationship and relative importance.

I will be using the Qur'ān as it is found around the globe today. It is the same text that influenced scholars from the 6th Century, as is found in the commentaries of the classical period. The authenticity of the Qur'ān has been covered by both Muslim and non-Muslim academics in other works such as Azami's *The History of the Qur'ānic Text* (Al-Azami, 2003) and the earlier work of Nabia Abbot (1967) and is not directly pertinent to the study.

The Qur'ān invariably talks of the spiritual and physical realms. The thesis discusses the spiritual realm as far as it can be understood from the Qur'ānic text, but does not delve into the spiritual discipline of the Sufis who have strived to learn about the inner realities. The extension into this area; exploring the links between scholastic and mystical sciences at a deeper level, is one possible extension project that could be undertaken at a later date.

The study is further constrained by situating itself for the greater part in the domain of the Sunni schools of Islamic jurisprudence and theology; however, it does not ignore the other groups with reference being made to their viewpoints where appropriate.

Where this study will depart from a straightforward thematic commentary is in its combination with historical analysis to evaluate the impact of the Qur'ān and the understanding of knowledge derived from it in Muslim communities in different ages from the time of the Prophet Muḥammad to the present. In this section I will review the historical

data and consider whether the achievements of the Muslim community in the Golden Age of Islam (8th to 13th Century CE) explain the notion of harmony between revelatory and rational knowledge or whether this requires an alternate explanation.

I will also seek to identify the reasons for the decline in the study of the rational sciences and to uncover the cause of the rift that has developed between the religious scholars and the rational scientists. This has now reached a level where they no longer share the same language and communication has become superficial at best with each viewing the other with suspicion and contempt.

The concept of knowledge, and how it is understood by Muslim theologians of dialectical theology and philosophers of the medieval period, is covered comprehensively by Franz Rosenthal (Rosenthal, 2007, pp. 46-69). Our concern here is not the philosophical and theological views of knowledge, but rather the interaction of revelatory knowledge and rational knowledge and their relationship in the Qur'ānic discourse. The overarching understanding is that of knowledge of scripture and knowledge of the natural world and not the seemingly inexhaustible philosophical treaties on how knowledge can be defined.

1.2 Methodology

This thesis utilises a library-based research method. Most of the material used is found in the form of books, articles in journals and some material found in resources online. The primary literature for the study is the primary sources of Islam.

Any study based upon the sources of Islam cannot ignore the primary literature, which consists of the Qur'ān and Ḥadīth and the exegetical studies carried out by scholars over the centuries.

Both primary and secondary literature has been used in the examination of how the Qur'ānic discourse impacts upon the field of jurisprudence, science and education. The primary sources are mainly Arabic with some Urdu whereas the secondary sources are mainly English.

The thesis begins by analysing the primary sources of Islam and their discourse on knowledge both revelatory and rational. The relationship between the two fields of knowledge is explored through the works of the exegetes, both medieval and contemporary. The classical $taf\bar{a}s\bar{i}r$ are essential as they have had by far the greatest influence on the development of religious thought in the Muslim community whereas contemporary $taf\bar{a}s\bar{i}r$ have often sought to recontextualise Islam for the modern world and are currently still exerting a substantial influence on modern Islamic movements in the Muslim world. The weakness in the classical $taf\bar{a}s\bar{i}r$ has been highlighted by Fazul Rahman who observes:

There was a general failure to understand the underlying unity of the Qur'ān, coupled with a practical insistence upon fixing the words of various verses in isolation. The result of this "atomistic" approach was that laws were often derived from verses that were not at all legal in intent.

(Rahman, 1982, pp. 2,3)

Rahman goes on to particularly mourn the impact on Philosophy, which lies outside the scope of this thesis; the limitation he highlights however, has general applicability. The contemporary $taf\bar{a}s\bar{i}r$ of Qutb and Mawdūdī while arguably lacking in rigor in the classical sense nevertheless made up for this in the way they highlighted the relevance of the Qur'ānic message to the Muslims of the twentieth century in a way that the classical scholars fail to do.

The impact of Ibn Kathīr on the contemporary community should not be underestimated; however, because with the rise in the interest in the traditional religious sciences many young Muslims have turned to the relatively simple rationalism of Ibn Taymiyyah and the Salafiyyah

movement and Ibn Kathīr as a student of Ibn Taymiyyah has gained considerable popularity. This was further expanded with the publication of an English translation, which predates even those of Quṭb and Mawdūdi. Abu Hamid Al-Ghazālī and Ibn Taymiyyah while not renowned exegetes also contributed important contributions theologically and philosophically and their work will also be referenced where appropriate.

For the exploration of exegesis, I have chosen to limit the study to the views of three primary exegetes:

Tafsīr Ṭabarī (839-923 CE): One of the earliest complete $taf\bar{a}s\bar{i}r$ to have survived it includes many references to earlier works thus providing valuable insight into the understanding of the early Muslim community. Its weakness lies in its use of weak $\hbar ad\bar{i}th$ (his work predated the development of the methodology of $\hbar ad\bar{i}th$ studies) and also the use of Isrā'īliyāt (Jewish and Christian Sources), a source most classical exegetes eschewed.

Tafsīr Zamakhsharī (1075-1144 CE): A commentary more reliant on reason; in part because of the author's affiliation to the Al-Muʿtazilah movement. This commentary is well respected and widely used in part because of the higher level of linguistic analysis including consideration of the different variant readings of the Qur'ānic text.

Tafsīr Ibn Kathīr (1300-1373 CE): A commentary replete with comprehensive references to authenticated $ahad\bar{i}th$, which enable linkages to be identified that are lacking in the other two classical $taf\bar{a}s\bar{i}r$.

In addition to these three classical commentaries, I have made limited use of the more contemporary commentaries of Sayyid Quṭb (1906-1966 CE) and Abu Ala Mawdūdi (1903-1979). These commentaries are both more recent and place emphasis on the recontextualisation of the text to find interpretations which are still relevant to contemporary Muslim communities.

What none of the established commentaries have done is to address knowledge as a theme and connect the relevant $\bar{a}y\bar{a}t$ and $a\dot{h}ad\bar{i}th$ to derive a coherent understanding of this crucial subject. Thus one role of the thesis is to draw together some of the key $\bar{a}y\bar{a}t$ and $\dot{h}ad\bar{i}th$ to achieve this.

1.2.1 Insider Outsider Issues

The primary sources of Islam have been studied extensively by traditional Muslim scholars, Orientalists and contemporary Muslim scholars using an array of traditional and western approaches. This thesis draws on all three strands of academia. The traditional scholars who have defined and developed mainstream approaches to understanding the primary sources of Islam have had the greatest impact on the development of Muslim society. They have defined what is acceptable to society and what taboos have developed and thus their perspective is primary in addressing the research questions. The perspective of the Orientalists; however, has value because their remote philosophical perspective has, at times, raised important questions. The Muslim community may have turned to their own scholars to answer these questions; however, without the external perspective, some may not have been asked. An example of this is the challenge that came from Goldziher and Schacht regarding

the authenticity of the <code>hadith</code> and the development of jurisprudence. This spurred Muslim scholars to more rigorously research and analyse the material and in some cases to reevaluate the source materials. The contemporary Muslim scholars have been valuable in challenging the orthodoxy from within.

The insider perspective also comes from the author who self-identifies as a believing Muslim who is nevertheless somewhat critical of some aspects of traditional Islamic studies and is highly critical of the division that has arisen between the revealed and the rational sciences. The study is in part an exercise to reveal the origin of this split and to establish whether it should and could be overcome.

One of the common criticisms of academic writing written from an insider perspective is the assertion that it must therefore lack objectivity. This assertion presupposes that an outsider perspective is inherently objective or at least more objective as Chittick observes:

The idea that we possess "objective knowledge" is one of the most impenetrable of veils. Those who hold on to it typically take a dogmatic position that leads them to discount everyone else. If our own position is "objective" then that of the others is "subjective" and hence it can be dismissed from consideration.

(Chittick, 1998, p. xii)

Thus the rigorous position is not one of feigned objectivity but one of transparent self-disclosure and self-analysis.

In her article *Principles of Qur'ānic Hermeneutics* Yamina Mermer explains that when one is engaged in reading a text it is important to first clarify who the reader is and who is the author:

Another rule of usul al-tafsir (methodology of Qur'anic exegesis) is that speech derives its power of meaning from four sources: the speaker, the form of the speech, the addressee, and the purpose of the speech... both the speaker and the addressee are crucial in determining the meaning of speech.. In the case of the Qur'an, since the claim is that it is the word of God, then I need to consider it as the word of God if I don't want to alter its meaning. Indeed, 'who the speaker is' determines the meaning of the content.

(Mermer, 2005)

She goes on to provide the example of verse 16:40 of the Qur'an:

For to anything which We have willed, We but say the word, "Be", and it is. (Ali, 2004, p. 647)

If we accept that the author is God then we know that it is the Creator of all things, including ourselves that is speaking whereas if, as some orientalists assert, we read the text as the words of Muḥammad then we are reading something, which is no longer the Qur'ān. The content would be the same but the message would be altogether different. This point is also brought out by orientalist Montgomery Watt in his text *Bell's Introduction to the Qur'ān* where he observes:

Normally a person can only reach important levels of religious experience through participating in the life of the community in which he has been brought up and basing his activity on its ideas. There are exceptions, but this is the normal case. It is not easy for a person brought up in a Christian environment to appreciate the religious ideas of Islam, far less to make them the basis of a satisfactory life. The same is true for the Muslim with Christian ideas. This means that it is Christian ideas which give the Christian the best chance of attaining a richer and deeper experience, and likewise Muslim ideas the Muslim.

(Watt, 1997, p. 182)

Thus the insider view of the text is the view that is most relevant to this study.

1.2.2 Research Questions

The key research questions that are addressed are:

- What is the significance of knowledge and the knowledgeable in the Qur'ānic
 Discourse?
- Within the Qur'ānic discourse is the emphasis on knowledge limited to revealed knowledge or does it extend to rational knowledge?
- Is the current division between Revealed and Rational knowledge rooted in the Qur'ānic discourse or were some other factors responsible?
- What does the Qur'ānic discourse say about the paradigm and purpose of knowledge?
- How did the Qur'ānic discourse on knowledge impact on the development of the revealed and rational sciences?

1.2.3 Structure of the Thesis

Chapter 2 provides an analysis of some of the key $\bar{a}y\bar{a}t$ of the Qur'ān and key $had\bar{i}th$ for a theoretical analysis focussed on the research questions. Chapter 3 then examines the impact of the Qur'ānic discourse on the development of some of the key religious sciences; namely fiqh, $tafs\bar{i}r$ and $had\bar{i}th$. These have been selected because fiqh was the first science to be addressed by the scholars of Islam and it is also a science that clearly integrates reason and revelation. $Tafs\bar{i}r$ and $had\bar{i}th$ studies both contribute to the study of fiqh and form the foundation of all the Islamic sciences as they define how the primary sources are studied and used. They are also the sciences used in the development of this thesis.

In chapter 4, the historical development of the rational sciences is analysed with particular reference to the relationships that existed between the rational and religious sciences. This is key to understanding the second and third research questions. Finally, in chapter 5 the impact of the revealed and rational sciences on the wider Muslim community is examined through the development of the mainstream education systems and their curricula. This provides a more thorough analysis of the real impact of the development of the revelatory and rational sciences on Muslim society.

1.3 Notes

1.3.1 Translations

The Qur'ān is a multilayered Arabic text. Even those who hear it understanding to numerous, sometimes divergent ways, and those who can't hear it in Arabic grasp no more than a fraction of its intended message.

The limits of human experience affect the way we approach the text. The Qur'ān as written in Arabic is less than the revelation given to Muhammad ; it is a second-order revelation. The Qur'ān unwritten, then translated from Arabic to English, becomes a third-order revelation. Distance from the source handicaps us, yet we can still learn about Islam from engaging by with the Qur'ān, even as a written text, translated from Arabic to English.

(Lawrence, 2006, p. 8)

In the above quotation Professor Bruce Lawrence of Duke University succinctly highlights the problem of addressing the text of the Qur'ān. Even in Arabic we cannot be sure that we are really getting the full message and in an essay like this whose medium is English we have to accept that some significant compromises have to be made.

We are presented with this difficulty when expressing the word 'ilm عِلْمُ in the English language.

The classical Arabic text translations have used the word 'knowledge' for 'ilm عِلْمُ Does 'knowledge' provide a sufficient understanding of 'ilm عِلْمُ as used in the Qur'ān? Every

translated work is to a degree an interpretation of the individual translating the text since no two languages are identical in form, and when translating from Arabic, which is a Semitic language with different word structures and grammar into English, an Indo-European language, the difficulty becomes even more acute.

There is a famous anecdote relating to the experience of the first computer translation software. To test the machine, the expression 'out of sight, out of mind' was first translated into Russian and then the same machine was used to translate the result back into English. The result was 'invisible lunatic'. The mistake the software made can be seen plainly and a human translator would be expected to use context etc. to avoid such a mistranslation but the opportunity for errors is manifest.

For the above stated reasons, I do not like to consult a copy of the Qur'ān without the Arabic text, knowing that a single word could have been translated into a number of different words and the choice made by the translator can have a major impact on the nuances of meaning conveyed to the reader. To illustrate this, we can look briefly at the word *muttaqīn* معقورة as used in the second verse of Surah Bagara in the Qur'ān:

- Marmaduke Picthall (2004, p. 25) translates it as 'those who ward off (evil)'
- Kaasem Khaleel (2008, p. 39) translates it as 'those who are in awe of God'
- Muhammad Asad (Asad, 2003, p. 8) translates it as 'God-conscious'
- Muhammad Abdel Haleem (2004, p. 4) translates it as 'Those who are mindful of God'
- Abdullah Yusuf Ali (Ali, 2004, p. 17) translates it as 'those who fear Allah'

- Aisha Bewley (2005, p. 2) and Laleh Bakhtiar (2009, p. 1) translate it as 'the most godfearing of you'
- J.A. Arberry (1998, p. 2) and Abdul Majid Daryabadi (2001, p. 4) translate it as 'the godfearing'
- Mir Ahmed Ali (2005, p. 2) and Sale (Wherry, 1896, p. 293) translate it as 'pious'
- Ali Unal (2006, p. 10) translates it as 'the God-revering, pious, who keep their duty to God'
- Al-Hilali and Muhsin Khan (1996, p. 9) translate it as ' the pious believers in Islamic Monotheism who fear Allah much (abstain from all kinds of sins and evil deeds which He has forbidden) and love Allah much (perform all kinds of good deeds which He has ordained)

The variety and variation in translation reflects not confusion over the term *muttaqeen* فتقين but the breadth of meaning and nuance that makes this term particularly difficult to translate.

This has led some of the translators to abandon any effort to find a single English word to represent it, and instead to have put a phrase or even a paragraph to represent this single word.

Consequently, I do not just provide a translation for the Qur'ānic text in this thesis but also give the Arabic text so the reader is able to determine the wider meaning of the Arabic words.

I have chosen to omit the transliteration since I give the Arabic text, as this would have affected the word count and made the thesis more difficult to read. In the course of the discussion, I do however, provide individual words in transliterated form.

1.3.2 Transliteration

Throughout this thesis the Library of Congress transliteration system has been employed whenever an Arabic expression is quoted. The following table explains the Arabic transliteration system for Arabic consonants and vowels. Note that J is always transliterated as al even when the J is not pronounced.

Arabic	Transliteration	Arabic	Transliteration
1	a	ط	ţ
ç	1	ظ	Ż.
ب	b	ع	¢
ب ت	t	ع ف ف	gh
ث	th	ف	f
<u>ج</u>	j	ق	q
で て さ	ķ	<u>ئى</u>	k
خ	kh	J	1
7	d	م	m
ذ	dh	ن	n
J	r	٥	h
j	Z	و	W
m	S	ي	у
m	sh	õ	h
ص ض	Ş	ال	al
ض	ģ		

Arabic short-long vowels, case endings & diphthongs

Arabic	Transliteration	Arabic	Transliteration
Ó	a	Ó	an
1	ā	្	in
़	i	៎ំ	un
ي	ī		
ំ	u	<u>َ</u> و	aw
و	ū	َ <i>ي</i>	ay

1.4 Literature Review

The Qur'ān since its inception has been subjected to rigorous analysis of its text by both Muslims and non-Muslims. It may be worthwhile to look at its historical origins. No other book has stood the test of time as much as the text of the Qur'ān. There is unanimous agreement among Muslim scholars on the text of the Qur'ān with its variant readings. The Qur'ānic text used for this thesis is the Ḥafṣ variant which is the most popular in the world today.

Before engaging with exegetical literature it is beneficial to have a sound overview of the Qur'ānic text and for this I found Michael Sells' *Approaching the Qur'ān* (Sells, 1999) both accurate and accessible. I would recommend this text for Muslims and non-Muslims alike for its elegant prose and insightful observations. Japanese scholar Toshihiko Izutsu's *Ethico Religious Concepts in the Qur'ān* (Izutsu, 2007) is essential reading for understanding the Qur'ān as an ethical and moral foundation.

One key question of this study is: What does the Qur'ānic discourse say about the purpose of knowledge? My research suggests the question has not been addressed in any depth previously in the major works of *tafsīr* as most of these simply give a verse by verse commentary; however, there are other studies on the broader topic of knowledge and many books have been written discussing different themes of the Qur'ān.

Major themes of the Qur'ān (Rahman, 1989) is one such attempt by Fazlur Rahman which is largely concerned about Qur'ānic concept of God, man and society and others like Understanding the Qur'ān Themes and Style (Abdel Haleem, 1999) by Muḥammad Abdul Haleem discusses many topics as war and peace, marriage and divorce and other topics but neither delve into the theme of knowledge. Muḥammad Abdul Haleem, points out:

...the study of themes in the Qur'ān is fairly a new subject in English. This is surprising as it is the only approach that can give a balanced view of what the Qur'ān says on any given topic.

(Abdel Haleem, 1999, p. pvii)

A good introduction to the science of Qur'ānic Exegesis is provided by Ahmad von Denffer in his Ulūm Al-Qur'ān — An Introduction to the Sciences of the Qur'ān (Von Denffer, 1996). Von Denffer's book overlaps somewhat with Al-Azami's The History of Qur'ānic text (Al-Azami, 2003) in explaining about variant readings and the early manuscripts but he also goes on to discuss in brief the science of Tafsīr, who is considered qualified to engage in exegesis and to describe the different approaches that the muffassirūn (Qualified Qur'ānic Exegetes) have taken. This can be supplemented by Bilal Philips' Uṣool at-Tafseer (Philips, 1997) and for a more contemporary perspective on approaches to Qur'ānic Exegesis Abdullah Saeed's Interpreting the Qur'ān (Saeed, 2006). A more detailed analysis is presented in Yasir Qadhi's An Introduction to the Sciences of the Qur'ān (Qadhi, 2003) and here we also have some descriptions of the most well-known tafāsīr or Qur'ānic commentaries.

The most recent and comprehensive text I have used on the science of *tafsīr* is *Schools of Qur'anic Exegesis*: *Genesis and development* by Hussein Abdul Raof (Abdul-Raof, 2010). One unusual feature of this text is that while it concentrates on the traditional discussions of methods of exegesis it also includes full details of the orientalist discussions where they are pertinent. While for the purposes of this study the opinions of the orientalists are largely irrelevant and we are much more interested in how the Muslim community received the exegetical works, this text still adds a degree of rigor as it has been pointed out by the American Muslim scholar Omar Faruq Abdullah in his oral presentations, while Muslims may not wish to hear the analysis provided by non-believers they would do well to listen to the

questions they pose as sometimes an outsider can uncover and stimulate an important new area for discussion. A good example of this is the debate over the authenticity of the <code>hadīth</code>. It was the probing of the orientalists, perhaps attempting to undermine the traditional sources of Islam, which prompted some excellent scholarship by Muslims that has ultimately reassured the believers about the reliability of their own books and teachings.

Al-Tafsir Wal-Mufassirun authored by Dr. Muḥammad Hussain al-Dhabi is also an invaluable and comprehensive text in the Arabic language giving detailed information of the development of tafsīr from the earliest period to 1976 when it was published and categorizing the mufassirūn according to their school of thought.

Current literature is also subject to the particular scholarly leanings of its authors and Yasir Qadhi's book clearly exposes his adherence to the now popular literalistic Ahle Hadith tradition through his disparaging asides relating to commentaries by followers of Asharī aqīda or particular schools of jurisprudence. (In fact he dedicates an entire chapter to his refutation of the Asharī aqīda.) Another useful text from the same school is *Usool at-Tafseer – The Methodology of Qur'aanic Explanation* (Philips, 1997) by Bilal Philips. To get a broader understanding one should read *Introduction to the Science of Tafsir of the Qur'ān* by the Shia Scholar Ayatullah Ja'far Subhani (Subhani, 2006) or perhaps the best general reference is *Methodologies of the Qur'ānic Exegesis* (Ushama, 1995) by Dr Thameem Ushama. This latter text comes out of the International Islamic University of Malaysia and gives the most detailed and descriptions of both the different types of *tafsīr* and descriptions of the major works.

The discussion of the development of Islamic law has been the subject of a vast amount of scholarship. Yasin Dutton's text *The Origins of Islamic Law* (Dutton, 1999) is a comprehensive

reference on the Maliki School of law and Mohammad Akram Nadwi's *Abū Hanīfah* (Nadwi, 2010) provides an excellent explanation of the school of Abū Hanīfa. For a detailed overview of all the Sunni schools I have found Hashim Kamali's *Sharīʿah Law* (Kamali, 2008) excellent and for a more detailed technical analysis his *Principles of Islamic Jurisprudence* (Kamali, 2003) is by far the most detailed and comprehensive source. No examination of the four Sunni schools of jurisprudence would be complete without examining Al-Shafi'i's *Risalah* and the translation I used for this was that by Lowry (Al-Shāfi'ī, 2015).

Moving forward to the development of the concept of *Maqāsid Al Sharī'ah* the two key texts are Imam Al-Shatibi's *Theory of the Higher Objectives and Intents of Islamic Law* (Al-Raysuni, 2005) and Ibn Ashur's *Treatise on Maqāsid al-Sharī'ah* (Ibn Ashur, 2006). Finally, for the consideration of the impact of the authoritarian Wahabi-Selafi school that currently dominates Saudi Arabia and has impacted on the whole Muslim world, I found the text *Speaking in God's Name* (Abou El Fadl, 2003) by Egyptian-American academic Khaled Abou El Fadl invaluable.

Tafsīr is a science that depends extensively on the prophetic traditions and for this reason the science of the authentication of <code>hadīth</code> is crucial. Abdul Raof discusses it to a degree in his aforementioned text on exegesis but more detailed texts include Ibn al-Shahrazūrī's <code>Kitāb Ma'rifat anwā' 'ilm al-Ḥadīth'</code> which is now available in translation as <code>An Introduction to the Science of the Ḥadīth</code> (Al-Shahrazūrī, 2006), and Hashim Kemali's <code>A Textbook of Ḥadīth Studies</code> (Kamali, 2005) both of which I consulted. The main weakness these texts have is that they put emphasis on the Shafi'i school's approach which is understandable as it dominates the Shāfi'i, Hanbali and Salafi schools; however, there are aspects of the Hanafi schools approach which

are important to understand and for this the more recent publication *Hanafi Principles of Testing Ḥadīth* (An-Nasafi, 2015) by Shaykh Arabek An-Nasafi and *Interpreting Ḥadīth Studies* (Chowdhury, 2015) by Safaruk Chowdhury are important texts. Finally, for an understanding of the many collections of <code>ḥadīth</code> used the essential text is Imam Ad-Dihlawi's *Bustān al-Muḥaddithīn* which is available in translation as *The Garden of the Ḥadīth Scholars* (Ad-Dihlawi, 2007).

A recent work of Yusuf Al-Qaradāwi; Al 'Aql wa al 'Ilm fi Al-Qur'ān Al-Karīm (Al-Qaradāwi, 2001) is a good resource book to find the Qur'ānic quotes, aḥadīth and statistical information looking at different aspects of Qur'ānic guidance, but whether man's acquisition of knowledge is to comprehend God is not directly addressed. A significant effort is made to explore the theme of knowledge and he highlights the importance and place of knowledge in the realms of Islam, but he does not make the desired connection between various related terms mentioned in the Qur'ān.

The analysis of the development of the rational sciences is in the main a historical review of some of the significant Muslim scholars of the rational scientists. The backbone of this chapter is therefore an overview of history provided by Philip Hitti in his *History of the Arabs* (Hitti, 1950) and Ira Lapidus in his *A History of Islamic Societies* (Lapidus, 2007). I then turned to specialist texts and articles for details on the individual scholars. A particularly valuable resource for this was the Islamic Heritage Website established by Professor Salim Al-Hassani of Salford University. There an excellent selection of academic papers can be found by scholars such as the Turkish academics Ekmeleddin İhsanoğlu and Mehmet Ipsirli. A good overview is

also available in the companion text 1001 Inventions – Muslim Heritage in Our World (Al-Hassani, et al., 2006).

Specific texts used for research on key individuals included *Religion, Learning and Science in the Abbasid Period* (Hill, 1990) which provided valuable information of Al-Khwarizmi and Bradley Steffens *Ibn Al-Haytham – First Scientist* (Steffens, 2007).

Some more detailed information was found in George Saliba's *Islamic Science and the Making of the European Renaissance* (Saliba, 2007) and Ibn Khaldun's seminal *Muqaddimah* (Ibn Khaldun, 2005) as translated by Rosenthal was also a key resource both in terms of his own work and his historical overview. For a detailed discussion of the key scholars' approaches to the classification of the sciences I used Osman Bakar's *Classification of Knowledge in Islam* (Bakar, 1998) while his text *the History and Philosophy of Islamic Science* (Bakar, 1999) was valuable for perspectives on the interaction between science and philosophy.

There have been a number of recent texts popularising the work of Muslim scientists of the golden age that were used as secondary sources including Particle Physicist S.M. Deen's *Science Under Islam*, Pervez Hoodbhoy's *Islam and Science* (Hoodbhoy, 1991), Ahmad Dallal's *Islam, Science and the Challenge of History* (Dallal, 2010) and Michael Morgan's *Lost History* (Morgan, 2007). Ehsan Masood's *Science and Islam* (Masood, 2009) and Jim Al-Khalili's *Pathfinders* (Al-Khalili, 2012) were also valuable texts and both of these related to recent television documentaries.

It was also important to consider the view of the secular sceptics who aim to 'debunk' what they consider to be the 'myth' of Islamic Science such as Taner Edis and his text *An Illusion of*

Harmony (Edis, 2007) and some of the writings that blame the Islamic orthodoxy for the current division between the religious and rational sciences such as K Razi Naqvi who wrote Can Islam Come Back to Islam (Naqvi, 2015).

Finally, the link between Science and Philosophy proved an important issue in the acceptance or rejection of the rational sciences and the key texts consulted on this were C. A. Qadir's *Philosophy and Science in the Islamic World* (Qadir, 2013) and Fazlur Rahman's *Islam* (Rahman, 1979).

There are number of books written on education in Islam and some papers on the concept of knowledge in Islamic thought.

The literature on education and educational institutions is again very rich although there is cursory attention paid to the theme of this study. The most important texts on the history of the Islamic Educational institutions are George Makdisi's *The Rise of Colleges* (Makdisi, 1981), Tibawi's *Islamic Education* (Tibawi, 1972) and Mehdi Nakosteen's *History of Islamic Origins of Western Education* (Nakosteen, 1964).

Makdisi's *The Rise of Colleges* (Makdisi, 1981) provides a good historical analysis of the development of institutions supplemented by Mehdi Nakosteen's *History of Islamic Origins of Western Education* (Nakosteen, 1964) and *History of Muslim Education* (Shalaby, 1954) by Ahmed Shalaby. These texts give a full and balanced description of the early development; however, they do not extend their study to the colonial and post-colonial period that has so profoundly changed the intellectual landscape in this area. Here Barbara Metcalf's *Islamic Revival in British India* (Metcalf, 2002) & (Metcalf, 2007) and Yoginder Sikand's *Bastions of the*

Believers (Sikand, 2005) completed the story. For the detailed analysis of the Dars-i-Nizamīya curriculum the earliest work available is G.M.D. Sufi's 1942 text Al Minhaj (Sufi, 1941): Being the Evolution of Curriculum in the Muslim Educational Institutions of India; however, this was later added to with new material gathered at source by Francis Robinson who published his findings in The Ulema of Farangi Mahāll (Robinson, 2001) and Islamic Culture in South Asia.

For a historical snapshot of the institutions of learning I also used Ibn Khaldun's *Muqaddimah* (Ibn Khaldun, 2005) while for an overview of the Mughal rulers' promotion of the rational sciences I found the best source to be Ghazanfar Khan's *History of Islamic Education in India and Nadvat ul-'Ulamā* (Khan, 2004).

I was also interested in the philosophy of education. A conference on Islamic Education held at King Abdulaziz University in Saudi Arabia in 1977 produced a number of critical works including Al-Attas' *The Aims and Objectives of Islamic Education* (Al-Attas, 1977), and Husain & Ashraf's *Crisis in Islamic Education* (Husain & Ashraf, 1977). Other valuable titles include Saffad Rizavi' *Islamic Philosophy of Education* (Rizavi, 1986) and Afridi & Khan's *Educational Philosophy of Islam* (Afridi & Khan, 2007).

On the discussion of the nature of knowledge ('ilm) and intellect ('aql) in contrast to ignorance (jahl) Educational theory: A Qur'ānic outlook ('Abdullāh, 1982) (again a product of the 1977 conference) was extremely useful.

Perhaps the most important single text on the topic of Knowledge in Islam during the medieval period is *Knowledge Triumphant* by Franz Rosenthal (2007). This is the only book I have found

which directly addresses the topic and although I found a number of areas in which I could not agree with the author's conclusions it remains a crucial source.

Some of my conclusions relate to the issue of the reform of the Educational institutions in the Muslim world and in Britain in particular. In this area there are two seminal works: Iqbal in his *Reconstruction of Religious Sciences* (Iqbal, 1974), mourns the state of Muslims in the British Raj and through his poetry awakens the inner spirit by urging Muslims to read the Qur'ān as if it is being revealed unto you rather than reading through the eyes of Rāzi or al-Zamakhsharī. The traditional literalism is fought against through his integration of rationalism with spirituality as complementary approaches to knowledge. The other major figure in this field was Al-Attas of Malaysia whose work and ideas are best explained through the writing of his student Wan Daud in *The Educational Philosophy and Practise of Syed Muḥammad Naquib Al-Attas* (Wan Daud, 1998).

Two books that address the topic of knowledge directly are the *Book of Knowledge* (Al-Ghazālī, 1998) by Abu Hamid Al-Ghazālī (a part of his major work Ihya Ulum al Din – the Revival of the religious sciences.) and Al 'Aql wa al 'Ilm fi Al-Qur'ān Al-Karīm (Al-Qaradāwi, 2001) by Yusuf Qaradāwi.

1.5 Introducing the Qur'anic Revelation

The Qur'ān is the primary foundation of this research, thus it is crucial to understand the Qur'ān and its nature before embarking on this study; however, the Qur'ān is the basis but not the object of this research. This relatively small introduction cannot do justice to the Qur'ān given that there have been numerous studies on the Qur'ān and its sciences over the centuries. However, being limited by the number of words the objective here is to cover

enough ground to enable the reader to comprehend the essential aspects and nature of the Qur'ān concerning the topic at hand.

The Qur'ān as the word of God is the most prized possession for Muslims which is recited, memorised, revered, kissed and worn by millions around the world today. The Qur'ān is recited in the ears of a child at birth, before any ceremony begins in marriage, divorce, financial contracts as well as upon and before death. The whole life of a Muslim is surrounded by the sound of the Qur'ān; in the house, on the street, in the car, at events etc. During the month of Ramadhan, the month when the Qur'ān is understood to have descended from the heavenly tablet, the whole of the Qur'ān is recited, over 6100 verses, in every mosque in the world, including thousands of mosques in the Europe and the western world.

The Qur'ān is regarded as the last of the revelations in the line of the scrolls of Abraham, Psalms of David, the Torah of Moses, and the Good News given to Jesus. It is regarded by Muslims as the last testament or perhaps one could say the latest edition of God's revelation which is as fiercely guarded because it is understood to embody the essence of the earlier revelations and the essentialised knowledge of the whole of human history.

The Pew Research Center that carries out research on, amongst other things, demographics, reports that the population of Muslims in the world in 2010 stood at 1.6 billion; 23.2% of the world population. The young age and fertility rate of the Muslim community means; however, that it will increase disproportionately to 29.7%, a total of nearly 2.8 billion by 2050 (Pew Research Center, 2015, p. 8). This being the case the Qur'ān, which holds sway over the Muslim community will have an increasingly great impact on the world over the next half

century. This makes the study of the Qur'ān and its impact on intellectual thought and culture a field of great and increasing importance.

1.5.1 Definition and meaning of the word 'Qur'an'

The word Qur'ān is derived from the word 'Qara' which means to read. The word Qur'ān is the verbal noun of qara meaning reading or reciting and is found seventy times in the Qur'ānic text. The Qur'ān is also referred to as 'The book' (الْكِتَابُ) which is in a form of written record. The Qur'ān has both a continuous oral history and a continuous written history.

The above point is particularly of interest as this research is exploring the theme of knowledge: reading and writing forms the basic tools of this inquiry, which is the fundamental teaching of the Qur'ān from the outset.

This emphasis on learning via reading and writing is also clear from the first revealed verses. From the advent of the Qur'ān onwards reading and writing became accessible to ordinary people, which previously was only in the hands of the elite and the privileged few. In his work 'History of Islamic Education' Ahmad Shelaby (1954, pp. 16-18) corrects the understanding of earlier writers who assumed that the early *Kuttab's* or elementary schools taught both literacy and religious knowledge. Historical sources from that period state that many of the teachers were *Dhimmis* (non-Muslims living under Muslim rule) (Shalaby, 1954, p. 17) and captives from battles. Shelaby points out that they would not be entrusted with the teaching of the Qur'ān or religious knowledge and concludes that the majority of the early schools were in fact centres for the teaching of literacy. Thus the revelation of the Qur'ān may, without prejudice, be considered the foundation of the age of mass literacy.

Knowledge became important to discern truth from falsehood. The science of <code>Ḥadīth</code> developed to understand the life and character of the Prophet Muḥammads in part to discern the message of the Qur'ān.

The Qur'an also defines itself by many other words:

The Book	الْكِتَابُ	Al Kitāb	2:2
Guide	ۿؙۮٙؽ	Hudā	2:2
Clear Proof	بُرْ هَانٌ	Burhān	4:174
The Balance	الْمِيزَانَ	Al Mīzān	42:17
The Absolutely Clear	الْبَيِّنَةُ	Al Bayyinah	98:1
The Criterion	الْفُرْقَانَ	Al Furqān	25:1
The Wisdom	الْحِكْمَةَ	Al Ḥikmah	3:48

It is also referred to with a number of superlatives:

The Glorious Qur'ān	الْقُرْ آنِ الْمَجِيدِ	Al Qur'ān Al Majīd	50:1
That (this) is indeed a noble Qur'ān	إِنَّهُ لَقُرْ آنٌ كَرِيمٌ	Innahu La Qur'ān Karīm	56:77
The Grand Qur'ān	الْقُرْ آنَ الْعَظِيمَ	Al Qur'ān Al 'Azīm	15:87
The Wise Qur'ān	وَالْقُرْ آنِ الْحَكِيمِ	Al Qur'ān Al Ḥakīm	36:2

These various names and titles provide clear descriptors of the characteristics and qualities of the Qur'ān.

1.5.2 How the Qur'an was revealed and to whom?

1.5.2.1 The People

In the Qur'ān and the <code>hadīth</code> the time immediately prior to the period of revelation is referred to as <code>jāhilīyah</code> meaning a time of ignorance. We know from historical accounts that this was an inaccurate description of Persia, Central Asia and even Southern Arabia all of which possessed city's with culture and literacy; however, the Qur'ān was revealed to the Prophet Muḥammadﷺ in Mecca and Yathrib (now Medina), cities in the north of Arabia in the region known as the <code>Hijaz</code>, which was populated by tribes of idol worshipping, proud and aggressive nomads who, according to historian Philip Hitti, had a history of 'guerrilla wars' and possessed 'no ancient culture of its own' (Hitti, 1950, p. 87). In fact, he goes on to say, having no system of writing their cultural heritage was limited to traditions most of which went unrecorded until around 200 years after the Hijrah. (The migration of the Muslim community from Mecca to Yathrib to escape persecution in 622 CE.) Considering the great love the Arabs in general had for language both written and spoken, this is remarkable and highlights how dependant Muḥammadﷺ's people were on their oral tradition. In his text <code>Majmū'at Rasā'il</code> (lit. collection of messages) the polymath Al-Jahiz (776-869 CE) quotes a traditional adage that states:

The beauty of man lies in the eloquence of his tongue.

(Hitti, 1950, p. 90)

And in another later saying:

Wisdom has alighted on three things: the brain of the Franks, the hands of the Chinese and the tongue of the Arabs.

(Hitti, 1950, pp. 90,91)

It was thus the literary structure and quality of the Qur'ān that captured the hearts and minds of the first adherents to Muḥammad s's message and given the illiteracy of Muḥammad this was the first 'miracle' they witnessed.

Mecca was a central point of convergence for the various tribes because the Ka'ba was filled with idols to which they would make pilgrimage. The Prophet **'s tribe, the *Quraysh*, was the tribe controlling the city and this gave them wealth and status but the city's infrastructure was limited to the support systems required for accommodating pilgrims, trade and the sale of idols. There was no library, no education institutions etc. It is recorded that there were only seventeen literate people in Mecca and eleven in Yathrib at the time of the first revelations. There would have been travellers to the city with more education but the opportunities for the local people to gain knowledge of history, science or the religious texts of other faiths such as Christianity or Judaism would have been very limited.

1.5.2.2 The Prophet

Muḥammad was raised as an orphan by his uncle Abdul Mutallib. He was sent into the desert as a child in the custody of a wet nurse in a tradition that was aimed at both improving the health and inculcating good spoken Arabic as the nomads were considered to have preserved the classical Arabic speech better than the city dwellers. Whilst living with the Bedouins he

spent time caring for sheep and then upon his return he became involved in trade, buying and selling goods from the caravans that passed through the city (Salahi, 2006, p. 42).

Long before Muḥammad was chosen as the messenger, he was well known as a trustworthy and truthful man (his nickname was *Al-Amīn* – the trustworthy), who did not indulge in idol worship of the day but rather turned to a cave for reflection. Like most of his contemporaries he was not literate. One could therefore say that it would have come as a surprise to his companions when Muḥammad, both through the Qur'ānic injunctions and his own example became a champion of knowledge acquisition.

1.5.3 The Message of the Revelation

The Qur'an comprises a number of key themes:

- Understanding the reality of God and Man through the creation of the Universe and through detailed descriptions of man's environment; the natural world including plants, animals, insects etc., his relationship with others, his short life on earth as a test preparing him for his final judgement and the hereafter
- Belief in God; the ultimate reality. Understanding God through his names and attributes and his 'Sunnah' or habitual way of doing things
- Life after Death: its quality and duration and the nature of the reward and punishment it brings
- Social Relations in society: how we should live to earn God's pleasure and to gain ease;
 rules of marriage and divorce, economics, manners, behaviour, modesty. The need for cooperation and the value of community

- Relations between men and women; the balance between rights and responsibilities,
 the lawful pleasures and their limits
- Lessons from history: how earlier peoples earned God's pleasure or wrath, how they were saved or were destroyed, what Iblis did to be cast out
- Concepts of Justice, fairness and balance
- To what mankind can and should aspire: the stations of Islam, Iman and Iḥsān
- Diseases of the heart, their nature and remedies: greed, avarice, backbiting, pride,
 vanity, etc.
- Atonement and forgiveness: the promise of salvation for all who sincerely strive for it

1.5.4 The Style and Structure of the Revelation

We have already highlighted that the first miracle of Islam for its followers was the form and style of the text that left a community in awe who, whilst not literate, were steeped in beautiful poetry and prose. Clearly these qualities cannot be appreciated by outsiders who lack the religious framework and language. Michael Sells references this observing that non-Muslims who do not understand the Arabic language:

...can find it difficult to grasp, confusing, and in most English translation, alienating. The written Qur'ān does not seem to have a clear beginning, middle and end. It shifts thematic registers: From mystical passages to sacred history, from law to the struggles of Muhammad and his followers with little or no warning. Many of its chapters mix themes that sometimes begin in mid-topic. The Suras are arranged in what can seem a chronologically and topically arbitrary manner, with the longest Suras at the beginning and the shortest at the end.

(Sells, 1999, p. 11)

Hence the Qur'ān does not appear to be a miracle in translation. For Muslims the Qur'ān only really exists in the original Arabic and the translation is merely an individual's limited interpretation that has lost much of the style, structure and beauty of the original. The first recipients of the Qur'ān included many local 'experts' in the field of Arabic language in the form of poets and devotees of poetry and prose. Not all were moved to embrace the new faith but all were struck by the unique qualities of the Qur'ān. As Professor Abdel Haleem of London University states:

One of his opponents who was in awe of the power of the Qur'ān's language described it by saying, 'It ascends to the heights and nothing ascends above it, and it crushes what is beneath it.'

(Abdel Haleem, 1999, p. 8)

The inimitability or *l'jāz* of the Qur'ān is a topic that captivated many scholars over the centuries. A particularly notable grammarian was Abu Sulaymān Al-Khaṭṭābī (d 998 CE) who, in his *Bayān l'jāz al-Qur'ān* observes that the opponents of Muḥammad when attacked with the words of the Qur'ān:

...declared war on him in which many died, blood was shed, family relationships were cut off and wealth was lost.

He goes on to reason:

If the [Qur'ān] imitation was within their power, they would not have taken upon themselves those serious matters, nor would they have undertaken those destructive acts or abandoned the mild ease of just using words, adopting instead the onerous difficulty of rugged deeds. This is not what a rational man would do or an intelligent person would choose.

(Al-Khaţţābī, 2015, p. 11)

Al-Khaţţābī's contemporary Abū al-Ḥasan Al-Rummāni (d995 CE) addresses the Qur'ān's rhetorical eloquence stating:

As for rhetorical eloquence, it is of three ranks: one is the highest, another is the lowest and another is in the middle between the highest and the lowest. The rhetorical eloquence of the highest rank is inimitable, and it is that of the Qur'ān....

...The highest ranks of rhetorical eloquence in poetry are inimitable to Arab and non-Arabs, particularly to those dumbfounded by it, but the Qur'ān's rhetorical eloquence is inimitable to everyone.

(Al-Rummānī, 2015, p. 53)

This last statement is bold in that it implies that there remain qualities of the Qur'ān that transcend even the language barrier. Professor Michael Sells of the University of Chicago has made a remarkable attempt to convey some of the majesty in the sound that is unique in the Qur'ān to his English speaking audience. He references the $r\bar{u}h$ (spirit / breath) and nazm (voice) of the Qur'ān that is inextricably linked to its meaning and acknowledges that this spirit transcends any particular definition or delimitation (Sells, 1999, pp. 199-223). This quality is palpable and can be witnessed wherever the Qur'ān is recited by someone who has mastered the science of $tajw\bar{u}d$ (recitation). In the UK the majority of Muslims sadly do not understand the Arabic message but when the Qur'ān is recited as a programme a reverent, awestruck silence descends upon the audience who find their breathing slowing and tranquillity descending and their eyes fill with tears, such is the majesty of its sound.

The Qur'ān continues to inspire and influence millions of people, Muslims and non-Muslims to this day. Many people have embraced its message, either through the language or the message; it is urging a spirit of enquiry using the intellect, observing the signs of God in the text and in the world around us.

The Qur'ān is the fountainhead of divine guidance for Muslims. Muslims are taught through it that the purpose of their existence is to worship God and to bow their will to His will:

I have only created Jinns and men, that they may serve/worship Me.

Qur'ān 51:56 (Ali, 2004, p. 1364)

More than this; however, the Qur'ān provides guidance on how mankind can achieve this state of obedience:

This is the Book; in it is guidance sure, without doubt, to those who are conscious of Allah.

Qur'ān 2:2 (Ali, 2004, p. 17)

Consequently, the Qur'ān is recited on daily basis for acquiring such guidance and seeking blessings from God. It continues to be memorised by hundreds and thousands in its entirety and also retained in the form a book.

The first recipient of this word of God was a man named Muḥammad, chosen from the tribe of Quraysh in Mecca which is in present day Saudi Arabia. Muḥammad was well known by the people as truthful, *sadiq* and trustworthy, *amin*. He was also known as one of the *hanīfs* (pure monotheists) as al- Faruqi explains:

Arabia knew them as highly oriented and ethically motivated Universalists and their very name acquired in Arabic usage the meaning of moral uprightness and rectitude of religious purity.

(al-Faruqi & Sopher, 1974, p. 237)

They were known to be neither Jewish nor Christian in faith, (there were small numbers of Jews and Christians in Arabia but these were considered 'outsiders') but they rejected any association with any of the cults in pre-Islamic Arabia:

It is also certain that these hanifs towered above the usual tribal solidarities and differences without renouncing or being denied by the tribal loyalties, that they professed adherence to the faith of Abraham, Noah and the early prophets of the "Semitic" peoples and that they were monotheists.

(al-Faruqi & Sopher, 1974, p. 237)

It is narrated in the <code>Ḥadīth</code> that on one of the occasions when Muḥammad® was meditating the archangel Gabriel came before him for the first time commanding him to read:

Read! in the name of your lord who created: 'He created man from a clinging form. Read! Your Lord is the most Bountiful One who taught by the Pen. Who taught man what he did not know.'

Qur'ān 96:1-5 (Abdel Haleem, 2004, p. 428)

These were the first revealed verses of the Qur'ān; Muḥammad had been chosen by God as his Messenger and was not given any choice in the matter, but to deliver the message.

The message was one of a revival in the belief in one God alone and rejection of idol deities such as *Lat*, *Uzza* and *Manat*,' whom the pagan Arabs regarded as daughters of God:

Say, he is God the One, God the eternal.

Qur'ān 112:1 (Abdel Haleem, 2004, p. 444)

It was a guidance for mankind especially for هُدَى لِّلْمُتَّقِينَ (those who are mindful of God) (Abdel Haleem, 2004, p. 2). Numerous verses urge humanity to use their intellect and to not allow themselves to be enslaved by others and it provides a practical guide for liberating humanity from the slavery of man, providing lessons from numerous stories of the past and paving a straight road for the future into the grave and beyond.

The messages from God were sent down over the period of 23 years until almost the time of the death of the Prophet[®]. The Qur'ān reveals that it was sent down in three successive stages (Kamali, 2003, p. 17):

Firstly, it was sent down to the Preserved Tablet (لَوْح مَّحْفُوظٍ):

This is truly a glorious Qur'ān written on a preserved Tablet.

Qur'ān 85:21-2 (Abdel Haleem, 2004, p. 416)

Secondly, it was sent down to the lowest heaven which is known as 'The abode of honour' in the Night of Power (لَيْلَةِ الْقَدْر).

Finally, it was revealed to humanity through the angel Gabriel to Prophet Muḥammad piece meal:

Truly, this Qur'ān has been sent down by the Lord of the Worlds, The Trustworthy Spirit brought it down to your heart so that you could bring warning in a clear Arabic tongue.

Qur'ān 26:192-5 (Abdel Haleem, 2004, p. 237)

It was during the lifetime of the Prophet® that the Qur'ān was memorised and written down and it was then compiled into a book form as we have it today by his Companions. Many official copies were produced during the caliphate of 'Uthman Ibn Affan and these were sent to many parts of the world (Al-Azami, 2003, pp. 87-108).

The fact that the Qur'ān came in the Arabic language is mentioned not less than eleven times in the Qur'ān itself:

...this revelation is in clear Arabic.

(Abdel Haleem, 2004, p. 173)

This has been understood by some to mean that the Qur'ān should not be translated and thus some scholars have maintained that the Qur'ān cannot be translated. Most notable of the early dissenters from this opinion was the jurist Abu Hanīfa, the founder of what is now the largest school of Islamic jurisprudence (Tibawi, 1962).

Of course any translation from one language to another loses something of the original and in the case of the Qur'ān this is even more serious as the laws that Muslims have implemented and governed by have relied upon the scholarly interpretation of the text. Every translation is an interpretation since no two languages have an equivalent word for each word. Those who have emphasised on the spiritual nature of the revelation have voiced even stronger concerns. Frithjof Schuon refers to the spiritual power of the Qur'ān as 'divine magic' and expresses the necessity of retaining the Qur'ān in its original form as follows:

This magic is closely linked with the actual language of the Revelation, which is Arabic, and so translations are canonically illegitimate and ritually ineffectual. When God has spoken in it a language is sacred; and in order that God should speak in it, it must have certain characteristics such as are not found in any modern language...

(Schuon, 1976, p. 49)

For these reasons the majority of even non-Arabic speaking Muslims across the world have thus far rejected any attempts (such as those in Turkey) to persuade them to abandon the learning of the Qur'ān in its original Arabic and adopt the teaching of translations in isolation

(Al-Azami, 2003, p. 10). There are however, many respected translations. In the English language some of the most well-known are those by M. M. Pikthall, J. A. Arberry, M. Asad, T.B. Irving, M. Abdul Haleem and Abdullah Yusuf Ali.

The Qur'ān itself is regarded as the miracle of the Prophet Muḥammad. The miraculous nature of the Qur'ān is called '*l'jāz al Qur'ān*. Von Denffer explains this saying:

... in technical language it means the inimitable and unique nature of the Qur'ān which leaves its opponent powerless or incapable of meeting the challenge which the revelation poses to them.

(Von Denffer, 1996, p. 147)

The Qur'an became the first complete recorded book in the Arabic literature and became the source for deriving the rules of Arabic Grammar (Surti, 1993, p. 11). Although it is a book, it is not like any ordinary book with so many chapters and each chapter with a particular theme:

...the Qur'an does not begin Chronologically like the Old testament, nor genealogically like the new testament ...Nor does the beginning of the Qur'an resemble beginning of any earlier work in Arabic literature.

(Abdel Haleem, 2004, p. 1)

The messages of the Qur'an came down as and when people sought guidance from the Prophet. The Prophet often waited for the revelation to come before he could answer people's questions. Sometimes there were new teachings and at other time there were clarifications of old stories and events highlighting the main points without detail.

1.5.5 Qur'ānic Exegesis

Tafsīr is a term commonly reserved for verse-by-verse commentaries and in this study, I will be referencing a number of such works; however, by their very nature they contain only a very limited level of interpretation on any one verse. For instance, perhaps the most commonly

used *tafsīr* today is *Tafsīr al-Jalalayn* by the two Jalals; Jalalu'd-din Al-Mahālli and his student Jalalu'd-din As-Suyuti. Despite containing a complete exegesis of the whole Qur'ān this work is still published as a single volume, even when it contains the English translation (Al-Mahalli & As-Suyuti, 2007).

The methodology developed by the mufassirūn is prescribed; however, by Muslim scholars for any interpretation of the text to give the author a rigorous and reliable framework in which to develop their work. The textual analysis element of this study will thus be carried out in conformity with the principles of *Tafsīr*. Details of these principles and how they were developed will be discussed in chapter 3.

My approach in this study is to use the first source of *tafsīr*, internal exegesis, as extensively as possible since it is the Qur'ānic perspective I am after. In general I will approach the text directly however, where an existing *tafsīr* gives some analysis relevant to my study, I will seek to incorporate it.

1.6 Overview of the Sunnah

When a Muslim washes their hands before sitting down to eat, recites *in the name of God,* invoking God's blessing on the food and then eats using his right hand, finishing their meal by thanking God with a short prayer is said to be following the Sunnah. In this instance they are consciously emulating the life example of the Prophet Muḥammad for the action of eating.

There are numerous other things that Muslims may choose to do during even the most mundane day that will remind them of the Prophet **'s way of doing things; walking, drinking, dressing, sleeping.

In the way he honours his parents, neighbours and guest; his ethical conduct in his financial transactions, generosity to orphans, poor, the needy and relatives; from a cheerful smile to the greetings of peace for friends and strangers, a Muslim is simply following the Prophet **'s Sunnah.

1.6.1 Definition of Sunnah and Ḥadīth

What is the Sunnah? Anyone who has read about Islam will have heard that the faith and practice of Muslims is based on the Qur'ān and Sunnah but what exactly is the Sunnah?

Sunnah literally means 'way' and all things can have a Sunnah. Community cultural conventions are a Sunnah, personal habits are a Sunnah and indeed God has a Sunnah which is manifest in His creation. When we say Sunnah now it is generally assumed to be a reference to the Sunnah or example of the Prophet Muḥammad.

But what is the significance and value in following the Sunnah?

Muḥammad was chosen to be the human being through whom the Qur'ān was revealed because he was the best of mankind but that is not the only reason he is taken as an exemplar. As the soul through which revelation took place he is understood to have been the living embodiment of the Qur'ānic message; the book made flesh. In one ḥadīth the Prophet w's wife Aisha described him as the walking Qur'ān. This is understood to mean that in his personal life example the Prophet gave a practical example of the message the Qur'ān seeks to convey to us all.

This is not however, the limitation of the prophetic Sunnah. On many occasions the Prophet® was asked to explain the meaning of the Qur'ān, and here his elucidation is taken as divinely guided and hence authoritative. Where through words or deeds the Prophet® condoned or prohibited any action the Sunnah may be used as a source of law on the basis that God would have guided him away from any mistake in a matter of *Sharīʿah*.

1.6.2 The Authority of the Sunnah in Relation to the Qur'an

The life of the Messenger Muḥammad is intrinsically linked to the message of the Qur'an:

Say [O Prophet]: "If you love God, follow me, [and] God will love you and forgive you your sins; for God is much-forgiving, a dispenser of grace."

Qur'ān 3:31 (Asad, 2003, p. 79)

In this verse we have a clear statement that indicates that God's mercy and forgiveness is contingent upon following His guidance, i.e. the Qur'ān and following the Prophet Muḥammad. This has echoes of the biblical verse that states Jesus declared "I am the way and the truth and the life. No one comes to the Father except through me." (The Committee on Bible Translation, 2005, p. 739):

O ye who believe! Obey Allah, and obey the Messenger, and those charged with authority among you. If ye differ in anything among yourselves, refer it to Allah and His Messenger, if ye do believe in Allah and the Last Day: That is best, and most suitable for final determination.

Qur'ān 4:59 (Ali, 2004, p. 203)

This is the verse most often cited as the one defining the Sunnah of Muḥammad as a legitimate source of *Sharī'ah*. In fact, while some verses of the Qur'ān have a clear and apparent meaning there are many others that are difficult to interpret without the elucidation provided by the Prophet in his Sunnah and even where an apparent meaning seems to be evident scholars consider the *Asbāb al-Nasūl* or context of revelation. This tells us what was happening in the life of the Prophet and his people when Allah chose to reveal a particular verse and the way that the verse fits their immediate situation is often taken as a guide to how that verse should be interpreted and applied.

1.6.3 The application of Sunnah – the context, the style, love of the Prophet

Arabian society was transformed by the acceptance of Islam and for the early Muslims this brought unparalleled joy. New bonds of brotherhood were formed that spanned the tribes and a new and inspiring vision of life in this world and the next overwhelmed them. The Prophet Muḥammad embodied that vision and his calm, generous and loving character was the source of inspiration for his companions:

VERILY, in the Apostle of God you have a good example for everyone who looks forward [with hope and awe] to God and the Last Day, and remembers God unceasingly.

His Sunnah was therefore not merely a practical factual source of guidance, it was a source of affection and gratitude. The early Muslims would keep that feeling alive by recounting their stories of what he said and did and his status as the beloved, closer to them than their own families meant that this was as emotionally charged as would be a parent reminiscing over a

lost child. This love for the Prophet[®] has been passed down through the generations and to this day many Muslims are overwhelmed when they hear stories of the Prophet[®] and for many his life is more tangible and accessible than the text of the Qur'ān.

This deeply 'confessional' attitude is often underestimated in contemporary literature as has been highlighted by Carl Ernst in his paper Muḥammad as the Pole of Existence which is published as a chapter in the Cambridge Companion to Muhammad (Ernst, 2009). He observes:

Modern reformist Muslims tend to downplay suggestions that the Prophet could have had any extraordinary status beyond ordinary human beings, and the Protestant inclinations that characterize much of the contemporary climate of opinion on religion (for Christians and non-Christians alike) reinforce the notion that Islam is a faith that lacks the supernatural baggage to be found, for instance, in Catholic Christianity. The legacy of anti-Islamic polemics among Christians since medieval times has also helped focus attention (mostly negative) on Muḥammad as a political and military leader.

From such a socio-political perspective, it therefore might seem surprising that Muḥammad has also been seen for centuries in a quite different light, as the prophet whose spiritual and cosmic role is the most important aspect of his career. Far from being viewed as a mere postman who delivered a message that happened to be of divine origin, Muḥammad, for a considerable portion of premodern Muslims, was the primordial light through which God created world, viewed in semi-philosophical terms as the "Muḥammadan reality."

He then concludes his article saying:

If anything, it may be said that the focus on the Prophet Muḥammad in Ṣūfī circles has continued to increase, regardless of whether the means of transmission was extraordinary, as in dreams or visions, or through the normal course of the study of Ḥadīth.

This demonstrates the continuity of Muslim Piety to the present day which helps to explain the continuing impact of the person of the Prophet and the traditions preserved about him.

2 REASON AND REVELATION IN THE QUR'ĀN AND SUNNAH

2.1 Introduction

Reason and revelation is a subject of numerous debates, which seems to suggest that they are at odds with each other or perhaps there is some sort of contest between them. These debates are not confined to one religion or another. From the early period of Islam, particularly from the time of Ḥassan Al-Basri (642-748 CE) there have been discussions raging, which lead to a range of theological movements both fringe and mainstream, which came to define the course of historical events.

In this chapter, the concept of knowledge is explored in terms of reason and revelation through the most fundamental sources of Islam: The Qur'ān and Sunnah. This is explored through the main questions of the thesis, namely:

- What is the significance of knowledge and the knowledgeable in the Qur'ānic
 Discourse?
- Within the Qur'ānic discourse is the emphasis on knowledge limited to revealed knowledge or does it extend to rational knowledge?
- What does the Qur'anic discourse say about the purpose of knowledge?

The chapter begins by seeking to define the term 'ilm – the Arabic word for knowledge and the various words that stem from its root. It then provides examples of how these are used in the Qur'ān. The concepts relating to knowledge are then explored through the vehicle of Qur'ānic exegesis, considering specifically God's knowledge, Man's knowledge and the various methods through which knowledge of all types may be acquired.

One of the aims of this chapter is to demonstrate that the Qur'ānic discourse on knowledge is not confined to religions or to rational knowledge, but rather the two are integrated. The word 'ilm is propagated by some as meaning specifically and only religious knowledge. Through interrogating the revelatory sources of Islam, I hope to demonstrate that this understanding is not coherent with the Qur'ānic discourse.

2.2 Definitions

2.2.1 Al-'Ilm (Knowledge)

Knowledge in the Oxford English dictionary (OED) is defined as '(i) facts, information and skills acquired by a person through experience or education; the theoretical or practical understanding of a subject, (ii) the sum of what is known: or (iii) awareness or familiarity gained by experience of a fact or situation.' (Stevenson, 2010, p. 976) Historically the OED states that 'Philosophical debates in general start with Plato's formulation of knowledge as "justified true belief".' However, it goes on to warn 'There is however, no single agreed definition of knowledge presently, or any prospect of one, and there remain numerous competing theories.'

The Arabic word 'ilm is generally translated as 'knowledge'. Although it contains much of the above understanding this definition does not fully encompass the wider meaning of the term. It is established that one word from a particular language can rarely be fully translated into another by the use of a single word and this is particularly the case when translating from Arabic into English because Arabic has a much greater vocabulary and belongs to a different linguistic group (Semitic as opposed to Indo-European).

'is, according to Rosenthal a very deep rooted concept in the teaching of Islam: عِلْمٌ Is, according

Arabic 'ilm is fairly well rendered by our "knowledge". However, "knowledge" falls short of expressing all the factual and emotional contents of 'ilm. For 'Ilm' is one of those concepts that have dominated Islam and given Muslim civilisation its distinctive shape and complexion. In fact, there is no other concept that has been operative as a determinant of Muslim civilisation in all its aspects to the same extent as 'ilm' ... There is no branch of Muslim intellectual life, of Muslim religious and political life, and of the daily life of the average Muslim that remained untouched by the all-pervasive attitude towards "knowledge" of something of supreme value for Muslim being.

(Rosenthal, 2007, p. 2)

Rosenthal astutely states that knowledge is of supreme value. The knowledge that is discussed in the Qur'ān is not merely cold hard facts and figures or even the intellectual debates of philosophers. Rather it is an understanding of God both through His revelation and through examination of the creation. The divine is inextricably linked to everything in the creation so knowledge of the creation can lead to knowledge of the Creator. This knowledge is infused with emotion through the love that one has for God and his Messenger born out of awe and gratitude for God's Generosity and Mercy.

Imam Rāghib Al-Iṣfahānī the eleventh century Qur'ānic exegete and linguist says in his AlMufradāt Fī Al-Qur'ān (Lit. The Strange/Obscure Vocabulary in the Qur'ān):

Al-'ilm is understanding something by its true nature and it is divided into two:

- The first: grasping the essence of the thing
- The second: passing a judgement over something, through the presence of something for which it exists, or negating something for which it is repudiated (Al-Isfahānī, 2010, p. 343).

He then explains that from another perspective there are two categories:

Theoretical is that thing which necessitates nothing more than knowing about it, so once it's known, it becomes complete like knowing about the thing in existence in the universe.

Practical is that which cannot be classed as complete without acting on it, like knowledge of the devotional aspects, the behavioural aspects and the like.

(Al-Isfahānī, 2010, p. 343)

Finally, he adds:

...and from yet another perspective are two more types: عقلي Intellectual and Traditional [Lit. Transmitted orally from generation to generation]

Chittick states that the classical scholars have for centuries divided knowledge into

- 'aqlī Rational knowledge
- naqlī transmitted knowledge

He goes on to say:

...throughout Islamic history, various great teachers have reminded the community that transmitted knowledge is not an end in itself. Its real function is to serve as a framework for self-realization that is, for the awakening of the intelligence that is innate to the human soul.

(Chittick, 2008, p. 283)

'Ilm is derived from the trilateral root على. No less than 855 verses of the Qur'ān use various derived forms of the root word اعلى (to know). Since the whole Qur'ān contains around 78000 words it is approximately 1% of the verses highlighting the importance of 'ilm - knowledge.

Generally Arabic root words can have up to 10 or in some exceptional instances 12 grammatical forms.

Some of the common forms for عِلْمٌ are:

to know	عَلِمَ	lst
to teach	عَلَّمَ	IInd
to advise	أعْلَمَ	IVth
to learn, study	تَعلَّمَ	Vth
to inquire, gather information	إستعلمَ عن	Xth

Each of these forms are then conjugated to form the specific word for a given context. e.g. for the 1st form عِلْمُ we can conjugate the following words:

he knew	عَلِمَ	you knew	عَلِمْتَ	we knew	عَلِمْنَا
she knows	عِلْمَتْ	you know	عَلِمْتِ	they knew (m)	عَلِمُوا
they knew (f)	عَلِمْنَ				
Passive	A	active	Verbal noun	Imperfect (present & future)	Perfect (past)
Known	Know	ledgeable	Knowledge	he knows	He knew
مَعْلُومٌ	عَلِيمٌ	عَالمٌ	عِلْمٌ	يَعْلِمُ	عَلِمَ

In the English language there are of course a number of words that are similar to the word knowledge; comprehension, understanding etc. Similarly, as one would expect in a language whose vocabulary extends well beyond that of English there are in Arabic a number of other

words that are used for knowledge and its derived forms. So we should explore what the particular usages and nuances of meaning are that relate to the term عِلْمُ

In the Qur'ān whenever the text is discussing God's knowledge we find علم and its derivatives being used. The term عَرَفَ that is used in common speech for expressions such as:

is never used. Similarly, where God is mourning the ignorance of people with expressions such as:

and where God is referring to those who have a deep understanding:

derivations of عِلْمُ are used. This has led scholars to agree that this word and its derivatives are used to describe knowledge of the true nature of things. It is knowledge of the highest order.

in contrast is used to refer to knowledge based on the potentially flawed perception of men or women. The 12th Century Persian exegete Al-Rāghib expresses this saying:

is the perceiving a thing by reflection and by consideration of the effect thereof المَعْرِفَةُ [upon the mind or sense], so that it has a more special meaning than العلمُ

(Lane, 1984, p. 2013)

Thus it is typically used where man's comprehension of God is concerned such as in the expression:

such a one knows God and His apostle

because the comprehension of God of common people is necessarily limited or flawed. In contrast where a Prophet is concerned, they have been specifically endowed with a deep understanding of reality by God so again we find the use of عِلْمَ:

When Joseph attained His full manhood, we gave him power and **knowledge**: thus do We reward those who do right:

Qur'ān 12:22 (Ali, 2004, p. 553)

There are a number of other terms used in the Qur'ān and these form a gradation or hierarchy of types of knowledge varying from the true knowledge of things to conjecture or guesswork.

2.2.2 Knowledge and Wisdom

It is interesting to note that Rosenthal claims that:

The outstanding position accorded to 'ilm in the Qur'an led to the practical elimination of hikmah "wisdom" as something superior to knowledge and, indeed, as a serious rival of it.

(Rosenthal, 2007, p. 35)

He continues to expound upon this theme comparing the concept of wisdom in Christianity, which he states holds a superior position. Salih 'Abdullah however, refutes this convincingly exposing Rosenthal's weakness in Arabic lexicography stating:

According to Arabic lexicographers, hikmah means knowledge of the best thing in the best sciences... One main characteristic of hikmah which is emphasised by interpreters is that it consists of two basic elements: 'ilm and 'amal.

('Abdullāh, 1982, p. 37)

He goes on to cite Qur'an verse 2:269:

He grants wisdom to whom He pleases; and he to whom wisdom is granted receives indeed a benefit overflowing; but none will grasp the Message but men of understanding

Qur'ān 2:269 (Ali, 2004, p. 115)

This verse, he highlights, emphasises that the person to whom <code>hikmah</code> is granted receives an 'overflowing benefit' and thus it must be of a high status beyond mere knowledge. He further suggests that the high status accorded to hikmah amongst educated Muslims was the reason why Muslim philosophers such as Ibn Rushd borrowed the term to describe their own philosophy. They sought to use the high status of hikmah to overcome the disdain with which their ideas were met.

2.2.3 Light as a Metaphor for Knowledge

Light has been used as a metaphor for knowledge in many faiths and Islam is not different:

اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ مَثَلُ نُورِهِ كَمِشْكَاةٍ فِيهَا مِصْبَاحُ الْمِصْبَاحُ فِي زُجَاجَةٍ النُّ جَاجَةُ كَأَنَّهَا كَوْكَبٌ دُرِّيٌّ يُوقَدُ مِن شَجَرَةٍ مُّبَارَكَةٍ زَيْتُونِةٍ لَّا شَرْقِيَّةٍ وَلَا غَرْبِيَّةٍ يَكَادُّ زَيْتُهَا يُضِيءُ وَلَوْ لَمْ تَمْسَسُهُ نَارٌ نُورٌ عَلَى نُورٍ يَهْدِي اللَّهُ لِنُورِهِ مَن يَشَاء وَيَضْرِبُ اللَّهُ الْأَمْثَالَ لِلنَّاسِ وَاللَّهُ بِكُلِّ شَيْءٍ عَلِيمٌ

Allah is the Light of the heavens and the earth. The Parable of His Light is as if there were a Niche and within it a Lamp: The Lamp enclosed in Glass: the glass as it were a brilliant star: Lit from a blessed Tree, an Olive, neither of the east nor of the west, whose oil is well-nigh luminous, though fire scarce touched it: Light upon Light! Allah doth guide whom He will to His Light: Allah doth set forth Parables for men: and Allah doth know all things.

Qur'an 24:35 (Ali, 2004, p. 876)

Tabarī explains that God is describing himself as the guide for everyone in the heavens and on the earth and by his light people are guided to the truth (Al-Ṭabarī, 2005, p. 6051 Vol 7). He relates from others the meaning that the likeness of God's light is the heart of the believer. Others he states understood the light to represent the Prophet Muḥammad≝ and others believed the niche is a metaphor for the believer where the lamp is the Qur'ān and faith while the glass is the heart of the believer. He says the believer seeks refuge in Gods guidance from the confusion of error.

He relates from Abu Jafar through Mujāhid the understanding that 'light upon light' refers to the light of illumination of the Qur'ān illuminating the signs of God that were sent down before it. [This could be referring to the earlier scriptures or the signs in creation.]

Zamakhsharī however, likens God's light to his divine truth (Al-Zamakhshari, 2008, p. 68Vol3).

Ibn Kathīr says that the verse is highlighting that God is controlling all affairs including the stars and the sun and moon and repeats the understandings already mentioned of the earlier exegetes (Ibn Kathīr, 2000, p. 83 Vol 7).

The verse is known as the verse of light and it has been the subject of many philosophical treaties, most notably those by Abu Hamid Al-Ghazālī in his text *The Niche of Lights* (Al-Ghazālī , 1998) and that by Sufi philosopher Mullā Ṣadrā Shīrāzī (Shirazi, 2004) (1571-1640 CE).

Given that both scholars wrote entire books on this particular verse, to do justice to their work remains outside the scope of this study; however, there are a few concepts that we can valuably highlight. Both scholars believed that the verse uses descriptions of objects from the rational world as metaphors for God, His guidance and the role of the Prophet Muḥammad

in transmitting that guidance. In this metaphor the physical properties of a lamp and of light are crucial to their understanding. For instance, Mullā Sadrā observes:

If the light of the lamp did not have a substratum having the determination of position, then there would not be the particularization of the dimension of proximity and distance from it in the air from which strength and weakness [of light] is illuminated.

(Shirazi, 2004, p. 61)

Thus, he is somewhat verbosely highlighting that the analogy God is providing of a physical lamp only conveys the correct message because a physical lamp has the property of being in a particular position and the property of light that emanates from a physical lamp is that it spreads out becoming weaker as the distance increases. These are the qualities of the 'real world' similitude that God is highlighting, to compare with His illuminating light of divine guidance that he provides for us through the Prophet Muḥammad.

Al-Ghazālī begins his concluding summary in his *tafsīr* of this verse by clarifying the light analogy:

...God is light, that there is no light other than He, and that He is the totality of lights and the Universal Light. This is because the word light is an expression for that through which things are unveiled;

(Al-Ghazālī, 1998, p. 19)

He explains that the expression Allāhu nūr al samāwāti wal arḍ - Allah is the light of the heavens and the earth is a reminder that ultimately God is the source of all knowledge and wisdom. It is God who blessed man with the faculties of comprehension and wisdom, it is God who inspired the Messengers with his Books of knowledge and Guidance and it is God who ultimately will tell all the truth on the last day. Furthermore, the ultimate truth is knowledge of God himself and so he is both the source of all light and the light itself.

Al-Ghazālī takes the parable of the niche to be the indication of a hierarchy in terms of sources of light and hence knowledge. To simplify the analogy, he re-expresses it:

The way to perceive a similitude of this hierarchy in the visible world is to suppose that moonlight enters through the window of a house, falls upon a mirror attached to a wall, is reflected from the mirror to an opposite wall, and turns from that wall to the earth so as to illuminate it.

(Al-Ghazālī, 1998, p. 14)

He goes on to explain that you are left with a number of visible 'lights'; the moon, the mirror the light patch on the wall and the illuminated floor. None of these are actually the light as that is the sun that first illuminated the moon. Similarly, there are stations of knowledge amongst the creation with each passing knowledge to the next. Thus the Prophet teaches us about Allah and the knowledgeable teach what they have gleaned from the Prophets; however, ultimately Allah is the source of all knowledge and the ultimate reality.

By giving knowledge as light bringing people out of darkness into light God describes himself as giving people a framework for life:

Allah is the Protector of those who have faith: from the depths of darkness He will lead them forth into light. Of those who reject faith the patrons are the evil ones: from light they will lead them forth into the depths of darkness. They will be companions of the fire, to dwell therein (For ever).

Qur'an 2:257 (Ali, 2004, p. 107)

This Qur'anic verse teaches a wholesome moral way of life as described in another verse 2:172. The false Gods and their advocates harm humankind by leading them astray. The various exegetes in one way or another have likened light to God's truth, His teachings, the

Qur'ān and His Messenger Muḥammad that illuminate the heart of the believer through faith to that he is able to walk on the path of righteousness.

Returning to the importance of the understanding of the reality in order that the metaphor becomes meaningful it is interesting to note that Al-Ghazālī discusses rays of light *emanating* from the sun, *reflecting* off the moon and entering a room where they *bounce off* a mirror. This sounds straight-forward and without greater consideration one might think that such an understanding could have been given by the earlier *muffassirūn* such as Ṭabarī or even Ibn 'Abbās. We should recall; however, that it was Ibn Al-Haytham the tenth century 'ālim and scholar of the rational sciences that 'discovered' that light enters our eyes whereas previous scholars including the Greeks believed that sight was a process whereby light was emitted *from* our eyes (Steffens, 2006, p. 63). This means that until the development of the rational science of optics by Ibn Al-Haytham who only died shortly before Al-Ghazālī was born, the *tafsīr* of Al-Ghazālī would have been impossible.

This example highlights the potential benefits in considering what new developments in *tafsīr* will be possible using the knowledge gained even more recently. As rational knowledge develops we gain more and more opportunities to understand God directly through his creation as Ibn Al-Haytham strove to do (this is discussed in chapter 4) but we also gain new opportunities to deepen our knowledge and understanding of the revelation, once again confirming the interdependence of Reason and Revelation.

2.2.4 Jahl as the Antithesis of 'ilm

In much of the early literature Arab philologists considered *jahl* to be the opposite of *'ilm* – knowledge, and so its derivative *jāhilīyyah*, the term used in the Qur'ān and *ḥadīth* to designate the state of affairs before the Arabs accepted Islam has commonly been translated as the 'age of ignorance'. It was the German orientalist Ignaz Goldziher who first challenged this understanding. Having examined the use of *jahl* in early literature including pre-Islamic poetry he asserted that a more accurate understanding was that *jahl* was in fact the opposite of *ḥilm* which is understood to mean the moral reasonableness of a civilised man (Nicholson, 1966, p. 30).

This understanding is challenged by Franz Rosenthal (2007, p. 32) on the basis of his own analysis of both Islamic and Jewish and Christian texts; however, the more comprehensive analysis of Japanese scholar Toshihiko Izutsu is more persuasive in its endorsement of Goldziher. He references for example the popular early book of *Sīra* (biography of the Prophet Muḥammadﷺ), of Ibn Isḥaq (704-770CE) in which the time of *jāhilīyyah* is described as *a blind*, savage passion which characterized those who 'did not know how to distinguish between good and bad, who never asked pardon for the evil they had done, who were deaf to the good, dumb to the truth, and blind to Heavenly guidance.' (Izutsu, 2007, p. 31) He asserts that:

The jāhilīyyah had practically nothing to do with 'ignorance'; that it meant in reality the keenest sense of tribal honor, the unyielding spirit of rivalry and arrogance, and all the rough and rude practices coming from an extremely passionate temper.

(Izutsu, 2007, p. 29)

Thus *jahl* here would be used in the sense of a belligerent stubbornness to deny any divine guidance. Combining this with the previous use of light as a metaphor for knowledge and we find that the darkness the Qur'ān is referring to is a state of arrogant denial of the divine truth.

2.2.5 Knowledge and certainty

Ibn Rajab Al-Hanbali (1335-1393 CE) the famous jurist and exegete explains *sidq* in his text *The Excellence of Knowledge:*

Sidq: truthfulness is the conformity of the inner and the outer such that the deeds and statements of the person do not belie his beliefs and vice-versa is foundation of faith and results in peace of mind. Lying is the foundation of hypocrisy and results in doubt and suspicion, and this is why the two can never co-exist without being at odds with each other.

(Al-Hanbali, 2008, p. 92)

The Qur'ānic concept of knowledge is not based upon hawā, 'desire' or zann, 'conjecture' but must lead to absolute certainty.

In the Qur'ān God uses a number of expressions representing degrees of certainty:

Knowledge (or the science) of certainty - 'ilm al-yaqīn:

Nay, were ye to know with certainty of mind, (ye would beware!)

Qur'ān 102:5 (Ali, 2004, p. 1690)

The eye of certainty - 'ayn al-yaqīn:

In the end you will indeed, most surely, behold it with the eye of certainty.

Qur'ān 102:7 (Asad, 2003, p. 1109)

And finally the truth of certainty haqq al-yaqīn:

وَإِنَّهُ لَحَقُّ الْيَقِين

But verily it is truth of assured certainty.

Qur'ān 69:51 (Ali, 2004, p. 1523)

These are explained in the context of the hellfire where 'ilm al-yaqīn is a description of the fire, 'ayn al-yaqīn is seeing the fire and ḥaqq al-yaqīn is being consumed by fire.

When one becomes aware of the fact of the fire, one accepts it through the use of reason. The eye of the certainty is seeing the actual fire which takes the person at the next level of certainty while if one is able to touch the flames he is convinced with absolute certainty (Bakar, 1999, p. 55).

In his autobiography al-Ghazālī explains that when he was going through his crisis he was never in any doubt whatsoever about the existence of God, that he had 'ilm al-yaqīn but that he yearned to gain haqq al-yaqīn i.e. to actually experience the divine. Certainty of truth which is a human yearning is not accessible to everyone, but it comes through a long hard toil of seeking knowledge with absolute sincerity and pure intentions wherever the quest may take the seeker of knowledge. It is one of the reasons why people of knowledge are highly praised. They intend to achieve objectivity as much as is possible since the passion for knowledge is not driven by greed or fame. It is a yearning for knowledge of his own reality. He questions where he has come from and where is he going, why is he here. This yearning haunts many an Imam and Al-Ghazālī was no exception. This may be likened to the story of Prophet Abraham who asked God to see the dead brought to life:

وَإِذْ قَالَ إِبْرَاهِيمُ رَبِّ أَرِنِي كَيْفَ تُحْدِي الْمَوْتَى قَالَ أَوَلَمْ تُؤْمِن قَالَ بَلَى وَلَكِن لِيَطْمَئِنَّ قَالَ إِبْرَاهِيمُ رَبِّ أَرِنِي كَيْفَ تُحْدِي الْمَوْتَى قَالَ أَوَلَمْ تُؤْمِن قَالَ بَلَى وَلَكِن لِيَطْمَئِنَّ جُزْءًا ثُمَّ الْمُعَنَّ يَأْتِينَكَ سَعْيًا وَاعْلَمْ أَنَّ اللهَ عَزِيزٌ حَكِيمٌ ادْعُهُنَّ يَأْتِينَكَ سَعْيًا وَاعْلَمْ أَنَّ اللهَ عَزِيزٌ حَكِيمٌ

And, lo, Abraham said: "O my Sustainer! Show me how Thou givest life unto the dead!" Said He: "Hast thou, then, no faith?" (Abraham) answered: "Yea, but [let me see it] so that my heart may be set fully at rest." Said He: "Take, then, four birds and teach them to obey thee; then place them separately on every hill [around thee]; then summon them: they will come flying to thee. And know that God is almighty, wise."

Qur'ān 2:260 (Asad, 2003, p. 71)

Abraham in the Qur'ān is described as one of the people who is utterly sincere with his search for truth amidst the worshippers of idols. He does not succumb to the practices of his people, he is yearning for truth and this leads him to use his rational faculty examining the sun and the moon as signs of God.

His search for truth was not simple obedience to the commands of his Lord but first he searched for knowledge of the truth by using his reason with sincere intention. The Qur'ān describes him as someone who came using all his faculties with absolute purity and submitted his will to God.

2.2.6 The Rank of the Knowledgeable

The Messenger of Allah said, "He who follows a path in quest of knowledge, Allah will make the path of Jannah easy to him. The angels lower their wings over the seeker of knowledge, being pleased with what he does. The inhabitants of the heavens and the earth and even the fish in the depth of the oceans seek forgiveness for him. The superiority of the learned man over the devout worshipper is like that of the full moon to the rest of the stars. The learned are the heirs of the Prophets who bequeath neither dinar nor dirham but only that of knowledge; and he who acquires it, has in fact acquired an abundant portion."

(Abu Dawud, 1988, p. 1034 Vol 3; Al-Tirmidhī, 2007, pp. 158-9)

In this <code>hadith</code> anyone seeking knowledge is praised to the highest and we are told that all of God's creatures from the fish to the angels ask God for forgiveness for them.

One of the most salient verses from which to understand the status of the people of knowledge is:

GOD proffers evidence - and [so do] the angels and all who are endowed with knowledge - that there is no deity save Him, the Upholder of Equity: there is no deity save Him, the Almighty, the Truly Wise.

Qur'ān 3:18 (Asad, 2003, p. 82)

Al Ghazālī simply comments on the apparent meaning in his Iḥyā 'Ulūm al Dīn saying:

See then how God has mentioned Himself first, the angels second, and men endowed with knowledge third. In this you really have honour, excellence, distinction and rank.

(Al-Ghazālī, 1998, p. 3)

Al Ghazālī further emphasises the position of the scholar by quoting Ibn 'Abbās who said:

The learned men rank seven hundred grades above the believers, between each two of which is a distance five hundred years long.

(Al-Ghazālī, 1998, p. 3)

Imam Ṭabarī explains this verse in the historical context of the revelation which came as a response to the delegation of Christians from Najran who had taken Lords besides God (Al-Ṭabarī, 2005, pp. 1719-21 Vol 3); i.e. he suggests that this verse is emphasising the oneness of God and makes a link with the following verse which starts:

Behold, the only religion in the sight of God is self-surrender unto Him.

Qur'ān 3:19 (Asad, 2003, p. 83)

Zamakhsharī on the other hand concentrates on God's oneness and his justice from a theological perspective and that the people of knowledge affirm God's oneness and justice with beautiful debates (Al-Zamakhshari, 2008, p. 417 Vol 1). He describes the scholars as the scholars of justice and $tawh\bar{l}d$ (i.e. Mu'tazilites) of course; his personal views influenced his understanding of the Qur'ān.

Ibn Kathīr concentrates on God's oneness and justice as well as the virtues of the people of knowledge:

Allah bears witness, and verily, Allah is sufficient as a Witness, and He is the Most Truthful and Just Witness there is; Hs statement is absolute truth, that lā ilāha illa Hūwa meaning, He alone is the Lord and God of all creation; everyone and everything are His servants, creation and in need of Him. Allāh is the Most Rich, Free from needing anyone or anything.

(Ibn Kathīr, 2000, p. 131 Vol 2)

He relates this verse to another verse:

However it be, God [Himself] bears witness to the truth of what He has bestowed from on high upon thee: out of His own wisdom has He bestowed it from on high, with the angels bearing witness thereto - although none can bear witness as God does.

Qur'ān 4:166 (Asad, 2003, p. 156)

Where God bears witness to the sending of the Qur'ān to Prophet Muḥammad. He says this verse emphasises the great virtue of those who have knowledge by mentioning the testimony of Angels and God alongside that of those who have knowledge.

The second verse that is frequently referenced in the context of highlighting one of the most endearing qualities of the people of knowledge is:

...Of all His servants, only such as are endowed with [innate] knowledge stand [truly] in awe of God...

Qur'ān 35:28 (Asad, 2003, p. 753)

Here Ṭabarī says that those who fear Allāh and are conscious of His punishment are obedient to Him (Al-Ṭabarī, 2005, p. 6795 Vol 8). They are aware of His power and that He does whatever He wishes. Whoever knows this, he says, is sure of the punishment that would be due for disobedience and fears his end. He then relates from Ibn ʿAbbās who said:

They know (i.e. the knowledgeable) that God has power over all things.

And relates from Qatādah al- Sadūsi (d 735 CE) the Başran exegete the saying:

Fear is enough knowledge.

(Tabarī, 2005, pp. 6794-5 Vol 7)

Ibn Kathīr also speaks on similar lines saying:

...the more they know about the Almighty, All-Powerful, All-Knowing Who has the most perfect attributes and is described with the most beautiful Names, the more they will fear Him.

(Ibn Kathīr, 2000, p. 145 Vol 8)

He continues to expound that the knowledgeable do not associate partners with God and they obey His commands by knowing what is lawful and unlawful.

Zamakhsharī explains that the meaning of 'the people of knowledge' is those who know God by His attributes and His Justice and Oneness and what is appropriate for Him or not (Al-Zamakhshari, 2008, p. 307). The knowledgeable honour Him as God should be honoured. They are in awe of God as they should be. A person whose knowledge increases his fear towards God and a person who has less knowledge has less fear. He quotes a <code>hadīth</code> narrated by Masruq that says:

The more knowledgeable of you have intense awe (Khashiah¹).

And he goes on to say that a man once asked Sha'bi (626-680 CE) to give his opinion of who is an 'Alim (man of knowledge) to which he replied that an 'Alim is one who has Khashiah (awe) of Allāh.

It is interesting to note that none of the above mentioned exegetes directly refer to the first part of the verse which is explaining about people, crawling creatures and cattle with different colours. In fact, the previous verse also details natural phenomena – God sending water to the earth which then produces different fruit of different colours. The knowledgeable are thus mentioned in the context of a discussion of the natural world and the variation of colours amongst human beings. Pondering over this would enable the knowledgeable to better understand God through His creation.

Zamakhsharī does demonstrate the flair with the Arabic language for which he is renowned through an explanation of the word *judad* (*tracts or streaks*); however, all of them seem to have missed a crucial point: That the world is being expounded here and it is a source of knowledge for the knowledgeable to learn from i.e. through rational scientific enquiry. It would seem that as the exegetes all lived in a deeply God-conscious society their first reaction was the see God's might and power in terms of punishment and reward (Al-Zamakhshari, 2008, pp. 307-8).

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¹ Khashiah is translated by some as 'fear'

Mawdūdī emphasises at some length the import of the descriptions of the natural world and how these prove the foolishness of those who fail to believe in a creator god; however, he then perversely reverts to the earlier interpretations in asserting:

Knowledge in this verse does not imply knowledge of academic subjects like philosophy and science and history and mathematics, etc. but the knowledge of Divine attributes, no matter whether one is literate or illiterate. The one who is fearless of God is illiterate merely as regards this knowledge even if he has All the knowledge of the world.

(Mawdūdī, 2013, p. 226 Note 49 Vol 9)

Here he is making the connection between knowledge and belief or action and the oft recurring theme that real knowledge is transformative and manifest in belief and action; however, given that it is precisely through science that man can ponder on the signs in creation mentioned, to say that this is irrelevant is absurd.

Syed Qutb offers perhaps the most balanced commentary saying:

The surah also mentions people's colours, which are not limited to the major categories that distinguish different racial groups ... The universe is thus shown as a splendidly colourful book which the Qur'ān opens and looks through. It then says that scholars who read, appreciate and comprehend this book are the ones who have a true God-fearing sense: "It is those who are endowed with knowledge that stand truly in awe of God." (Verse 28) The universe is a superb book of which the surah has shown but a few pages. It takes a good measure of knowledge to appreciate this wonderful book and to get to truly know God through His creation and power. People who do so realize the measure of His greatness by appreciating His work. Therefore, they are truly God-fearing, and they worship Him in true submission. This is not the result of a mysterious feeling that we sometimes experience when we look at a splendid natural scene; rather, it is the product of true and direct knowledge.

(Qutb, 2012, pp. 179-80)

Quib thus retains the emphasis on the need for true knowledge to manifest God-consciousness in the form of fear and awe but also emphasises the deep appreciation of the creation as the means to engender that God-consciousness. What he does not seem to appreciate is that this deep appreciation is found in countless scientific texts that focus on the creation evidencing that rational scientific enquiry when combined with a God-fearing attitude is the perfect recipe for *taqwa*; the love and fear and awe that the knowledgeable feel towards God.

2.3 God's Knowledge

The Qur'ān describes God as *Al-Ālīm*; the All-Knowledgeable. Before we discuss God's knowledge, it is important to understand the nature of God as described in the Qur'ān without which it will be difficult to comprehend God's knowledge.

2.3.1 The Nature of God

It is arguable whether it is possible to fathom the nature of the invisible God of the Qur'ān. In the Arabic Language God is known as Allah, which is also found in the Qur'ān. It may be literally translated as 'the God' ($\frac{1}{2} + \frac{1}{2}$) implying that there is only one God, the creator Al-Khāliq, the originator $\frac{1}{2}$ of everything that exists in the universe.

God is also known by many other names, which collectively are termed the *asmā al-husnā* (Lit. the most beautiful names):

Say: "Call on God, or on the Lord of Mercy – whatever names you call Him, the best names belong to Him.

Qur'ān 17:110 (Abdel Haleem, 2010, p. 294)

The Mufassir Ibn Kathīr explains the context of revelation for this verse saying:

Makhul reported that one of the idolaters heard the Prophets saying when he was prostrating: "O Most Gracious, O Most Merciful." The idolater said, he claims to pray to One, but he is praying to two! Then Allah revealed this Ayah. This was also narrated from Ibn `Abbas, and by Ibn Jarir.

(Ibn Kathīr, 2000, p. 105 Vol 6) Volume 6

Understanding God is one of the most fundamental themes of the Qur'ān known as *Tawḥīd*, oneness of God. This is summarised succinctly in chapter *Al-ikhlās*, the sincerity:

Say: He is God, the One and Only; قُلْ هُوَ اللَّهُ أَحَدٌ

God, the Eternal, Absolute; اللهُ الْصِنَّمَدُ

He begetteth not, nor is He begotten; لَمْ يُولَدُ لَهُ يُولَدُ اللَّهُ عَلَمْ يُولَدُ اللَّهُ عَلَمْ يُولَدُ اللَّهُ عَلَمْ عَلَى اللَّهُ عَلَى اللّ

وَلَمْ يَكُن لَّهُ كُفُوًا أَحَدٌ And there is none like unto Him.

Qur'ān 112 (Ali, 2004, p. 1714)

The term *ahad* is more specific than *wahid* and suggests God is unique without partners or children. The term *al-Ṣamad*, the eternal, which occurs in the 4th verse of this chapter only occurs once in the whole of the Qur'ān, once again emphasizing God's uniqueness and eternity compared to everything else which is ephemeral.

Al-Bukhari narrates in his hadīth collection that a man heard someone reciting the first verse of this surah again and again in his prayer, and, concerned that this was not sufficient for the correct performance of the prayer he went to the Prophet and reported it. The Prophet replied:

I swear by Him in whose hand is my soul that it is equivalent to one third of the Qur'ān.

(Al-Bukhārī, 1985, p. 494 Vol 6)

This emphasises the importance of the meaning of this surah which reminds one of God's supremacy and uniqueness which is important because it also helps one to understand their own human nature through that comparison.

In another chapter *Surah Ar-Ra'd* Luqman speaks to his son warning him of the enormity of the sin of ascribing partners to God:

And, lo, Luqman spoke thus unto his son, admonishing him: "O my dear son! [13] Do not ascribe divine powers to aught beside God: for, behold, such [a false] ascribing of divinity is indeed an awesome wrong!

Qur'ān 31:13 (Asad, 2003, p. 706)

This, despite the fact that God is merciful, *al-Raḥmān*, and the forgiving, *al-Ghafūr*, who will forgive all sins except the ascribing of partners to God which is such a heinous sin. One of the main reasons given is that, "they ascribe partners unto Him... without knowledge":

Verily, God does not forgive the ascribing of divinity to aught beside Him, although He forgives any lesser sin unto whomever He wills: for he who ascribes divinity to aught beside God has indeed contrived an awesome sin.

Qur'ān 4:48 (Asad, 2003, p. 131)

Ayāt al kursī, the verse of the throne further elaborates on the nature of God. This verse is recited profusely by Muslims after their formal prayers (Ṣalāh):

GOD - there is no deity save Him, the Ever-Living, the Self-Subsistent Fount of All Being. Neither slumber overtakes Him, nor sleep. His is all that is in the heavens and all that is on earth. Who is there that could intercede with Him, unless it be by His leave? He knows all that lies open before men and all that is hidden from them, whereas they cannot attain to aught of His knowledge save that which He wills [them to attain]. His eternal power overspreads the heavens and the earth, and their upholding wearies Him not. And he alone is truly exalted, tremendous.

Qur'ān 2:255 (Asad, 2003, p. 69)

The above verse spells out clearly that God is not limited in the way that human beings are, and possesses perfect knowledge about humanity and everything else that exists in the universe. There is some mystery about God's nature which is not fully disclosed. There are many verses which point to the fact that only knowledgeable people will truly understand the nature of things.

Although the nature of God is being explained through revealed knowledge, at the same time, other verses appeal to human reason in a rhetorical fashion:

He said "Do you worship what you have carved yourself?"

Qur'ān 37:95 (Asad, 2003, p. 775)

...Say: "[Why,] then, do you take for your protectors, instead of Him, such as have it not within their power to bring benefit to, or avert harm from, themselves?" ...

Qur'ān 13:16 (Asad, 2003, p. 404)

The attributes of God, or the ninety names of God, some of which are mentioned in the verse below indicate the vastness or the infinite reality of God:

هُوَ اللَّهُ الَّذِي لَا إِلَهَ إِلَّا هُوَ الْمَلِكُ الْقُدُّوسُ هُوَ اللَّهُ الَّذِي لَا إِلَهَ إِلَّا هُوَ عَالِمُ الْغَيْبِ
وَاللَّهَادَةِ هُوَ الرَّحْمَنُ الرَّحِيمُ السَّلَامُ الْمُؤْمِنُ الْمُهَيْمِنُ الْعَزِيزُ الْجَبَّارُ الْمُتَكَبِّرُ سُبْحَانَ اللَّهِ
عَمَّا يُشْرِكُونَ هُوَ اللَّهُ الْخَالِقُ الْبَارِئُ الْمُصَـوِّرُ لَهُ الْأَسْمَاء الْحُسْنَى يُسَبِّحُ لَهُ مَا فِي
السَّمَاوَاتِ وَالْأَرْضِ وَهُوَ الْعَزِيزُ الْحَكِيمُ

Allah is He, than Whom there is no other god;- Who knows (all things) both secret and open; He, Most Gracious, Most Merciful. Allah is He, than Whom there is no other god;- the Sovereign, the Holy One, the Source of Peace (and Perfection), the Guardian of Faith, the Preserver of Safety, the Exalted in Might, the Irresistible, the Supreme: Glory to Allah. (High is He) above the partners they attribute to Him. He is Allah, the Creator, the Evolver, the Bestower of Forms (or Colours). To Him belong the Most Beautiful Names:

whatever is in the heavens and on earth, doth declare His Praises and Glory: and He is the Exalted in Might, the Wise.

Qur'ān 59:22-24 (Ali, 2004, pp. 1449-1450)

2.3.2 God: the source of all knowledge

The word العَلِيمُ al-'Ālīm meaning 'all-knowing, having knowledge of everything' (Lane, 1984, p. 2140) is exclusively used for God 36 times in the Qur'ān. عَلِيمٌ 'Alīm meaning 'knowing' is used 98 times for God and 6 times for men; however, in each of these cases God is quoting men describing themselves or each other using the term as a superlative:

Joseph said: "Set me over the store-houses of the land: I will indeed guard them, as one that knows (their importance).

Qur'ān 12:55 (Ali, 2004, p. 565)

'alīman which also means 'knowing' is also used for God only and appears 22 times.

The term عَالِمْ 'Ālim, meaning 'one who knows' is used 13 times for God in the singular. It is used twice in the plural (غَلَمَاءٌ ulamā) for human beings and once in the plural form 'alimūn again for men. Finally, عَالِمِينَ 'ālimīn another plural form is used twice for God (the royal 'we') and twice for men.

we can see that these are very strong expressions for the concept of knowledge. The fact that none of the derivatives of the root غنة 'alima is ever used in the singular to refer to a man is interesting especially given that the term غنة 'alim is now commonly used to refer to someone who has studied the religious sciences. We can perhaps gain some insight into this by

referencing the hadith that are used to justify the concept of *ijmā'* or consensus; (Kamali, 2003, p. 240):

My community shall never agree on an error.

(Ibn-e-Maja, 2005, p. 282 Vol 5)

One possible interpretation is that for an isolated human being to call himself or be called an 'alim is dangerous because only God is infallible; however, if a group of learned people agree on something then that is a safer reference point. This attitude should inculcate humility in the individual and ward against the super-elevation of the scholars to the point they become as individuals treated as partners with God (i.e. *shirk*). God warns about this referencing the practise of the people of the book:

They take their rabbis and their monks as lords beside God, as well as Christ the son of Mary. But they were commanded to serve only one God: there is no god but Him; He is far above whatever they set up as His partners!

Qur'ān 9:31 (Abdel Haleem, 2010, p. 192)

It is recorded in the books of *ḥadīth* by Imam Ahmad and At-Tirmidhī and also in the *Tafāsīr* of Ibn Kathīr and Ṭabarī that some of the companions of the Messenger became upset when this verse was revealed (Al-Ṭabarī, 2005, p. 3974 Vol 5; Ibn Kathīr, 2000, p. 409 Vol 4). They attempted to refute this; however, the Messenger responded by asking if they (rabbis and monks) made things lawful and unlawful for them (Christians and Jews). They agreed and he explained that this is how they worshiped them.

In the following verses, it is explained how God encompasses the knowledge and power of the visible and the invisible.

The distinction is made between the knowledge of man and the knowledge of God. God has all knowledge, but what man knows God also knows. This is highlighted in the following two verses:

Allah is He, than Whom there is no other god;- Who knows (all things) both secret and open...

Qur'ān 59:22 (Ali, 2004, p. 1449)

For with Him are the keys to the things that are beyond the reach of a created being's perception: none knows them but He. And He knows all that is on land and in the sea; and not a leaf falls but He knows it; and neither is there a grain in the earth's deep darkness, nor anything: living or dead, but is recorded in [His] clear decree.

Qur'ān 6:59 (Asad, 2003, pp. 206-7)

The following verses are significant in the way they reveal the extent of God's knowledge:

And if all the trees on earth were pens, and the sea [were] ink, with seven [morel seas yet added to it, the words of God would not be exhausted: for, verily, God is almighty, wise.

Qur'ān 31:27 (Asad, 2003, p. 709)

SAY: "If all the sea were ink for my Sustainer's words, the sea would indeed be exhausted ere my Sustainer's words are exhausted! And [thus it would be] if we were to add to it sea upon sea."

Qur'ān 18:109 (Asad, 2003, p. 507)

God's knowledge is so vast that human beings cannot fully grasp the words of God, yet those who seek God's words are praised. Because of this, Muslim scholars of the past and present who have endeavoured to understand God's words typically end their work with 'wa Allāhu 'alam' and God Knows best. They thereby acknowledge that there is a possibility of misunderstanding and there may be other valid interpretations of the divine revelation.

2.4 Man's Knowledge

...say: "O my Sustainer, cause me to grow in knowledge!"

Qur'ān 20:114 (Asad, 2003, pp. 538-9)

In this verse the station of the human being as a student of knowledge is made clear. Before we look at why he needs to seek knowledge we must first understand the nature of man.

God warns mankind in the Qur'ān that they only have limited knowledge, thus emphasising the caution that should be exercised in interpreting His words and making any haughty assumption about the veracity of their interpretation:

They ask thee concerning the Spirit (of inspiration). Say: "The Spirit (cometh) by command of my Lord: of knowledge it is only a little that is communicated to you."

Qur'ān 17:85 (Ali, 2004, p. 698)

The limited (man) cannot possibly comprehend the unlimited (God), especially when He has chosen to limit what He has revealed to man which may be, in part, to provoke man's curiosity and encourage the spirit of seeking knowledge.

2.4.1 The Nature of Man

The word *insān* meaning human being has been claimed to have a number of derivations. Some assert it is derived from a root meaning to be seen in contrast to the Jinn who are unseen, some from a root meaning the opposite of lonely suggesting that it is in man's nature to be a social creature, and some have suggested it is from a root meaning forgetful which relates well to the Qur'ānic discourse in which Ādam and his wife Hawa are forgetful and eat from the forbidden tree (Lane, 1984, p. 114).

Humans are undoubtedly a creation that is full of contrasts and extremes. On the one hand they can be brave and resourceful whilst at the same time they are the most fragile of creatures with no real control over their destiny Qur'ān 4:28 (Asad, 2003, p. 125).

In surah tīn we have a clear statement of mankind's noble stature:

We have indeed created man in the best of moulds.

Qur'ān 95:4 (Ali, 2004, p. 1690)

The verbal noun *taqwīm* translated here as *stature* is derived from the verb *qawwama* meaning, "to raise, shape, form, arrange". Nasr et al suggest this indicates that mankind has been created to be something that has truly achieved its potential in terms of harmony and balance (Nasr, et al., 2015, p. 1533). They go on to cite a *ḥadīth that* states "Allāh created Ādam in His image" and suggest that the meaning of this is not that God looks like humans but that humans are unique in possessing some attributes that are lesser forms of God's attributes: Knowledge, power, speech, hearing sight.

The Qur'ān is explicit in its descriptions of humankind. With respect to the frailty of human beings, it describes them as weak and forgetful. In terms of strength, they are awarded the rank of *khalīfah*, (Qur'ān 2:30) God's vice-regent on earth. This is the highest rank awarded to any creature on earth, higher than even that of the angels. Man has been given both a physical and a spiritual nature. The physical aspect is what we see with our eyes - the body and limbs; man has been fashioned from clay (Qur'ān 3:49), his physical essence is material, whereas his spiritual aspect is not a tangible part of the human being. Without this spiritual essence man is just a piece of meat both literally and metaphorically.

This dual nature of men and women highlights the fact that they have both huge potential, they are capable of achieving the noblest possibilities yet at the same time they have a flaw, a weakness that can cause them to sink to the lowest most despised of forms:

We have indeed created man in the best of moulds, Then do We abase him (to be) the lowest of the low, Except such as believe and do righteous deeds: For they shall have a reward unfailing.

Qur'ān 95:4-6 (Ali, 2004, p. 1670)

Sayyid Qutb explains this in his tafsīr saying:

God has perfected all His creation; and the special emphasis laid here and elsewhere in the Qur'ān on man's being endowed with perfect form shows clearly that man has enjoyed extra divine care. Moreover, God's care for man, despite his distortion of his upright nature and the corruption he indulges in, suggests that God has given him special rank and special weight in the universe. God's care is most clearly apparent in the moulding of man's highly complicated physical structure and his unique spiritual and mental make-up.

(Qutb, 2004, p. 191)

Ibn Kathīr takes a slightly different view on the verse referencing the early jurists and exegetes Mujāhid, Abu Al-'Āliyah, Al-Ḥassan and Ibn Zayd in saying that the verse is warning that while Allah has graced mankind with a beautiful upright stature, if he is disobedient and sinful his final abode will be hellfire. Alternatively, he suggests it may also be a reference to the decrepitude of old age (Ibn Kathīr, 2000, p. 30 Vol 10).

These rather literal and *aspiritual* explanations are typical of Ibn Kathīr whereas I would favour the approach of Nasr et al, who emphasize the inward moral and spiritual degradation that man is capable of despite having the potential for spiritual upliftment (Nasr, et al., 2015, p. 1533).

The spiritual dimension is described in surah Al-Hijr where God recalls speaking to the angels, commanding them to prostrate before \bar{A} dam once he has completed his creation by blowing into him from his $\hat{r}uh$ or spirit:

And when I have formed him fully and breathed into him of My spirit, fall down before him in prostration!

Each human being possesses *fitra*, an instinct which enables one to discern right from wrong. Human beings also have been given the faculties of sight, hearing and hearts which are recipients of knowledge. The heart is used extensively in both the literal and metaphorical sense as a repository of knowledge and understanding:

Many are the Jinns and men we have made for Hell: They have hearts wherewith they understand not, eyes wherewith they see not, and ears wherewith they hear not. They are like cattle,- nay more misguided: for they are heedless (of warning).

Qur'ān 7:179 (Ali, 2004, p. 397)

Ibn Kathīr interprets this by saying:

'They are like cattle,' means, those who neither hear the truth, nor understand it, nor see the guidance, are just like grazing cattle that do not benefit from these senses, except for what sustains their life in this world.

(Ibn Kathīr, 2000, p. 212 Vol 4)

He also explains that the verse shows that while man may have eyes and ears he can blind himself to the guidance (e.g. the Qur'ān) and his heart may be unable to recognise God's $\bar{a}y\bar{a}t$, signs. Zamakhsharī and Ṭabarī also highlight that man has been graced with 'aql; intellect, but if he fails to use it he becomes like the cattle who have none (Al-Zamakhshari, 2008, p. 269 Vol 4; Al-Ṭabarī, 2005, p. 3715 Vol 5).

The concept of *fitra* is quite subtle. In surah Al-Nahl God states:

And God has brought you forth from your mothers' wombs knowing nothing - but He has endowed you with hearing, and sight, and minds, so that you might have cause to be grateful.

Qur'ān 16:78 (Asad, 2003, p. 453)

This shows that the *fitra* is not as concrete as knowledge but is more an inclination towards the good, a sense of what God would want from us rather than a rational awareness.

Sayyid Qutb expands on this saying:

Even the most advanced scientist is born devoid of knowledge. Whatever he subsequently learns is given to him as a blessing from God, within the limits He has set for mankind, and contingent upon what is needed for life on this planet: "He has given you hearing, and sight, and minds." (Verse 78) It should be mentioned here that the Arabic word, af'idah, rendered in the translation as 'minds', originally denotes, 'hearts'. The Qur'ān, however, uses it in reference to all human faculties of perception, which are generally referred to as constituting the human mind and intellect.

(Qutb, 2005, p. 58)

2.5 Revelation - Waḥy

According to the Merriam-Webster Dictionary revelation may be defined as:

- a) An act of revealing or communicating divine truth
- b) Something that is revealed by God to humans

The Arabic word *Waḥy* literally means 'communication'. In Lane's Lexicon there is a short entry on this word stating it is used to mean:

- a) He (God) revealed to him by revelation
- b) He suggested to him or put into his mind

Technically waḥy means both the message that is revealed or inspired as well as the method of communication.

In surah Al-Bagara the purpose of communication is expounded:

We did say, "Down with you all from this [state]," there shall, none the less, most certainly come unto you guidance from Me: and those who follow My guidance need have no fear, and neither shall they grieve.

Qur'ān 2:38 (Asad, 2003, p. 17)

This clarifies that the purpose of the *waḥy* is guidance and the purpose of that guidance is salvation. Then in Surah Al-An'ām God clarifies that the guidance is all that is required for His creation:

There is not an animal (that lives) on the earth, nor a being that flies on its wings, but (forms part of) communities like you. Nothing have we omitted from the Book, and they (all) shall be gathered to their Lord in the end.

Qur'ān 6:38 (Ali, 2004, p. 303)

In Surah Al-Nisā God explains that Muḥammads is given waḥy as were the prophets before him:

BEHOLD, We have **inspired** thee [O Prophet] just as We **inspired** Noah and all the prophets after him - as We **inspired** Abraham, and Ishmael, and Isaac, and Jacob, and their descendants, including Jesus and Job, and Jonah, and Aaron, and Solomon; and as We vouchsafed unto David a book of divine wisdom.

Qur'ān 4:163 (Asad, 2003, p. 155)

This verse according to Ṭabarī, Zamakhsharī and Ibn Kathīr is revealed in response to the questions of the people of the book who asserted that God had not sent anything down after Moses (Al-Zamakhshari, 2008, p. 582 Vol 1; Al-Ṭabarī, 2005, p. 2639 Vol 4; Ibn Kathīr, 2000, p. 48 Vol 3). This verse asserts that Prophet Muḥammad is inspired in the same way as the earlier prophets were.

This is not however, the only way that the term wahy is used. It is used in the context of God inspiring the Angels:

Lo! Thy Sustainer inspired the angels

Qur'ān 8:12 (Asad, 2003, p. 272)

And even the bees:

And [consider how] thy Sustainer has inspired the bee: "Prepare for thyself dwellings in mountains and in trees, and in what [men] may build [for thee by way of hives].

Qur'ān 16:68 (Asad, 2003, p. 451)

Finally, the extent to which this wahy extends is made clear:

Say: "What could most weightily bear witness to the truth?" Say: "God is witness between me and you; and this Qur'an has been revealed unto me so that on the strength thereof I might warn you and all whom it may reach." Could you in truth bear witness that there are other deities side by side with God? Say: "I bear no [such] witness!" Say: "He is the One God; and, behold, far be it from me to ascribe divinity, as, you do, to aught beside Him"!

Qur'ān 6:19 (Asad, 2003, p. 200)

According to the exegete Tabarī, this verse shows that the Qur'ān is a universal message that goes beyond the time of the Prophet and is a Divine warning to all those whose eyes or ears it may reach (Al-Tabarī, 2005, pp. 3146-7 Vol 4).

2.5.1 Categories of Revelation

In the Qur'an different forms of wahy are described:

And it is not given to mortal man that God should speak unto him otherwise than through sudden inspiration, or [by a voice, as it were,] from behind a veil, or by sending an apostle to reveal, by His leave, whatever He wills [to reveal]: for, verily, He is exalted, wise.

Qur'ān 42:51 (Asad, 2003, p. 846)

In the case of the Prophet Muḥammad He received the inspiration that was the Qur'ān which scholars have named $wahy z\bar{a}hir$ (lit. manifest revelation) and he also received inspiration that underpinned the additional guidance he provided to his companions that we find in the $had\bar{a}th$ which has been termed $wahy b\bar{a}tin$ (lit. internal revelation) (Kamali, 2003, p. 18). One of the differences between these two types of revelation is that in the case of the $wahy z\bar{a}hir$ that brought the Qur'ān, it was revealed in detail, whereas the $wahy b\bar{a}tin$ was a conceptual revelation that the Prophet would then put into his own words.

The personal inspiration that can be received by any pious person is often termed *ilhām* and this is a category of $wahy b\bar{a}tin$:

Indeed, [even aforetime] did We send forth Our apostles with all evidence of [this] truth; and through them We bestowed revelation from on high, and [thus gave you] a balance [wherewith to weigh right and wrong], so that men might behave with equity; and We bestowed [upon you] from on high [the ability to make use of] iron, in which there is awesome power as well as [a source of] benefits for man: and [all this was given to you] so that God might mark out those who would stand up for him and His Apostle, even though He [Himself] is beyond the reach of human perception. Verily, God is powerful, almighty!

Qur'ān 57:25 (Asad, 2003, pp. 955-6)

This verse clearly indicates the concept of revelation as well as the method of revelation (i.e. via the messengers) and the message of the revelation which consists of guidance on what is right and wrong. He also mentions iron which is the name given to the chapter. This may be understood to mean other aspects or things which benefit humankind besides revelation. Finally, those who stand up for God and his apostle as Muḥammad Asad explains:

The meaning is that only they who put God's spiritual and material gifts to right use can be described as "true believers".

(Asad, 2003, p. 956)

In this verse it may seem rather strange to those unfamiliar with the style and form of the Qur'ān that a verse which speaks about God sending down his revelation to guide humanity has in the middle a reference to 'iron'. In fact, this aspect of the Qur'ān is what it describes itself as a reminder – humankind is being reminded not only of the benefit of revelation but also of the potential benefits in the natural world that has been created for them.

While this verse reminds the reader of the realm of the unseen (i.e. of God and the Revelation) at the same time it points to the natural world of which iron has 'awesome power' and potential 'benefits'.

Ibn Kathīr comments on this verse:

... 'and revealed with them the Scripture' which contains the true text, 'and the Mīzān' that is justice, according to Mujāhid, Qatādah and others. This Āyah refers to the truth that is attested to by the sound straight minds that oppose misguided opinions and ideas.

(Ibn Kathīr, 2000, p. 498 Vol 9)

As for the benefits of iron, he contextualises the understanding of this at the time of the Prophet Muḥammad saying it means:

We made iron as a deterrent for the people who refuse the truth and oppose it after the proof has been established against them.

(Ibn Kathīr, 2000, p. 499 Vol 9)

And he interprets the power of iron to be referring to its use in the manufacture of weapons, and the benefit to mean its use in making cooking utensils, hammers etc.

Tabarī starts by saying that God has sent the messengers with clear signs and proofs and sent them with a book, rules and regulations and balance with justice. He also quotes Qatāda by saying that *mīzān* means *justice*. He narrates from ibn 'Abbās that Prophet Ādam came down with three things but lists four (!); anvil and tongs, knife sharpener and a hammer. He also quotes Ibn Zaid concerning iron saying that the power of iron means swords and weapons and that the benefits of iron are iron tools for digging the earth and mountains (Tabarī, 2005, pp. 7903-4 Vol 9).

Zamakhsharī however, begins by extrapolating the phrase 'we have sent messengers' to angels and Prophets with clear proofs and miracles and have sent down the book which is waḥy (Al-Zamakhshari, 2008, p. 66 Vol 4). He continues by making a reference to Prophet Nūḥ, saying that it has been narrated that Jibrīl was sent down with the mīzān and told Nūḥ to tell his people to use it. He also narrates the story of what Ādam brought but says it was five things; anvil, tongs, knife sharpener, hammer and needle. He explains in a similar way to Ṭabarī on the power and benefits of iron. (Note that the rationalist mufassir is more skilled in counting!)

Clearly both of these exegetes interpreted the verse through their own context and that of the Prophet Muḥammad. In our context; however, the power of iron might be understood better through the factories that were at the heart of the industrial revolution through which wealth and hence political power was obtained while the benefit through iron supplements used by pregnant women and anyone suffering anaemia.

The more universal and general import of this verse where we have both revealed and rational sources of knowledge being referred to by God is that He has provided the revelation providing guidance through which we can make balanced judgements and separate right from wrong while the rational knowledge of the natural world can through the application of the human intellect be used for power and benefit.

2.5.2 Messengers and Scriptures

In the story of Creation God converses with angels stating that he is going to create a being who will be a God's deputy on earth. The Angels respond by saying that He will create

someone who will shed blood on earth while they celebrate His praises. God tells the Angels 'Verily, I know that which you do not know" Qur'ān 2:30 (Asad, 2003, p. 62). Here we find the first mention of knowledge in the creation narrative; that it is God who imparts knowledge to Ādam. According to Al-Qurṭubi there is disagreement amongst the exegetes as to whether the knowledge referred to is just the names of things or if it is knowledge in the comprehensive and conceptual sense (Al-Qurtubi, 2003, p. 207). Muḥammad Asad however, asserts that:

The term ism (name) implies, according to all Philologists, an expression "conveying the knowledge [of a thing] ... applied to denote a substance or an accident or an attribute, for the purpose of distinction": in philosophical terminology, "a concept". From this it may legitimately be inferred that the "knowledge of all the names" denotes here man's faculty of logical definition and, thus of conceptual thinking.

(Asad, 2003, p. 15 footnote 25)

He then goes on to assert that from the context it is humankind and not merely Ādam that has been endowed with this gift and hence this is a distinct quality that belongs to all of mankind. The angels are then asked to confirm the names (or knowledge) to confirm their veracity. They reply by glorifying God and stating that they have no knowledge other than that which God has taught them and that God is perfect in knowledge and wisdom. Ādam is then asked by God to display his knowledge and in response the angels prostrate before Ādam.

In this story of creation, Asad asserts that it is not just Ādam who has been given knowledge but the whole human race (Asad, 2003, pp. 15-16). This he suggests is evidenced by the fact that Allah is giving Ādam knowledge in response to the assertion by the Angels that Mankind will spread corruption on the earth. Thus he is demonstrating the knowledge of mankind that will provide the safeguard and will counteract the spreading of corruption. The superiority of

humans over angels and hence their capacity to become God's Vicegerents on earth is that of the knowledge they possess.

I extend this view, that the Qur'ānic perspective on the connection between humankind and God is through knowledge, asserting that it is so fundamental that it transcends all boundaries of time and place. God equips human beings with some knowledge and also provides the tools for acquiring more knowledge with which humankind can develop in order to come ever closer to God.

God chooses certain human beings to teach other human beings. They are known as rasulullāh; messengers of God.

The Qur'an mentions, that this link has always been there from the time of Adam:

Of some apostles We have already told thee the story; of others We have not;- and to Moses Allah spoke direct.

Qur'ān 4:164 (Asad, 2003, p. 155)

Messengers bring knowledge in the form good news or warnings, as mentioned in the next verse, that mankind may not have any excuse before God after the coming of these messengers:

Messengers who gave good news as well as warning, that mankind, after (the coming) of the apostles, should have no plea against Allah. For Allah is Exalted in Power, Wise.

Qur'ān 4:165 (Ali, 2004, p. 238)

The messengers come with strict instruction to just convey the message without adding or taking away from it as they are the deliverers of knowledge. They are regarded as human beings and not a part of God. This is a very important point to avoid any confusion between God and messengers. They do not come between God and man. By extension one can conclude that no other human being who comes with knowledge stands between man and God. They are the role models for human behaviour. Prophet Muḥammad is mentioned as أُسْنَوَةُ حَسَنَةُ uswatun hassana, the best example. He is told that he is not the keeper of people and should not be disappointed if people do not take heed of the knowledge that is given to them.

Yet if God had so willed, they would not have ascribed divinity to aught beside Him; hence, We have not made thee their keeper, and neither art thou responsible for their conduct.

Qur'ān 6:107 (Asad, 2003, p. 215)

While the messengers are never intermediaries between ordinary people and God they nevertheless have a role to be leaders, and the community has the duty to follow their guidance. In surah Maryam Prophet Ibrahim speaks to his father asking him to follow her because she has been given guidance.

"O my father! Behold, there has indeed come to me [a ray] of knowledge such as has never yet come unto thee: follow me, then; I shall guide thee onto a perfect way."

Qur'ān 19:43 (Asad, 2003, p. 516)

In his book Al 'Aql wa al 'Ilm fi Al-Qur'ān Al-Karīm Yusuf Al-Qaradāwi (2001) uses verses such as this to establish the opinion that ignorant people (jahil) should follow the people of knowledge (ulamā'). This is a popular argument for the followers of the established schools of law. Against this we must however, consider the warning in the Qur'ān that the people of the book took their priests and rabbis to be their lords (committing shirk) through giving them the authority to determine the lawful and the unlawful. (This will be discussed further later on). The verse which I believe provides a balanced approach on this issue is this:

And We sent not (as Our messengers) before thee other than men whom We inspired--Ask the followers of the Remembrance if ye know not!

Qur'ān 16:43 (Picthall, 2004, p. 163)

This verse is translated by some others as "ask the people who have knowledge" (Abdel Haleem, 2004, p. 168) which then appears to support the assertion that one should follow the *ulamā'*; however, I chose to use Marmaduke Picthall's translation because the key word here is not *ulamā'* but *ahle Dhikr* or people who remember. Given that someone can have a great memory without necessarily being particularly gifted intellectually, I would assert that the formulation is emphasising that the individual who lacks knowledge should find out from those who possess the memory of the required data, i.e. those who remember, but that they nevertheless retain responsibility for the use of that knowledge. Thus personal accountability is retained and the knowledgeable in our community become simple guides rather than intermediaries endowed with authority.

2.6 Reason

2.6.1 Intellect 'aql

Man has been endowed with an intellect, which is regarded as a tool for acquiring knowledge

The Qur'ān repeated calls upon man to use his intellect:

do you not understand?	أَفَلاً تَعْقِلُونَ	e.g. 2:44, 2:76,
so that you may understand	لَعَلَّكُمْ تَعْقِلُونَ	e.g. 2:242, 6:65,24:61
that you may use your reason	لَعَلَّكُمْ تَعْقِلُونَ	e.g. 2:73, 2:242, 6:151

Here the word translated as 'understand' is derived from the word ('aql) meaning 'intellect'.

'aql is derived from approaching things that would ruin him, thus intelligence, 'aql, is an ability to restrain the self from following vain desires.

There are 49 verses in which the various conjugations or 'aql are found.

Many verses also command the faithful to contemplate on God's creation using words derived from the root فكر (fakara) meaning 'remembrance' such as:

Human beings are asked to reason and reasoning requires a basis in knowledge which indicates the necessity of first acquiring said knowledge.

Abdullah observes in his text Educational Theory: A Qur'ānic Outlook:

Knowledge is one of the basic equipment of man in this life. His life is affected by the quality and quantity of the knowledge he acquires.

('Abdullāh, 1982, p. 81)

Many verses admonish humankind in the strongest of terms for failing to use their reason:

Notwithstanding that no human being can ever attain to faith otherwise than by God's leave, and [that] it is He who lays the loathsome evil [of disbelief] upon those who will not use their reason?

Qur'ān 10:100 (Asad, 2003, p. 371)

Tabarī begins by saying that God is addressing the Prophet and telling him that it is not possible for any of God's creation to believe in the Prophet Muḥammad≝ except by His permission (Al-Ṭabarī, 2005, p. 4273 Vol 5). This would seem to be deduced from the previous verse where God says:

dost thou, then, think that thou couldst compel people to believe

Qur'ān 10:99 (Asad, 2003, p. 371)

Then he says God will put *rijs* (lit. uncleanliness, filth (Lane, 1984, p. 1037)) on those who do not follow the Prophet® because they do not use their reason and he explains that *rijs* here means God's anger and punishment.

Then he says it is punishment from God for those who do not reason because they do not understand God's proofs, reminders and signs which indicate the prophethood of Muḥammad, the Prophet 's truth and his call to them to the oneness of God and leaving making idols and partners with God.

Zamakhsharī says that nobody can believe except with God's permission *al-idhan and says rijs* (filth) is *khudlan* (to desert) indicating that the filthy punishment that God meets out on those who fail to use their reason is that He deserts them (Al-Zamakhshari, 2008, p. 255 Vol 2).

Ibn Kathīr provides a similar reflection to Ṭabarī and Zamakhsharī but suggests that in this context *rijs* has the meaning of disorder and misguidance meaning that God will justly lead astray those who do not reason (Ibn Kathīr, 2000, p. 662 Vol 4).

2.6.2 The Use of the Senses

Verily, the vilest of all creatures in the sight of God are those deaf, those dumb ones who do not use their reason.

Qur'ān 8:22 (Asad, 2003, p. 274)

Ṭabarī narrates a ḥadīth from Ikrāmah (Al-Ṭabarī, 2005, p. 3805 Vol 5) in which he says:

We are deaf and dumb to what Muḥammad calls us to. Nor do we answer his call. They were all killed at Uhud and they were the people of the flag.

And Ibn Zaid who says that the meaning of the verse is:

They are not deaf and dumb in this world but their hearts are deaf, dumb and blind.

And he then recited the verse:

Have they, then, never journeyed about the earth, letting their hearts gain wisdom, and causing their ears to hear? Yet, verily, it is not their eyes that have become blind - but blind have become the hearts that are in their breasts!

Qur'ān 22:46 (Asad, 2003, p. 571)

Here there is a difference of opinion as to whether this refers to the *Mushriqīn* (idolaters) or the *Munafiqīn* (hypocrites). Some said they are some of the Mushriqīn yet others said they are *Munafiqīn*. This discussion is connected with the context of revelation; however, the general import, if taken with the overall Qur'ānic view, is that anyone who does not use their reason is deficient in their faculties and this is stated in quite strong terms.

Zamakhsharī explains that these people are the worst of those who walk the earth or that they are the worst of beasts because they are deaf towards the truth and they won't reason. God called them beasts and then called them the worst of beasts. He confirms as Ṭabarī stated that they were the people of the flag and were all killed at the battle of Uhud (Al-Zamakhshari, 2008, p. 151 Vol 2).

Ibn Kathīr narrates from the *sīra* of Ib Ishaq that:

This verse refers to the hypocrites who pretended to hear and obey while in fact they do neither.

These people, he states, are regarded as the worst of creation because they don't listen to the truth and they don't comprehend it. He says that the phrase *those who understand not* refers to the most wicked creatures because all other creatures behave according to the way God created them whereas these people were created to worship God but instead they disbelieved (Ibn Kathīr, 2000, p. 284 Vol 4).

The above three *tafāsīr* all explain the verse from 2 main aspects:

- Firstly, they don't listen to the truth
- Secondly they have been called the worst of creatures because they don't apply their faculty of reason

This is an apparent understanding of the verse. The context is also very important and the context of revelation is given in more detail by Tabarī and Zamakhsharī however the discourse on universalising the message, i.e. developing and understanding that is applicable to other times and places is missing. I would assert that this message is that being deaf and dumb to the truth is a deliberate act of denial and is a sign of insincerity. Human beings are asked to listen to and reason with the message or any form of knowledge be it reason or not.

2.6.3 The Natural World

God is described as the lord of the worlds in the opening chapter of the Qur'ān meaning the lord of the heavens and the earth. The universe and the cosmos are seen as the signs of God on earth, Al-Qurṭubi states that the meaning of الْعَالَم al-'ālimūn is that it encompasses everything that is created by God, the knowledge of which brings humans ever closer to God. This word is derived from the same root ع ل م as the word الأعَلاَم al-'alām which means a sign.

This etymological connection may be seen as significant as the creation is said to comprise a multitude of signs which testify to the existence of the creator and to his oneness.

And among His signs are the ships that sail like [floating] mountains through the seas.

The Qur'an encourages humankind to use a systematic approach to investigating God's signs in the creation. It is also interesting to note that the word 'alim meaning a scholar and the word 'alam meaning the world are identical but for their diacritical marks. This establishes a linguistic connection between the natural world and the scholar.

2.6.3.1 Observation

There are a significant number of verses urging human beings to be observant, gazing upon the skies and the earth which would lead them to understand God:

AND [remember:] it is God who sends forth the winds, so that they raise a cloud, whereupon We drive it towards dead land and thereby give life to the earth after it had been lifeless: even thus shall resurrection be!

Qur'ān 35:9 (Asad, 2003, p. 750)

[Easy is it for Him to create likeness and variety:] [10] thus, the two great bodies of water [on earth] are not alike [11] the one sweet, thirst-allaying, pleasant to drink, and the other salty and bitter: and yet, from either of them do you eat fresh meat, and [from either] you take gems which you may wear; and on either thou canst see ships ploughing through the waves, so that you might [be able to] go forth in quest of some of His bounty, and thus have cause to be grateful.

Qur'ān 35:12 (Asad, 2003, p. 751)

In other verses the virtue or superiority of those who observe is stated:

For [thus it is:] the blind and the seeing are not equal.

Qur'ān 35:19 (Asad, 2003, p. 752)

This verse is not a value judgement on those not blessed with sight. Rather it is aimed at those who have the ability to see but refrain. It relates to the verses that describe those who disbelieve saying that God has set a covering on their eyes meaning they are not capable of appreciating God's signs.

2.6.3.2 Exploration

Having observed the signs of God, exploration is the next stage of inquiry, delving further and analysing. This takes mankind a step deeper into the process of learning or acquiring knowledge, once again using the five senses:

Say: "Go all over the earth and behold how [wondrously] He has created [man] in the first instance: and thus, too, will God bring into being your second life for, verily, God has the power to will anything!

Qur'ān 29:20 (Asad, 2003, p. 680)

One of the most prominent ways in which humans are asked is through travel. Writers such as Bernard Lewis have argued in *The Muslim Discovery of Europe* (Lewis, 2000) that the Europeans in contrast to Muslims are much curious and sought knowledge in Muslim lands. Muslims however did travel but not in pursuit of knowledge, but rather for practical demands of business and engaging in diplomacy.

A number of other writers have also asserted that the beliefs of Muslims prohibited them from exploring and enquiring a view based on the situation of Muslims in around 18th and 19th centuries. While one cannot deny that there had been slow progress, even stagnation of Muslim educational achievement during this period, it cannot be attributed to the teachings of faith. Other writers such as Franz Rosenthal in his *Knowledge Triumphant* (Rosenthal, 2007) and Ian Richard Netton in *Seek Knowledge: Thought and Travel in the House of Islam* (Netton, 1996) have provided many examples to disprove such prejudiced notions.

Gellens looks back to the earlier period when the Muslim community was in ascendance observing:

This civilisation - really a network of variegated societies united by their commitment to the sharia - was one which in the fullest sense owed its vibrancy to constant movement. Travel in all its myriad forms - pilgrimage, trade, scholarship, adventure expanded the mental and physical limits of the Muslim world...

(Gellens, 1990, p. 51)

This view clearly contradicts the views expressed by Lewis.

One renowned teaching among Muslims is often quoted as a hadith is that 'seek knowledge even unto China'. This has had an impact on the behaviour of Muslims as expressed by the above authors:

Do they not travel through the land, so that their hearts (and minds) may thus learn wisdom and their ears may thus learn to hear? Truly it is not their eyes that are blind, but their hearts which are in their breasts.

Qur'ān 22:46 (Ali, 2004, p. 834)

In the teachings of Islam, exploration is not just a voluntary act, but has been made compulsory as an act of worship, if one can afford it, in the form of pilgrimage, the Hajj.

Muslim from all over the globe took hazardous journeys to go to the Ka'ba, for many it took years to get there and some settled in Mecca and never went back to their lands.

At the time of Hajj people come from different corners of the globe to perform the pilgrimage in the process of which there are reminders and lessons. It is a way of meeting people from all over the world, forming bonds and doing businesses; a compulsory way of acquiring knowledge of languages, people and their lands.

It is a Journey which enables one to acquire inner and outer knowledge. The outer, the physical world of human beings and nature leads human beings to increase in understanding of different cultures, language and landscapes.

2.6.3.3 Experimentation

And if you doubt any part of what We have, bestowed from on high, step by step, upon Our servant [Muḥammadﷺ, then produce a surah of similar merit, and call upon any other than God to bear witness for you -if what you say is true!

Qur'ān 2:23 (Ali, 2004, p. 21)

The third and final method of investigation exhorted in the Qur'ān is experimentation. This last example is particularly unusual for a religious text as, far from telling the faithful to simply believe, the Qur'ān enjoins upon its reader a sceptical, experimental approach to even verifying its own authenticity. The reader is challenged to test the Qur'ān's claim to being divine in origin by attempting to produce a verse that is comparable to any of its verses, the

implication being that having failed the reader will have confirmed the validity of the text for themselves.

Thus we have three basic approaches to rational investigation mentioned in the Qur'an:

- 1) Observation
- 2) Exploration
- 3) Investigation (including experimentation)

This can be seen to be a basis for the scientific methods developed by Muslim scholars such as Ibn Al-Ḥaytham for investigating the natural world (see chapter 4).

2.6.3.4 Recording Information

One of the reasons for the explosion of scientific advancement was the dawning of the age of mass literacy. This will be discussed further in chapter 4; however, this was not simply a fortunate happenstance for the Muslim community but the response to a Qur'ānic injunction:

O ye who believe! When ye contract a debt for a fixed term, record it in writing. Let a scribe record it in writing between you in (terms of) equity. No scribe should refuse to write as Allah hath taught him, so let him write...

Qur'ān 2:282 (Pickthall, 2006, pp. 32-3)

The first revelation began with the command to read and with a reference to God teaching man by the pen. The above verse builds on this telling the believers to commit their contracts to paper. This principle of writing down important information was clearly crucial in the development of all the sciences. Prior to the establishment of the Muslim empire reading and writing had existed but only for a tiny privileged minority. Through these lessons in the Qur'ān

the common people were made to realise that they too should benefit from literacy which had a dramatic impact on the society of the day.

2.6.4 History

The Qur'an portrays a definite time line starting with the beginning of creation till the day of resurrection. Humans are passing through different stages of development and the knowledge is imparted accordingly. Lessons from history are a common feature of the Qur'anic dialogue:

Have the stories of those [deniers of the truth] who lived before you never yet come within your ken - [the stories of] the people of Noah, and of [the tribes of] `Ad and Thamud, and of those who came after them? None knows them [now] save God. [9] There came unto them their apostles with all evidence of the truth -but they covered their mouths with their hands [10] and answered: "Behold, we refuse to regard as true the message with which you [claim to] have been entrusted; and, behold, we are .in grave doubt, amounting to suspicion, about [the meaning of] your call to us!"

Qur'ān 14:9 (Asad, 2003, p. 416)

The various prophets each brought miracles appropriate to their time and community. For instance, at the time of Moses his people were fascinated by sorcery and magic so God enabled Moses to perform a miracle with his staff which turned into a snake and ate the snakes of the other magicians. At the time of Jesus people were more impressed by the healing of the sick and giving life to the dead; however, at the time of Prophet Muḥammad, 600 years after Prophet Jesus, Prophet Muḥammad's miracle was the Qur'ān. People had become more sophisticated in terms of eloquence, poetry and forms of language. Hence, the language of the Qur'ān, its content and knowledge became the miracle to be appreciated. Each time and place in history has its own situation and historical context:

أَوَلَمْ يَسِيرُوا فِي الْأَرْضِ فَيَنظُرُوا كَيْفَ كَانَ عَاقِبَةُ الَّذِينَ مِن قَبْلِهِمْ كَانُوا أَشَدَّ مِنْهُمْ قُوَّةً وَأَثَارُوا الْأَرْضَ وَعَمَرُوهَا أَكْثَرَ مِمَّا عَمَرُوهَا وَجَاءَتْهُمْ رُسُلُهُم بِالْبَيِّنَاتِ فَمَا كَانَ اللَّهُ لِيَظْلِمَهُمْ وَلَكِن كَانُوا أَنفُسَهُمْ يَظْلِمُونَ

Do they not travel through the earth, and see what was the end of those before them? They were superior to them in strength: they tilled the soil and populated it in greater numbers than these have done: there came to them their apostles with Clear (Signs). (Which they rejected, to their own destruction): It was not Allah Who wronged them, but they wronged their own souls.

Qur'ān 30:9 (Ali, 2004, pp. 1009-10)

Here one sees that the emphasis on exploring the world to understand what happened to those before us. These verses urge one to look through the pages of history and through the ancient records to seek true knowledge of history. Hence history becoming a source of knowledge which is why in the Qur'ān you find the stories of the people of the past.

The Qur'ānic aspect of knowledge is not bound to a particular time in history, but rather it reveals the way that the truth has been present at all times of history, hence it is to be sought with utmost sincerity and diligence. There are stories of the people of the past, the present chaos and the news of the future. (This story is understood to be gradually unfolding before us in our time and will continue to do so until the day of resurrection.) In fact, with the advancement of knowledge humans will continue to receive knowledge through the Qur'ān.

Later in this chapter I will be discussing the presence of 'scientific' descriptions of the world in the Qur'ān. In many cases it has only been later generations that have gained the knowledge to understand these verses. In this way the text of the Qur'ān is able to span the generations from its first revelation through the Prophet Muḥammad through to the present day and beyond.

2.7 The Purpose of Knowledge

The prominence of statements emphasising the acquisition of knowledge, both revelatory and rational, in the Qur'ān and the significance of the knowledgeable has been evidenced in this chapter. When one understands the signs of God, whether they are revealed or rational, they become signposts to His Truth. The more one acquires knowledge the more one comes closer to understanding the purpose of knowledge.

2.7.1 Signs Āyāt

And He has subjected to you, as from Him, all that is in the heavens and on earth: Behold, in that are signs indeed for those who reflect.

Qur'ān 45:13 (Ali, 2004, p. 1295)

One of the perpetual themes of the Qur'ān is reflection on the $\bar{a}y\bar{a}t$ (pl of ayah; sign) of God that are found in the Natural world and in the revelation (i.e. the Qur'ān). It is vital or critical to note that the word ayah means both a sign and a verse of the Qur'ān. Since God is asking us to reflect on his $\bar{a}y\bar{a}t$ it is understood to mean we should reflect on both the signs of God in the revelation and the signs of God in the natural world.

The signs in the natural world may point to the verses in the Qur'ān and the verses in the Qur'ān may point to the signs of God in the natural world. The weaving of the two phenomena of revelatory knowledge and pointing to the natural world which requires the rational faculties to understand is linguistically remarkable as well as sophisticated in its use of other concepts, whether it is the plant life or the behaviour of animals which is discussed in many places

throughout the Qur'ān. I would assert that the fact that the two are both signs emphasise clearly the importance and relevance of both sources of knowledge.

For a believer, both these aspects of knowledge lead man or point to the reality of God who is named in the Qur'ān as the Creator Al-Khāliq (النزاق) and Sustainer Al-Razāq (الرزاق) of the universe:

Soon will We show them our Signs in the (furthest) regions (of the earth), and in their own souls, until it becomes manifest to them that this is the Truth. Is it not enough that thy Lord doth witness all things?

Qur'ān 41:53 (Ali, 2004, p. 1244)

Verses such as this indicate signs in man himself as well as in the horizons of the earth pointing man to the existence of the metaphysical reality that is God. Through examining these and pondering over them man should become humble and grateful. Arrogance is the cause of corruption and abuse and oppression in the land.

When looking at this verse Ṭabarī and Zamakhsharī both relate it to the time of the Prophet Muḥammad and their own time saying that the signs that would be shown are the events around Mecca and the conquest of Mecca. This shows that they were not merely taking a general point from the verse but were specifically contextualising it in a way that was meaningful to them (Al-Zamakhshari, 2008, p. 458 Vol 3; Al-Ṭabarī, 2005, p. 7215 Vol 9):

When Our Signs are rehearsed to such a one, he turns away in arrogance, as if he heard them not, as if there were deafness in both his ears: announce to him a grievous Penalty.

Qur'ān 31:7 (Ali, 2004, p. 1035)

All types of knowledge, whether revelatory or rational should lead man to accept the reality of his nature and acknowledge all that he has been given with humility.

There must however be a reason for this great emphasis, which is perhaps why Rosenthal regards 'ilm as the operative word for Islamic Civilisation. The driving force behind this must therefore be sought and understood: What was the purpose of acquiring knowledge?

In the Qur'an God asks human beings to seek knowledge both in the scripture and in the natural world, sincerely, honestly and diligently.

God also provides guidelines:

- Do not conceal knowledge that you have ascertained and believe to be true as it can liberate people from superstition, illogical dogmas and traditions
- It is incumbent upon the one who knows and understands that they act upon their knowledge because knowing has no meaning without practice and practice is the sincerest evidence of understanding. Knowing without practice has no meaning. Knowledge when truly comprehended and internalised should transform the individual in action, behaviour or attitude depending on the nature of the knowledge acquired
- The highest level of knowledge if acquired and understood may give the acquirer some increase in their understanding of the ultimate metaphysical entity God. Clearly not all knowledge is of this form but ultimately all knowledge is interconnected. All human beings have experienced a spiritual connection with God at some time through the $r\bar{u}h$ God blew into them and from the meeting between God and mankind when He

proclaimed "Am I not your Lord" so to regain some spiritual connection must be possible

 The ultimate connection or re-connection with God has been promised in the hereafter

2.8 Scientific Verses

There is a plethora of emerging literature in the area of Qur'ānic scientific exegesis first inspired by the French Surgeon Maurice Bucaille in his book *The Bible, The Quran and Science:*The Holy Scriptures Examined in the Light of Modern Knowledge (Bucaille, 2003). In this book which was originally written in French but has since been translated into many languages, Bucaille gives an in-depth analysis of some verses of the Bible and the Qur'ān relating to the natural world. He found that in the case of the Qur'ān the verses he examined accorded with a modern understanding of the natural world rather than what might have been expected of a book written 1400 years ago in an undeveloped country.

This book inspired some people to embrace Islam who saw this as evidence to confirm that the Qur'ān was divine in origin while for some Muslims it inspired them to look for more examples of 'science' in the Qur'ān.

There are many aspects of science that we take for granted now that were unknown to exegetes of the Qur'ān a thousand years ago. Now that the science has advanced some verses may now be understood differently in the light of this new rational knowledge. Similarly, we can hypothesise that there may be verses that we currently do not understand correctly that may become clear to our children or grandchildren when science has developed further still.

I will now illustrate this development of exegesis with some examples:

GOD is He who has created seven heavens, and, like them, [the many aspects] of the earth. Through all of them flows down from on high, unceasingly, His [creative] will, so that you might come to know that God has the power to will anything, and that God encompasses all things with His knowledge.

Qur'ān 65:12 (Asad, 2003, p. 997)

First let us consider what the established exegetes wrote about this verse:

Zamakhsharī having considered without consequence the different variant readings states that this verse indicates that the earths are like the heavens and that there are therefore seven earths just as there seven skies and they all function according to God's will (Al-Zamakhshari, 2008, p. 124 Vol 4). He relates from Qatāda that there is a creation in the sky just as there is a creation on the earth and they all work according to God's will. He also says that there is a distance equivalent to a journey of 500 years marking the boundary between each sky and that they are all equal in thickness. He offers no explanation of what 'seven skies' or 'seven earths' actually means.

Finally, he relates from Ibn 'Abbās that when he was asked if there was anything below the earths he replied that there was and was either angels or Jinn.

Tabarī begins by stating that God has created the seven skies yet people make partners with God, despite them not having any power to create anything (Al-Ṭabarī, 2005, p. 8093 Vol 10). He says that God created the earths just as he created the skies. Similarly, to Zamakhsharī he relates that there are creatures in the heavens just as there are creatures on the earth. He

then relates from Ibn 'Abbās that he said that he was afraid that if he had explained to them about the seven skies and the seven earths they would have abandoned their faith. [i.e. they would have found it impossible to accept and thus abandoned their faith].

Ibn Kathīr states that God is showing His power and perfection so that people would only obey
Him and follow his way and obey Him. He then relates a hadīth from Bukhari that also
mentions seven earths:

Narrated Said bin Zaid: Allah's Apostle said, "Whoever usurps the land of somebody unjustly, his neck will be encircled with it down the seven earths (on the Day of Resurrection).

And another narration that says:

Narrated Salim's father (i.e. 'Abdullah): The Prophet said, "Whoever takes a piece of the land of others unjustly, he will sink down the seven earths on the Day of Resurrection."

(Ibn Kathīr, 2000, p. 56 Vol 10)

He says that those who suggest this <code>hadīth</code> refers to seven continents are giving an implausible explanation that is in conflict with the letter of the Qur'ānic text and have no proof.

This last statement shows that in his time (1300-1373 CE) people had become aware of the various continents and had considered this could be an explanation of the text. The earlier exegetes do not mention this so perhaps this idea had not yet been raised in their day.

Now let us consider some of the contemporary explanations of the verse that have been proposed.

Mehdi La'Li observes that there are seven layers in the atmosphere which are separated by temperature: The Troposphere, The Stratosphere, the Ozone layer, the Mesosphere, the

Ionosphere, the Thermosphere and the Exosphere but offers no explanation for 'seven earths' (La'Li, 2003, pp. 179-184).

This suggestion has been widely circulated and refuted by those who state that there are in fact five layers but scientists' labels account for some sub-layers.

Ijaz Choudhury (2015) offers two explanations:

- 1. GOD created seven universes and the same number of earths
- 2. We know of 9 planets of which 2, Jupiter and Saturn are unlike earth based on the fact that these are gaseous planets and all others are solid similar to our earth. This leaves us with 7 planets including earth, which are similar to each other

Other suggestions for the seven earths include a similar approach to La'Li's seven atmospheres by suggesting that there are seven layers within the earth; the Crust, the Lithosphere, the Upper mantle, the Asthenosphere, the Lower mantle, the Outer core and the Inner core.

Once again there appears to be some double counting of layers to make the idea fit.

What these ideas tell us is that there may be a rational scientific explanation for the verse but we cannot say what the correct explanation is at this time. Of course sceptics view this as a crude apologetic approach but it cannot be denied that some verses of the Qur'ān do accord remarkably well with current scientific understanding.

Let us consider another verse:

ARE, THEN, they who are bent on denying the truth not aware that the heavens and the earth were [once] one single entity, which We then parted asunder?—and [that] We made out of water every living thing? Will they not, then, [begin to] believe?

Qur'ān 21:30 (Asad, 2003, p. 548)

Tabarī refers to the statement of Qatāda:

Do they not see that the skies and the earth were together and then God separated them with air?

(Al-Ṭabarī, 2005, p. 5685 Vol 7) Various other similar statements are given with no real explanation.

Al-Zamakhsharī says that the verse means the sky was on top of the earth and there was no space between them. Then God made a break between them. He then reports statements from earlier peoples that say God then placed rain and plants between them and after that was silence (Al-Zamakhshari, 2008, pp. 570-1 Vol 2).

Ibn Kathīr says of this verse that in the beginning they were all one piece, attached to one another and piled up on top of one another, then He separated them from one another, and made the heavens seven and the earth seven, placing the air between the earth and the lowest heaven (Ibn Kathīr, 2000, p. 441 Vol 6). Then He caused the rain to fall from the sky and the vegetation to grow from the earth. He says that the next sentence means they see with their own eyes how creation develops step by step. All of that is proof of the existence of the Creator who is in control of all things and is able to do whatever He wills.

Once again we have a more developed idea from Ibn Kathīr that seems to hint at an evolutionary description of the creation. This is quite possible as we know from Ibn Khaldūn that such ideas were discussed by Muslim scholars. Nevertheless, all of the explanations fall short of satisfying a contemporary scientific explanation.

This verse has been very popular with contemporary Scientific Exegetes who suggest the verse is initially talking about the 'big bang' – the theory that all the planets and stars in the universe were a single mass that exploded (La'Li, 2003, pp. 26-27). The description of God making every living thing from water is linked to the understanding that water is crucial to life and the main component of all living things.

The big bang theory originates with Georges Lemaître in 1927 and so it is very recent, long after any of the above commentaries but has come to be accepted as 'established fact' based on the astronomical observations that show all objects in the universe are moving away from a central point. This is therefore one of the strongest examples where a recent scientific exegesis of the Qur'ān appears to be correct.

I will discuss the principles of Qur'ānic exegesis in more detail in chapter 3; however, some elements should be highlighted here. First of all, the scholars of Islam insist that an exegete must have a very high level of Arabic language skills. Without this an apparent conformity with science could be based on a modern Arabic interpretation that is at odds with the meanings understood at the time of revelation or through an error of grammar. In fact, some of the popular Scientific Exegetes are not even Arabic linguists and may err through an incorrect or ambiguous translation. A new rule of interpretation that I would propose given the errors in the earlier exegetical work is that the exegete should, like a jurist developing a legal opinion,

have a sound knowledge of the 'reality'. That is, where a verse is clearly describing the natural world, it should be interpreted by a scholar who understands that facet of the natural world.

2.9 Conclusions

In this chapter I examined a number of key verses of the Qur'ān, in part through the writings of established exegetes seeking to address some of the key research questions.

The significance of knowledge was revealed to be a means by which humankind can gain some aspect of the Truth of God and His creation. That is, we may better understand the nature of God and our own natures and so be able to better fulfil the reason for our existence, which is to serve God.

The significance of the knowledgeable was that they are the ones who can best understand God's signs and so they are better equipped to follow his will. In addition, they have an exalted status by virtue of the fact that they act as facilitators guiding the less knowledgeable to understand God's signs.

With every verse that I examined it was made abundantly clear that the revelatory text required both the tools of reason to extract its meaning and in most cases worldly knowledge that would enable us to understand a lesson the Qur'ān provided through example or metaphor. Reason and revelation were thus interdependent. To seek to place one above the other would be folly as without revelation our understanding of the signs in the real world would be shallow while without reason we could not understand the signs in the Qur'ān.

I also noted that all the established exegetes interpreted the Qur'ān through the lens of their own context as well as striving to comprehend the original context of revelation where it was

known and relevant. The need for recontextualisation in every age and circumstance was thus apparent.

In some cases, it was apparent that developments in scientific knowledge made verses that were obscure to earlier exegetes clear to later ones. This provided a possible understanding for the assertion that the Qur'ān is relevant to all peoples in all times.

The spiritual and physical, reason and revelation are interconnected. Reason cannot replace revelation and neither can revelation replace reason. They are fundamentally locked with each other. Reason is given a home in revelation. It gives it a context, a direction and a guiding framework without which it can be lost to the vain desires of the self. The scope of knowledge is vast and open providing each person with the opportunity to fulfil their potential; however, without guidance a person can harm themselves.

3 THE DEVELOPMENT OF THE REVEALED SCIENCES

3.1 Jurisprudence - Figh

Uṣūl al-fiqh is a science in which reason and revelation come together, where considered opinion is accompanied by received law.

(Al Shaikh-Ali, 2003, p. vii)

One of the most impressive early achievements in the history of the Islamic advancement of knowledge is the development of Jurisprudence. In the previous chapter, the place of reason and revelation was analysed in the primary Islamic sources from a theoretical perspective. The text of the Qur'ān was discussed and the way in which the Prophet Muḥammad was able to demonstrate those concepts during his lifetime.

Islamic jurisprudence or *fiqh* is a field that stems from revelation and is undoubtedly 'religious' in nature; however, a brief examination would suggest that its development is dependent on reason; the process by which rational knowledge is developed. A popular view amongst some contemporary groups is that the Qur'ān and Sunnah provide between them all the guidance one requires. According to this perspective, such a development would have been unnecessary, so why did the jurists and exegetes feel the need to draw from the Qur'ān and Sunnah theories of jurisprudence?

In this chapter, I will pursue the research questions from a more practical perspective:

- Is Islamic science purely based on revealed knowledge or is there a place for rational knowledge?
- What is the significance of the branches of knowledge in the field of Religious studies?

- Is reason, the mechanism by which rational knowledge is acquired, used in the revealed sciences?
- What is the status of those who are knowledgeable in the religious sciences?

3.1.1 Background to the Establishment of the Schools of Law

The Law of the people of the desert was based upon tribal lines. The attitude 'if you kill one of ours, we will kill one of yours' was the norm and blood ties far exceeded the concept of justice. Catholic theologian Hans Küng highlights that even the Jewish community of southern Arabia had been violent and oppressive indulging in forced conversion and military suppression until an army was sent from Christian Ethiopia to depose them and create a protectorate (Küng, 2007, p. 32). To unite such a people, whose lives were based on blood ties and pagan ideals and who followed the ways of their forefathers with a sense of pride and arrogance and without much rational thought, was a monumental challenge. One of the dominant tools proposed by the Qur'ān was rationality:

Say: "Come, let me convey unto you what God has [really] forbidden to you: "Do not ascribe divinity, in any way, to aught beside Him; and [do not offend against but, rather,] do good unto your parents; and do not kill your children for fear of poverty - [for] it is We who shall provide sustenance for you as well as for them and do not commit any shameful deeds, be they open or secret; and do not take any human being's life-[the life] which God has declared to be sacred -otherwise than in [the pursuit of] justice: this has He enjoined upon you so that you might use your reason.

Qur'ān 6:151 (Asad, 2003, p. 226)

Living a moral, ethical and just way of life is made incumbent upon the believer, which is in accordance with the will of God. The Sharī'ah is defined as 'God's way' which jurist scholars strive to interpret into concrete laws, termed *fiqh*, for how human beings should live in this world to make their life the best it can be and to maximise each individual's chances of achieving paradise in the life to come. In the following verses in the Qur'ān God directs human beings not to follow those who have no knowledge:

And, finally, [O Muḥammad,] We have set thee on a way (شَرِيعَةُ sharia) by which the purpose [of faith] may be fulfilled: so follow thou this [way], and follow not the likes and dislikes of those who do not know [the truth].

Qur'ān 45:18 (Asad, 2003, p. 869)

Guiding a rough Bedouin on the path of rationality could not have been an easy task for anyone, let alone the Prophet® whose character was gentle and kind and "not harsh". He was also someone known for his wisdom. There is a well-known story reported in all the books of sīrah that tells of how, when the prophet was 35, the Ka'ba needed to be rebuilt. This was a task that was seen as daunting because of the reverence with which it was held and one that was thought to bring honour. Therefore, all the tribes wanted to participate. Work went well until it came to replacing the black stone. All the tribes wanted the honour of performing this task and none was prepared to allow the others to do it.

Eventually they resolved to leave the decision in God's hands and agreed that the next person to enter the area would be given the authority to decide how they should proceed. That person was Muḥammad. His solution was to bring a sheet and place the black stone on the sheet. Then representatives of each tribe could hold the sheet between them and carry the black stone between them to the Ka'ba. When they had lifted it to the required spot, he then

secured it in its final resting place. All the tribes were then happy because they had all participated in the honoured job. This was a great example of how he used reason to resolve a problem of human relations (Salahi, 2006, pp. 46-9).

During the life of the Prophet®, it was relatively straightforward for people to resolve their disputes. If a matter of contention arose, the people approached the Prophet® to resolve it, relying upon him because of his reputation for being trustworthy and truthful (a reputation established long before he started to receive the divine revelations) and because they considered him to be guided by God.

During the early period of prophecy at which time the Prophet^{**} and his companions were living in Mecca most of the questions they would bring to him were about this 'new' message; questions to clarify their issues of faith and ethics.

It was not until the Prophet® and his companions' migration to Yathrib (later to be called Madinatun Nabi – the city of the Prophet® or Madina for short) to escape persecution that more practical questions concerning everyday living, family life, justice and civil administration were to become prevalent. There Muḥammad® and his companions lay down the foundational structure for a new society initially through the treaty of Medina, which has been cited as the oldest known multi-faith, multicultural constitution.

In Medina Muslims, Jews, Christians and pagan Arabs learned to live together under the leadership of the Prophet Muḥammad. It was thus a shock to everyone when the Prophet died and the guidance they had been receiving came to an abrupt end.

After the Prophetic period, the Muslim community expanded rapidly beyond the Arabian Peninsula into diverse lands with differing pre-existing cultures including North Africa, China, India and Persia. The Muslim community then had to adapt to new customs, languages and cultures and this brought with it a host of new questions and new contexts within which Islam had to be established.

Prophet Muḥammad s's followers were anxious not to deviate from the original message of the Qur'ān and the Sunnah but eventually this would mean deriving principles and methods from these founding sources so that the learned scholars could consistently, and justly apply the core principles of the new faith to the ever-changing contexts they found themselves in.

As Izutsu expresses it:

The social life of the individual is ruled and regulated by a certain set of moral principles with all of their derivatives. These regulations constitute what we may call the system of social ethics, soon to be developed in the post-Qur'ānic period into the grand-scale system of Islamic jurisprudence.

(Izutsu, 2007, pp. 17,18)

There is a famous <code>hadīth</code> concerning the trip of Mu'adh ibn Jabal, a companion of Muḥammad, to Yemen. Before he embarked on his journey, the Prophet Muḥammad asked him how he will judge among people. He responded by saying that he would use the Qur'ān and Sunnah. The Prophet then asked him what he would do if he failed to find the answer to a problem in the Qur'ān and Sunnah to which he replied that he would use his best judgement:

Narrated by Mu'adh ibn Jabal: Some companions of Mu'adh ibn Jabal said: When the Apostle of Allah (pbuh) intended to send Mu'adh ibn Jabal to the Yemen, he asked: How will you judge when the occasion of deciding a case arises? He replied: I shall judge in accordance with Allah's Book. He asked: (What will you do) if you do not find any guidance in Allah's Book? He

replied: (I shall act) in accordance with the Sunnah of the Apostle of Allah (pbuh). He asked: (What will you do) if you do not find any guidance in the Sunnah of the Apostle of Allah (pbuh) and in Allah's Book? He replied: I shall do my best to form an opinion and I shall spare no effort. The Apostle of Allah (pbuh) then patted him on the breast and said: Praise be to Allah Who has helped the messenger of the Apostle of Allah to find something which pleases the Apostle of Allah.

(Abu Dawud, 1988, p. 1019 Vol 3)

This <code>hadīth</code> establishes the principle of <code>ljtihad</code>, juristic reasoning, a word derived from <code>jihad</code> meaning to strive. Mu'adh uses in the form <code>ajtahidu</code> meaning 'I will try hard' or 'strive'. The nature of this struggle is <code>rayī</code> or my opinion so he was asserting that he would strive to derive a sound opinion. Hashim Kamali in his <code>Principles</code> of <code>Islamic Jurisprudence</code> paraphrases Mu'adh's response saying "Mu'adh told the Prophet[®] that he would resort to his own <code>ijtihad</code>, (Kamali, 2003, p. 288) however this is describing the interaction using <code>ijtihad</code> in a technical sense that had not yet been established rather than accurately translating the dialogue. Thus, the <code>ijtihad</code> has developed as a technical term meaning to strive intellectually to arrive at a juristic solution to a new problem or situation. The guidance found in the <code>hadīth</code> is also found in the Qur'ān where those people who blindly follow pagan customs, customs which themselves were not based on either reason or revelation are chastised:

But when they are told, "Follow what God has bestowed from on high," some answer, "Nay, we shall follow [only] that which we found our forefathers believing in and doing." Why, even if their forefathers did not use their reason at all, and were devoid of all guidance?

Qur'ān 2:170 (Asad, 2003, p. 45)

This could be described as the beginning of a legal system, which began as a religious issue but which, without the rational process, may have remained static and unable to adapt to the new problems faced by diverse societies and a changing world.

Formal methodologies for the establishment of Islamic rulings in new contexts, and to address new issues were not; however, developed until the second century AH. From the above discussion, it might seem obvious that such frameworks would inevitably integrate reason and revelation; however, such a notion was by no means without its detractors. While all scholars used reason to justify their opinions, they were all very cautious about reason as a source of law.

In the early period the foremost criteria used by the early Muslims as a criterion for selecting whose judgement was sound in matters of law was knowledge of the Qur'ān, this being the undisputed word of God. In one <code>hadīth</code>, Muḥammad said:

Learn the Qur'an from four people, Abdullah Ibn Masūd, Salim Maula Abi Huzaifah, Ubayy Ibn Kāb and Muaz Ibn Jabal.

(Asad, 1993, p. 94)

And in another he said:

If anyone likes to recite the Qur'ān as fresh as it had descended then he must recite it on the reading of Abdullah ibn Mas'ūd.

(Nomani, 2002, p. 557)

This has contributed to the acceptance of <code>Ḥafṣ</code>, as the most widely preferred *reading* in the Muslim world as this way of reading has its roots in the recitation of, amongst others Abdullah ibn Masood. This also contributed to many of the <code>ṣahāba</code> revering the knowledge and judgement of Abdullah Ibn Masood.

After the Qur'ān, the next source of knowledge for deriving law was the Sunnah or way of the Prophet Muḥammad which was preserved through the ḥadīth. After the death of the Prophet, thousands of the ṣahāba (companions) and tābi'ūn (successors) engaged in the

collection of $had\bar{\imath}th$ but most were very cautious about using them to derive legal rulings, knowing that while they may possess one $had\bar{\imath}th$ on a topic there might be many others that this should be balanced against. There were far fewer people prepared to give juristic opinions $(fat\bar{a}w\bar{a})$, and amongst those, there was often a reluctance to narrate $ahad\bar{\imath}th$ as they more than others realised the heavy responsibility that narrating a prophetic tradition that could change the way people behaved and they were very concerned not to recount weak traditions. This does not mean however, that there was a lack of respect between these two groups as each recognised the need for the other but it did mean that from a very early stage there was a degree of separation and specialisation between the $muhaddith\bar{\imath}n$ (scholars of $had\bar{\imath}th$) and the $fuqah\bar{a}$ (jurists) (Nadwi, 2007, pp. 76-77).

The following narration demonstrates the reticence that Abdullah Ibn Masood showed towards giving a legal opinion without a sound *ḥadīth* to support it:

It was narrated from 'Abdullah that some people came to him and said: A man among us married a woman, but he did not name a dowry for her, and he did not have intercourse with her before he died." 'Abdullah said: 'Since I left the Messenger of Allah I have never been asked a more difficult question than this. Go to someone else.' They kept coming to him for a month, then at the end of that they said: 'Who shall we ask if we do not ask you? You are one of the most prominent Companions of Muhammad in this land and we cannot find anyone else.' He said: 'I will say what I think, and if it is correct then it is from Allah alone, with no partner, and if it is wrong then it is from me and from the Shaitan, and Allah and His Messenger have nothing to do with it. I think she should be given a dowry like that of her peers and no less, with no injustice, and she may inherit from him, and she has to observe the 'Iddah, four months and ten days." He said: "And that was heard by some people from Ashja', who stood up and said: 'We bear witness that you have passed the same judgment as the Messenger of Allah did concerning a woman from among us who was called Birwa' bint Washiq." He said: "Abdullah was never seen looking so happy as he did on that day, except with having accepted Islam.

(An-Nasa'i, 2007, pp. 169-170 Vol 4)

A number of similar narrations are recorded where the person who reassured Abdullah Ibn Masud is said to have been Ma'qil bin Sinan Al-Ashja'i.

In this interaction, we can see that Abdullah Ibn Masūd was not aware of the <code>hadīth</code> held by Ma'qil bin Sinan Al-Ashja'i. He used his judgement to give a verdict; however, when the <code>hadīth</code> was narrated he was greatly relieved that it supported his judgement and that therefore he had given a sound ruling and he was filled with gratitude for the narrator. Ma'qil bin Sinan Al-Ashja'i was not one of those whom the people turned to for legal advice but his narration of <code>hadīth</code> was respected.

3.1.1.1 The City of Kufa

The city of Kūfa in Iraq began as a military encampment under the governorship of the companion Sa'd ibn Abi Waqqas during the rule of Umar, the second Caliph, following the defeat of the Byzantine army in the battle of Yarmouk. Caliph Umar sent Abdullah Ibn Masūd there to educate the people there and take responsibility for the *Bait-ul-mal* (treasury), although he refused the offered salary for this role. Mecca and Medina had benefitted directly from the presence of the Prophet Muḥammads; however, Kūfa was an entirely new city with new challenges. In addition to this, many of the Prophet's companions migrated to Kūfa so there was both the need for new legal opinions and the people with the best qualifications to fulfil that need. Given this, it is perhaps not surprising that it was in Kūfa that the first formal legal framework was established.

Kūfa was later chosen as the city from which the fourth Caliph 'Ali ibn Abi Tālib ruled. This at once strengthened it through the influx of companions and the next generation of Muslims and generated many challenges. It was particularly during the rule of Caliph 'Ali that the Muslim community fragmented into competing factions and the support of these contrasting viewpoints prompted some to fabricate Prophetic traditions in attempts to bolster the opinion they favoured (Khan, 2010, pp. 4,5).

Abdullah Ibn Masūd was succeeded in his juristic leadership by his students 'Alqamah ibn Qays al-Nakha'i and al-Aswad. Their principal student was Ibrahīm ibn Yazīd al Nakha'i who was so respected that he was given the title of *Faqīh al-Iraq* (The jurist of Iraq). He was succeeded by Ḥammad ibn Abi Sulayman (d 120AH) but it was his student; Abu Ḥanīfah Nu'mān ibn Thābit, that transformed the role of *faqīh* through the establishment of a formal legal framework (Nadwi, 2007, pp. 6-7).

3.1.2 Founders of the Schools of Sunni Jurisprudence

3.1.2.1 Abu Ḥanīfah Nu'mān ibn Thābit (699-767 CE)

Abu Ḥanīfah Nu'mān ibn Thabit was the son of a successful silk merchant who learned the Qur'ān at an early age and then became interested in dialectic theology, engaging in debates with the Kharijites (an early sect) when business took him to Basrah. Quite abruptly, however, he realised that *fiqh* (*jurisprudence*) unlike theology was a practical science that benefitted the community so he put all his efforts into learning it.

Abu Ḥanīfah travelled many times to Basrah and to Mecca and Medina and while each trip would have been for business, he would always take the opportunity to sit with the scholars

there and learn from them. From early on he gained a reputation for his ijtihad and was known as a scholar of *rayy* and *qiyās* (opinion and analogy). This would have been less than complementary as it implied a preference for opinion over following the *ḥadīth* closely. Scholars who came to know him however, generally revised their opinion of him significantly once they became aware that his arguments were always robust and rooted in the primary sources of Qur'ān and Sunnah.

An example of this is given by Nadwi who cites the case of the great Syrian imam al-Awza'i. He had warned his student Abdullah ibn al-Mubarak not to go near Abu Ḥanīfah whom he described as an innovator who has appeared in Iraq. (Innovation or bid'a was a very strong term and the Prophet famously stated that 'every bid'a is in the hellfire' (An-Nasa'i, 2007, p. 439 Vol 2)). However, after a trip there Abdullah narrated to him some of the complex juristic issues he had discussed with a sheikh there. Al-Awza'i was impressed and said; 'this is a noble sheikh; go and learn from him. Whereupon Abdullah revealed that, the sheikh he had met was in fact Abu Ḥanīfah. Al-Awza'i later met Abu Ḥanīfah in Mecca and discussed the same juristic issues with him in more detail. Following that, he said to his student Abdullah; 'I envy this man for his abundant knowledge and perfect intelligence, and I repent to God, for I had been in a clear mistake about him. Stick close to this man, for he is different to what has been reported to me' (Nadwi, 2010, pp. 28,29).

The use of reason was thus somewhat strange and undoubtedly treated with suspicion by the scholars of the day but those who looked deeper into Abu Ḥanīfah's work were in most cases won over to the idea that it was in harmony with and complementary to the teachings of the Qur'ān and the Prophet Muḥammad.

This chapter began by highlighting the term *rayy* or opinion as the expression of reason in Islamic jurisprudence. Al-Awza'i was by no means the only one to accuse Abu Ḥanīfah of preferring his opinion to sound *ḥadīth* and the school of Abu Ḥanīfah came to be termed the Ahl al-Rayy - the people of opinion, in contrast to the followers of the other schools who were given the title *Ahl al-Ḥadīth* - people of *ḥadīth*. Therefore, it is important to examine these claims to determine whether the Hanafi School did use reason more than the other schools and if so whether this can be seen to lie within the bounds of mainstream Islam or if it is an aberration, as some would assert.

It is important to clarify that the science of <code>hadīth</code> authentication as we know it now did not exist until sometime after Abu Ḥanīfah. This does not mean that he and the scholars of his generation did not apply some criteria to the determination of the strength of each tradition but these were somewhat different criteria to those used later on. Abu Ḥanīfah preferred to use <code>hadīth</code> narrated by scholars of <code>fiqh</code> to those narrated by others. He was very wary of isolated <code>hadīth</code> that came with only a single chain of narration (perhaps in part because of the prevalence of forged <code>hadīth</code> in the region.) Another limitation Abu Ḥanīfah would place on the use of <code>hadīth</code> was that he did not accept as some later scholars did the use of <code>hadīth</code> to modify the application of a Qur'ānic ruling, either to make a general rule particular or vice-versa.

Another issue that is worth mentioning is that for the scholars at the time of Abu Ḥanīfah it was common to mention the chain for a ḥadīth that only had a single chain of narration; however, for a well-known ḥadīth with many chains they would not provide the <code>isnad</code>. This resulted in some ḥadīth that were considered strong by early scholars later being designated weak by later scholars.

We have already highlighted that amongst the companions and successors the use of reason was limited to cautious application based always on the Qur'ān and Sunnah with the exception of the schismatic groups who sought to depart from the mainstream understandings. Abu Ḥanīfah refined the use of *qiyās* - analogical deduction, by developing rules for its application to allow consistency of its use. The scholars of Kūfa were known for their extensive use of *qiyās* and so Abu Ḥanīfah's work may be seen to introduce greater caution and safeguards rather than less. One example of this is that he rejected the use of *qiyās* in matters of *ibādāh* (worship) on the basis that formal worship was defined by God using a rationale that human reason cannot expect to comprehend.

Finally, it is important to note that most of Abu Ḥanīfah's opinions were views that were the norm in Kūfa. For instance, it has been suggested that he innovated in not raising his hands for $takbir^2$ in the middle of the prayer. While it is true that his view was based upon a hadīth narrated by Abdullah Ibn Masūd, and he preferred this to other hadīth because of the nature of the narrators who were $fuq\bar{a}h\bar{a}$, it is also true that not raising the hands had become the amal or norm of the people of Kūfa'³ (no doubt through the influence of those jurist scholars in the chain who had spent time there.)

Some scholars demanded that their students followed them completely and adopted all their views. Abu Ḥanīfah however, valued the opinions of his best students highly and would discuss all topics with them. If they could not come to an agreement on an issue, he would have them

² Saying *Allāhu Akbar*

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³ Here 'amal is used in the sense coined by the later Maliki school who used the established practice of the people of Medina as a source of law. Therefore, the 'amal of Kufa' means the established practice of the people of Kufa.

record all the opinions voiced. Thus, he established the important principle that difference amongst the scholars was to be respected rather than seen as a weakness. He felt so strongly about this that he submitted to being imprisoned rather than allowing himself to be the leader of a scholastic school that was imposed on the whole community.

From the above discussion, it is apparent that Abu Ḥanīfah's school of jurisprudence was firmly based on logic, reasoning and consultation with the Qur'ān and Sunnah central to every opinion developed.

3.1.2.2 Malik Ibn An-Nas (711-795 CE)

The second school of law to be established was that of Malik Ibn An-Nas in Medina. Imam Malik like Abu Ḥanīfah grew up with many of the greatest scholars of the day. In his case, his teachers included the famed *Seven Fuqāhā of Medina*: Sa'id ibn al-Musayyah, 'Urwa, al-Qasim ibn Muḥammad, Kharijah, Sulayman ibn Yasar, Ubaydallah ibn Abdallah and Abu Bakr ibn 'Abd al-Rahman. Like Abu Ḥanīfah he drew extensively upon the accepted practices of his hometown; however, in the case of Imam Malik that town was Medina; the place of the first Muslim run society, where the greater part of the Qur'ān was revealed. Imam Malik therefore surmised that a tradition drawn from the 'Amal or normative practice of Medina was in his view equivalent in status and reliability to a ḥadīth mutawātir, i.e. a ḥadīth with multiple chains of narration; even if those chains could not be identified. Some notable scholars of other schools of thought including the later Ḥanbali scholar Ibn Taymiyyah endorsed this principle (Ibn Taymiyya, 2000).

While the use of the 'Amal of Medina seems reasonable from a purely rational perspective, to only describe it in these terms provides an inadequate description of the thinking of this great scholar. Malik's foremost teacher was the reputed scholar of hadīth and jurist Abdul-Rahman ibn Hormuz bin Abi Sa'ad; however, his role was not to transmit hadīth or fiqh but to pass on to him a love of the Prophet Muḥammad and a sense of the sacred quality of the City of Medina. It is recorded that for 20 years Malik would visit him almost daily and that his visits were spent in a room with the doors and curtains closed during which time ibn Hormuz would tell Malik tales of the Prophet and the companions and that by the time the meeting was concluded both men's beards would be wet with their tears.

The 'Amal of Medina did not replace the use of <code>hadīth</code> and in fact the compilation of <code>hadīth</code> prepared by Imam Malik; the Muwatta, has been described by scholars, including Ibn Hajar al Asqalani, the author of <code>Fath al-Bari</code>, the famous commentary of the <code>Ṣaḥīḥ</code> of Al Bukhārī, as the most authentic volume of <code>hadīth</code> ever created.

With regard to *qiyās*, Malik, like Abu Ḥanīfah, accepted the use of analogical reasoning as a source of law but his greater emphasis on the use of *ḥadīth* meant that he was not considered to be of the *Ahl al-Ra'yy*.

Malik and Abu Ḥanīfah both identified some clear criteria by which they made their judgements and legal opinions. It was however, a student of Malik and contemporary of Abu Ḥanīfah's student Muḥammad Al Shaybānī, Muḥammad Ibn Idris Al-Shafi'i who is credited with being the first to formalise a set of consistent and coherent principles and so transform the science of jurisprudence into the consistent and coherent science it is today.

3.1.2.3 Al-Shafi'i (767-820 CE)

Al-Shafi'i was from the tribe of the Prophet Muḥammad and was born in the year 150 AH, the year of Abu Ḥanīfah's death in the city of Ghaza in Palestine. He was then taken to Mecca as a boy where he memorised the Qur'ān by the age of seven. Despite Al-Shafi'i's passion for the Islamic sciences and the aptitude that he showed from so early an age it was not easy for him to continue his education as his family were poor. He would stand at the outer edge of circles until the scholars drew him in based on his talent rather than any fees and he was forced to make his notes on scraps of animal skin and bones. His prodigious memory however, compensated admirably for this shortcoming and by the age of ten he had committed Malik's Muwatta to memory.

As was common for the Arabs of the region he was sent for some time to live with the Bedouins where he developed a high level of competency in Arabic and a love of poetry, and he proved highly skilled in archery.

The love of poetry was something that stayed with Al-Shafi'i perhaps because the community saw this as being a noble pursuit befitting a religious scholar; in part because the high level of language poetry demanded would also enable the scholar to more reliably interpret the Qur'ān and sayings of the Prophet.

Al-Shafi'i returned to Mecca and stayed there for some years where he continued to develop his facility with poetry whilst also studying the Religious sciences, principally hadīth. He then moved to Medina where he met with Malik. Malik offered to teach him the Muwatta but he revealed that he had already memorised it and when he recited it to Malik the scholar of

Medina was so taken with his articulation that he pressed him to continue until he had completed the whole work. This was the start of a close pupil teacher relationship between Al-Shafi'i and Malik. Al-Shafi'i studied with Malik for at least 4 years and was always respectful of his teacher even when later on he came to believe his approach to jurisprudence was flawed.

Following the death of Imam Malik, Al-Shafi'i made one or two trips to Yemen. He continued to study as widely as the disciplines of Physiognomy and medicine and considered the latter to be of great worth. He is recorded as stating 'knowledge is of two types: religious knowledge and worldly knowledge. Religious knowledge is Jurisprudence and worldly knowledge is Medicine' (Ali, 2011, p. 14).

This very limited description of the two branches of knowledge may be taken as an indication of which sciences of each type Al-Shafi'i considered truly praiseworthy and perhaps may indicate the type of knowledge he considered was being referred to by the Prophet® when he exhorted humankind to seek knowledge. Travelling became a very important aspect of Al-Shafi'i's life that would contribute to his new approach to jurisprudence that sought to combine the good features of the other jurists of the day and mould them into a coherent whole.

In Yemen Al-Shafi'i became advisor to the governor however, his personal integrity proved too much for the governor; who was used to controlling and manipulating his legal advisors. Ultimately, the governor accused him of involvement in a Shia rebellion and had him imprisoned. Al-Shafi'i and his alleged co-conspirators were then transported to Iraq to be brought before the Caliph Harun Al-Rashid. There the others were found guilty and executed;

however, either through his eloquent rebuttal of the charges against him or, more likely through the intervention of the Caliph's chief advisor Muḥammad Al-Shaybānī, the student of Abu Ḥanīfah, Al-Shafi'i convinced the Caliph to acquit him. Whatever the case may be, Al-Shafi'i chose to remain in Iraq and to study with the notable scholars of the Hanafi school who resided there (Muḥammad Al-Shaybānī being the most influential and gifted of them).

Al-Shafi'i and Muḥammad Al-Shaybānī spent a number of years studying together and debating. Al-Shaybānī had benefited from studying for a time with Imam Malik so he had absorbed some of the Maliki ideas into his Hanafi School of jurisprudence and as it has been highlighted, debate had always been an integral part of the Hanafi circles so challenges from Al-Shafi'i would not have been seen as in any way disrespectful.

Al-Shafi'i then returned to Mecca where he began to teach and to develop his ideas on Jurisprudence. His time spent studying with both Malik and Muḥammad Al-Shaybānī had identified for him strengths and weaknesses in both schools. Most crucially, he had become aware that neither had established core principles from which consistent and coherent judgements could be made. He felt this would lead to inconsistent judgements and so he set about formulating a thorough theoretical framework through which the Qur'ān and Ḥadīth could be applied in a consistent and balanced way. He published this in his work 'al-Risala'.

With regard to the use of rational knowledge, Al-Shafi'i, like Malik, believed that the Hanafis were too quick to employ analogical reasoning when revealed sources were available. He defended the principle of *qiyās* however, observing that Muslims were obliged to pray facing towards the Ka'ba; however, unless they were actually in Mecca they could not see the Ka'ba so they, of a necessity, must use logical reasoning to determine to the best of their ability the

correct direction for their prayer. This was later of course one of the motivating principles that led Muslim astronomers to develop their sophisticated spherical geometry.

3.1.2.4 Aḥmad Ibn Ḥanbal (781-855 CE)

The founder of the fourth school of jurisprudence that has persisted into the modern era was Aḥmad Ibn Ḥanbal. He was born in 781 CE in an Arab family in Baghdad. His family were not wealthy but he inherited a property from his father and used the rental income from it to fund his studies. To supplement this, he earned a humble income from working as a scribe, weaving and embroidering men's caps. He was a very serious and ascetic man who developed a passion for authentic <code>hadīth</code> and became the premier <code>Muḥaddith</code> (scholar of <code>hadīth</code>) of his age. In one tradition his son Abdullah ibn Aḥmad narrated that he heard Al-Rāzī state that Aḥmad memorised a million <code>aḥadīth</code> which he rehearsed with him according to topic (Haddad, 2007, p. 303).

The Musnad of Imam Aḥmad is one of the largest collections of ḥadīth containing around 40000, which were distilled according to Aḥmad himself from over 750000 (Ad-Dihlawi, 2007, p. 70). Some early scholars did not consider him a faqīh referring to him as a muḥaddith but this opinion has been superseded and he is now widely accredited with founding the fourth of the Sunni schools of law.

Aḥmad Ibn Ḥanbal studied extensively with Al-Shafi'i, and with Abu Yusuf the student of Abu Ḥanīfah; however, while he visited Kūfa he was very distrusting of the Hanafis because of their extensive use of *qiyās*. We should note here that Abu Yusuf was known to have studied with Imam Malik and to have incorporated some aspects of Maliki into his teaching so this explains

in part why Aḥmad remained his student until his death (Al-Matroudi, 2010, p. 6). Despite his criticism of the excessive use of *qiyās* Aḥmad was said to speak only kindly of Abu Ḥanīfah and to be insistent on respect for all the major schools. Aḥmad Ibn Ḥanbal accepted very limited use of reasoning but, perhaps in part because his encyclopaedic knowledge of ḥadīth he rarely saw the need for any departure from reliance on the Qur'ān and Sunnah. We should remember of course that Imam Aḥmad lived in the same generation as the great scholars of ḥadīth and his time represents the period of the greatest development in the collections of ḥadīth and the refinement of the methodology of the *muḥaddithīn*.

Aḥmad ibn Ḥanbal was a man of very high principle and suffered prison and torture for refusing to support the ruler's insistence on the Mu'tazilite doctrine of the created Qur'ān. He was frequently called upon to give juristic opinions and did so willingly, but he was very upset when he discovered many of them had been written down. It is said that when he discovered one of his students had made a record of his opinions he immediately publically repudiated them. This may have been because he feared they would be taken out of context and used erroneously or it could also be because he feared he might have made a mistake and did not want to be responsible for many people following an error.

His development of jurisprudence was very heavily reliant on <code>hadīth</code> and he insisted that to be a Mufti a scholar must know at least 500000 <code>hadīth</code> although he was conscience of the lack of knowledge of <code>fiqh</code> amongst the <code>muhaddithin</code> (scholars of <code>hadīth</code>).

From this introduction to the four extant schools of Sunni jurisprudence, it could be inferred that the use of analogical reasoning peaked with Abu Ḥanīfah and then became steadily less with each of the later schools until Imam Aḥmad Ibn Ḥanbal for whom it was at best a

necessary evil. This apparent progression is however, quite misleading as the Muslim community did not as a whole progress from one school of thought to the next but rather it fractured juristically with each of the approaches becoming well established in a substantial region of the world and continuing to develop until the present day.

3.1.3 Ibn Hazm (994-1064 CE) and the Zāhirī School

The four main schools of Sunni jurisprudence all accepted and integrated analogical reasoning into their systems; however, there was a less well known and accepted school that did not. The $Z\bar{a}hir\bar{i}$ (lit. apparent) or Literalist School led by the Andalusian scholar Ibn Hazm rejected all forms of $qiy\bar{a}s$ (Chejne, 1982, pp. 125-7). Ibn Hazm argued that the rules of the $Shar\bar{i}$ are conveyed through commands and prohibitions (dos and don'ts) and that there are only three $a\dot{i}k\bar{a}m$ (pillars) – command, prohibition and permissibility. Therefore, in the absence of any specific command or prohibition from the revealed sources all things default to being permissible.

His second point of contention was that the supporters of *qiyās* asserted that Qur'ān fails to provide a *naṣṣ* (explicit text) for every situation; however, this is in conflict with the statement in surah Al-An'ām that "We have omitted nothing in the Book".

Thirdly, he asserted that analogical reasoning derives its justification from an 'illah' (effective cause) which is common to both the original case and the new. If the effective cause is in the text, then he states that analogical reasoning is redundant as logic will suffice and if it is not then the foundation of the analogical reasoning is purely speculative and thus in conflict with the statement in surah Al-Najm that 'conjecture avails nothing against the truth.' From this

we can see that at least a part of the disagreement lies in either the definition of analogical reasoning or the definition of the effective cause.

Finally, Ibn Hazm interpreted the verse in surah Ḥujurāt where Allah commands 'Do not press forward before God and His Messenger to mean that the believers must refrain from legislating on matters in which Allah and his Messenger remained silent.

This minority view has gained some support more recently as in the post-colonial era some Muslims have rebelled against everything they perceive to be Western and corrupt and have found the highly simplistic literalism of the <code>Zāhirī</code> school seductive and reassuring in the way that it eliminates human agency and places full control with the creator through his revealed message. Scholars from the other schools have highlighted some perverse opinions that come out of the <code>Zāhirī</code> School.

They see the Qur'ānic prohibitions as referring only to worship (*ibādāh*) and this has formulated their definition of *bid'a* or innovation as the establishment of a new practice in worship that is not founded in the Qur'ān and *ḥadīth*. For them all other matters are free of the prohibition and there are areas where careful speculation is not merely permitted but is enjoined.

3.1.4 Fiqh Al-Wāqi'a (Understanding the Reality)

Thus far, *qiyās* or analogical reasoning has been highlighted as the key component of rational knowledge in the development of the schools of jurisprudence and this is indeed highlighted as one of the core sources in most texts on jurisprudence. I would assert; however, that rather

than a source it is actually a process. The question then remains: what rational *knowledge* was accepted as a key foundation of jurisprudence?

Sharī'ah does have a rational origin as well as its basis in revelation. By definition *fiqh* or jurisprudence is divinely guided law to be applied in a specific 'real' situation. Thus understanding the reality (*fiqh al-wāqi'a*) is without doubt a rational source. One feature common to all the early jurists was that they went to a great deal of trouble to truly understand the 'reality' of life for those who sought their legal opinions. All four rejected the offers of a comfortable life working for the rulers to avoid the pressure to conform to the politically motivated objectives of the Caliphs and all four lived simple austere lives motivated also by the desire to pursue piety and avoid the lure of worldly possessions. The scholars established early on the principle that a religious opinion or *fatwa* was only valid if it was based upon a true understanding of the circumstances of the people for whom it was made, and that the same legal question could produce a very different answer in different circumstances. Thus, the reality, the physical and social context that is determined by rational inspection, is a core component of every legal opinion.

This was eloquently explained by the later scholar Ibn Qayyim al-Jawziyyah (1292-1350 CE) who said:

The mufti or judge is not able to issue a fatwa or verdict without understanding two things:

- (i)Understanding and having a good grasp of reality: he should have a good understanding of what is happening, on the basis of circumstantial evidence and other signs, so that he has a full understanding of it.
- (ii) Understanding what is required in the light of these circumstances, which means understanding the ruling of Allah that He issued in His book or on the lips of His Messenger

concerning this reality; then he should apply the one to the other (I'lām al-Muwaqqi'īn, 1/87: Source: I'lam Al-Muwaqqi'īn 'an Rabb Al-Alamin 11).

This principle was formalised in different ways by the various schools of jurisprudence. The Hanafis established the principle of <code>istiḥsān</code> (equity). The literal meaning of this term is to 'approve or to deem something preferable' and it refers to preferring one opinion derived from analogical reasoning with another in order to avoid a perceived unfairness or inappropriate rigidity that would result from the literal enforcement of a normally accepted law. This is a legal principle that has produced a great deal of debate amongst the Islamic jurists with the most vehement opponents being the Shafi'i School who reject the concept outright. The Maliki School however, went further still in establishing <code>Muṣlaḥah Mursalah</code>, the principle of considerations of public interest, which they considered allowed unrestricted reasoning to take preference over analogical reasoning. Kamali defines this as:

...consideration that is proper and harmonious (wasf munāsib mulā'im) with the objectives of the Lawgiver; it secures a benefit or prevents a harm; and the Sharī'ah provides no indication as to its validity or otherwise.

(Kamali, 2003, p. 351)

The other three schools all accepted the principle of *muṣlaḥah mursalah* but the Hanafis and Shafi'is were more restrictive than the Malikis in insisting that it cannot be an independent proof. The Hanafis consider it a variety of *istiḥsān* whereas the Al-Shafi'is only accept *muṣlaḥah* as a tool of *qiyās*, thus requiring some textual authority (*naṣṣ*) at its root.

Although each specific opinion that comes out of this principle does so without direct reference to the revelatory sources, the principle itself is found within the Qur'ān and ḥadīth.

Commonly cited verses of the Qur'ān relevant to this include:

We sent thee not, but as a Mercy for all creatures.

Qur'ān 21:107 (Ali, 2004, p. 818)

And:

...God does not want to impose any hardship on you...

Qur'ān 5:6 (Asad, 2003, p. 166)

Acting on this principle the companions starting with the Caliph Umar imposed taxes that were used to fund welfare systems, establish prisons etc. and they established currency, all actions that were not explicitly demanded by the revealed texts, even by analogous reasoning but were in keeping with the principles that it laid down:

Ibn Al-Qayyim said, "Verily, the Sharia is founded upon wisdom and welfare for the servants in this life and the afterlife. In its entirety, it is justice, mercy, benefit, and wisdom. Every matter which abandons justice for tyranny, mercy for cruelty, benefit for corruption, and wisdom for foolishness is not a part of the Sharia even if it was introduced therein by an interpretation."

(I'lam Al-Muwaggi'in 'an Rabb Al-Alamin 11)

Thus, the rational understanding of the reality of a situation (the natural world) is a key component of Islamic jurisprudence and so we are led to the inescapable conclusion that revealed knowledge requires rational knowledge to be applied in accordance with the revealed law.

Muṣlaḥah Mursalah was to later become a core component of a broader set of principles termed Al-Magāṣid Al-Sharīʿah.

3.1.5 Magāṣid Al-Sharīʿah

The term Maqāṣid means 'objectives' and the *Maqāṣid Al-Sharīʿah* are the 'higher objectives' or 'goals' of the law. *Muṣlaḥah mursalah* was one of the first of these higher principles to be articulated by the scholars. During the early period, evidence for an orientation towards the preservation of such higher objectives lay largely in the Hanafi and Maliki schools as the *Ahl Al-Ḥadīth* tended towards a literalist interpretation of revealed texts. An open discussion of the concepts first surfaced in the tenth century with writings of Abū 'Abd Allah al-Tirmidh al-Hakim (d 932CE) and Imām al-Ḥaramayn al-Juwaynī (d 1085CE) who divided such principles into three categories (Al-Raysuni, 2005, p. 16):

- 1 Essential (darūriyyāt)
- 2 Complementary (ḥajiyyāt)
- 3 Desirable (taḥsīniyyāt)

Five particular fields within the Maqāṣid were then identified by Imam Al-Ghazālī (d 1111CE) (Auda, 2008, p. 18):

- 1 Faith
- 2 Life
- 3 Intellect
- 4 Lineage
- 5 Property

This was then expanded by Ibn Taymiyyah (d 1328CE) who felt the earlier defined categories were too confining and advocated an open-ended list that could be added to over time.

3.1.5.1 Al- Shāṭibī (d 1388 CE)

It was the 14th Century scholar Ibrāhīm ibn Mūsā ibn Muḥammad al-Lakhmī al-Gharnāṭī Abu Isḥāq al-Shāṭibī (d 1388CE) now simply referred to as Imam Al- Shāṭibī, who is credited with developing the concept of *Maqāṣid al-Sharīʿah* into a systematic approach to jurisprudence.

The key significance of this concept is that it is based firmly on a rational understanding of both the world and the revealed sources and is arguably the approach to understanding *Sharīʿah* that most tightly integrates the two fields of knowledge: the revealed and the rational.

Al- Shāṭibī grew up in the cosmopolitan Andalusian city of Granada at a time when it was the last remaining outpost of Muslim rule in Spain and had benefitted from centuries of scholarship both religious and secular. Far from being a revolutionary innovator in jurisprudence, al-Shāṭibī was a Maliki jurist known for his harsh stance against innovative practices in worship (bid'a). In particular, he issued fatāwā against congregational supplications offered after the obligatory prayers, group dhikr, celebrating the birthday of the Prophet etc. Thus, his work on the higher principles of the law can be seen to be a conservative proposal that was constrained tightly to adhere to the core principles of all schools of thought. Some have described it as a convergence of the Maliki and Hanafi School but it can equally be seen to be valid for the Al-Shafi'i and Ḥanbali schools.

The key principles that Al-Shāṭibī proposed were:

- The notion that the maqāṣid are fundamentals of religion and not merely 'non-restricted interests' as suggested by earlier scholars such as Al-Ghazālī. (This idea can be seen in the statements previously given from ibn Al-Qayyim but al-Shāṭibī is credited with being the first to formalise this understanding)
- That the maqāṣid are the bases for juristic rulings and not merely wisdoms behind them and thus should be given greater weight than partial rulings
- That the inductive process used to define the maqāṣid is 'valid' and 'certain' in contradiction of the Neo-Platonist teachings that all inductive reasoning is inherently uncertain (Auda, 2008, pp. 20-21)

Al-Shāṭibī's ideas were by no means popular and gained few supporters until his ideas were re-expressed and built upon by the 20th century Tunisian scholar Ibn Ashur (d 1973CE). They have since become one of the most discussed and debated approaches to jurisprudence with major contributions by Yasser Auda, Yusuf Qaradawi, Hashim Kamali and Tariq Ramadhan. Some such as Yasser Auda have suggested that the principles offer hope to narrow the intellectual gap between the various *madhabs* with the potential to even bridge the sunnishia divide through focussing on principles common to all schools rather than the detailed specifics.

3.1.6 Ibn Taymiyyah and the Modern Salafiyyah Movement

1263 CE marked the birth of one of the most influential scholars who challenged and influenced much of the Muslim world. Aḥmad ibn Taymiyyah, known since as simply *Ibn*

Taymiyyah, was born in Harran in Northern Iraq in an educated family of high repute. His grandfather was a renowned teacher of the Ḥanbali school and the family subsequently moved to Damascus (fleeing the armies of the Tartars) where his father became the khatīb (preacher) of the great Umayyad mosque and a professor of ḥadīth in Darul-Ḥadīth As-Sukkariyyah a college for students of Ḥadīth. It is said that both his father and his grandfather were blessed with eidetic memories, but that Ibn Taymiyyah surpassed both of them in this regard (Nadwi, 2005, p. 18).

Ibn Taymiyyah was educated in the Ḥanbali *madhab* and there is no doubt that it was Aḥmad Ibn Ḥanbal whose scholarship he revered above the other great *Mujtahids* (founders of the schools of Law). He, however, was more accepting of a broader approach to the roots of Islamic jurisprudence, accepting analogical reasoning more fully and embracing the concepts of *Istiṣhāb* (the presumption of continuity), *Maṣlaḥah mursalah* (public interest) and *Sadd al-Dharā'i'* (lit. blocking the means, that is; preventing the use of lawful means to achieve unlawful ends) and finally *Urf* (custom) (Al-Matroudi, 2010, pp. 39,40). He may thus be seen as a Ḥanbali scholar who accepted more of the approaches of the other schools. This generated much criticism from scholars of the Ḥanbali *madhab* who considered him to be propagating heresy. Although much of their concern was connected with his philosophy and in particular his very literalist interpretation of the Qur'ān which reignited the debate over the apparent anthropomorphisation of God in the Qur'ān⁴. For others however, Ibn Taymiyyah became a figurehead for those who question the necessity of following a single *madhab*. For

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⁴ This was a common understanding that was attacked by Ibn Al-Jawzī (d1201) who established a new consensus against the literal interpretation of verses that ascribe human attributes to Allah. See Ali (2006)

them he achieved the status of an absolute *mujtahid* (independent jurist) and thus the head of a new school of law although as a supposed opponent of *taqlīd* (the blind following of a school of law) this 'title' is perhaps ironic.

Ibn Taymiyyah's knowledge was unquestionably vast. He was praised for it by even his greatest scholastic adversaries. This is well illustrated by Abul Hasssan 'Ali Nadwi when he quotes from one of Ibn Taymiyyah's greatest adversaries, Allama Kamal-ud-din al-Zamalkani:

God has made knowledge of all the sciences as easy for Ibn Taymiyyah as iron had been softened for (the Prophet) David. Whenever he was asked any question, he answered in a way that the audience thought him to have spent his whole life in acquiring knowledge of that very branch of knowledge alone and acknowledged him as the greatest authority on the subject. Scholars subscribing to different juristic Schools attended his discourses and each one of them learnt something that he had not known earlier. It never happened that he debated any point and was put to shame. Whatever the subject matter about which he spoke, whether religious or discursive, he surpassed all the authorities on that particular subject.

(Nadwi, 2005, pp. 23, 24)

Ibn Taymiyyah studied the rational sciences as well as the revealed and praised the scholarship of the Greeks in that area while he condemned them for their ignorance in the field of metaphysics describing them as "unenlightened folk without any knowledge of what constitutes the truth" (Nadwi, 2005, p. 96).

He was particularly well known for his efforts to purge Islam of what he perceived to be corrupting influences, writing substantial texts critiquing Sufism, Christianity, Neo-Platonist philosophy etc. - texts that would continue to be considered influential and in some cases authoritative until the present day.

He was followed by his student Ibn Qayyim al-Jawziyya but their approach was widely perceived as heretical by the majority of Muslim scholars. It therefore did not gain a much wider following until the 18th Century activist Muḥammad ibn Abdul Wahab (1703-1792).

3.1.7 Muḥammad ibn Abdul Wahab (1703-1792)

Ibn Wahab was raised by his scholar father in the Ḥanbali School. He was by no means as learned or intelligent as Ibn Taymiyyah, but like him, he strove to address practices he considered decadent or innovative in religion in an effort to purify the practice of Islam in Arabia. He perceived many of the later innovations (especially Sufi practices despite practicing Sufism himself early on) to be a product of the mainstream schools of jurisprudence and for this reason he rejected them striving to 'purify' the faith by a return to the original teachings. He was condemned for this by most other scholars including his father from whom he received his original training in *Sharī'ah* but many around him were convinced though their own witnessing of the decadence and depravity of the ruling classes.

Ibn Wahab's movement gained impetus when he convinced a local chieftain from the tribe of Sa'ūd to join him. Together they took the Hijaz including Mecca and Medina and laid the foundation for the society that persists in Saudi Arabia today. The pact Ibn Wahab made with Muḥammad ibn Saud forged an alliance under which political power would remain with the Saudi family while religious authority would remain with the Al-As-Sheikh family of ibn Wahab. That pact remains in place to this day.

Juristically the Salafiyyah movement is very close to the Ḥanbali movement, where Ibn Ḥanbal was reticent to use *qiyās* the selafis rejected it totally. This coupled with their very literal

interpretation of the Qur'ān and Ḥadīth might lead one to assume that they were totally against ijtihad per se; however, this is not the case. In worldly matters where no text is definitive, they practice extensive ijtihad leading them to be for instance the most accommodating of modern banking practices. Where they differ significantly from Ibn Taymiyyah is in the acceptance of differences across the *madhabs*. Driven in part by their abhorrence of blind obedience to the traditional schools the Salafiyyah make extensive use of takfīr (denouncing those with whom they disagree as kuffār, disbelievers). This authoritarian approach can be seen to have influenced the other schools. As Abu El-Fadl observes:

In the methodology of individuals not affiliated with the Wahhabi school one finds that all legal problems yield a definitive, singular determination in which the law of God is searched, discovered and clearly asserted for all times to come... one notices that the earmark of contemporary approaches to Islamic Law, whether Wahhabi or anti-Wahhabi, is the certainty of results, incontrovertibility of conclusions and the unequivocalness of the asserted determinations. The end result is that the subtlety and richness of the Islamic legal heritage is largely absent in the contemporary age.

(Abou El Fadl, 2003, p. 174)

3.1.8 Abdul Aziz bin Abdullah bin Baz

Perhaps the best known of the contemporary Salafi *Ulamā* is Abdul Aziz bin Abdullah bin Baz who led the scholarly community of Saudi Arabia as Grand Mufti (chief jurist) from 1993 until his death in 1999. His father died at an early age and while he studied with his predecessor Muḥammad ibn Ibrahim Al ash-Sheikh an eye infection contracted when he was sixteen meant that by the age of twenty he was completely blind. He had developed a reputation for his erudition in Islamic law and in 1938 he became the judge of Al-Kharj district, a post he held for fourteen years. He never received any institutional education as this was very scarce in Saudi Arabia at the time; however, he went on to be a teacher of *Sharīʿah* in the Riyadh

Institute of Science. He then transferred to the Islamic University of Medina as Vice President and went on to act as its President and then Chancellor.

In his approach to jurisprudence, he became famous for a number of controversial juristic opinions some of which became law through his position as Grand Mufti. These include the permissibility of stationing American troops in the kingdom and a series of opinions considered by most to be demeaning to women. The opinions that are of more concern to this topic are those that revealed his complete lack of any rational scientific study: At different times he asserted that the world was flat and that the world was stationary and the sun rotated around it. He only retracted these views when Prince Sultan bin Salman Al Saud who had been a member of a space shuttle mission reported to him his personal observations.

3.1.9 Conclusions Regarding the role of Revealed and Rational Knowledge in Islamic Jurisprudence

The major role that reason has played and continues to play in the field of Islamic Jurisprudence is undeniable. Even the most extreme literalist groups use reason as a tool to derive their opinions and the vast majority of juristic schools employ reason as a tool for deriving laws. At a more fundamental level, rational knowledge is crucial to all schools as every legal opinion is situated in and dependent upon a 'real world' context. This means that while revealed knowledge is given a higher status, on the basis that only God has complete knowledge of the context and only God has infallible reason, reason and revelation are inextricably intertwined making rational knowledge essential to the jurist. The pursuit of both branches of knowledge are therefore obligatory for this the highest of all the religious sciences.

Jurisprudence as I have highlighted is dependent primarily on the understanding and interpretation of the Qur'ān and the Ḥadīth. I will therefore now examine the sciences that were developed specifically for analysing them.

3.2 The Science of Tafsīr - Qur'ānic Exegesis

Exegesis of the Qur'ān is one of the most crucial of all the revealed sciences, especially because it deciphers the message of the revelation. (See overview in chapter 1). In chapter two, I highlighted the emphatic message the Qur'ān provides demanding that humankind uses reason to understand it.

The science of *tafsīr* was one of the earliest of the revealed sciences to be established however, its formal codification took place after that of jurisprudence and *ḥadīth* authentication. One of the earliest books explaining the science is that by Imām Jalāl-al-Dīn ʿAbd al-Raḥmān al-Suyūṭī (1445-1505 CE) who says in his introduction:

When a student I was surprised to see that the ancient scholars had not composed a book on the sciences of the Qur'ān as they had for the science of hadīth.

His teacher Abū Abdillah Muhyi a-Din al-Kāfījī prepared a small volume but Al-Suyūţī extended this significantly to produce his *Al-Itqān fī ʿŪlūm al-Qur'ān* (The Perfect Guide to the Sciences of the Qur'ān) (Al-Suyūţī , 2011, p. xx).

The Qur'ān is the primary source of guidance; therefore, it was crucial for the early Muslims to understand its message correctly. During the lifetime of the Prophet[®], his companions would depend upon him for explanation of the text; however, he was aware that his time with them was limited and so he advised them on who they should turn to in his absence:

Learn the Qur'ān from four people, Abdullah Ibn Masūd, Salim Maula Abi Huzaifah, Ubayy Ibn Kāb and Muaz Ibn Jabal.

(Asad, 1993, p. 94)

These four companions were therefore the first of the *muffassirūn* or scholars of Qur'ānic exegesis. Abdullah Ibn Masūd travelled to Kūfa where he founded the Kūfan school of exegesis, Ubayy Ibn Kāb remained in Medina and founded the Medinan school of exegesis, Muaz Ibn Jabal was one of the first companions to take Islam out to the neighbouring realms when he travelled to Yemen and Salim Maula Abi Huzaifah died in battle confronting Musaylimah and his supporters; one of the early apostates who claimed prophethood after the death of Muḥammad In this battle he was a standard bearer and it is said he proclaimed "If you manage to overtake me, what a miserable bearer of the Qur'ān I shall be." Another companion Abdullah ibn 'Abbās was also prepared by the Prophet who it is said once placed his hand on Abdullah and said "O God! Teach him (the knowledge of) the Book" (Al-Bukhārī, 1985, p. 280 Vol 9). He was to found the Meccan school of exegesis.

The early exegetes were humble and cautious in the interpretations they would give of the Qur'ān, never using any form of analogy to interpret a verse on the basis that the words were those of the Creator so to distort their meaning in any way was to speak falsehood in His name. The Kūfan school was against the recording of interpretations in case a false interpretation should get re-transmitted. On one occasion, it is said 'Ubaidah ibn 'Amru al-Salmani, the student of Abdullah ibn Masūd, called all his students to him and told them to bring their lecture notes which he proceeded to burn to ensure he was not misquoted (Abdul-Raof, 2010, p. 154).

The Medīnan school was limited in its transmission because of the passion for <code>hadīth</code> in the city although one of its students As'id ibn al-Musaiyab was to have a great influence on al-Hasan al-Baṣri who founded an additional school of exegesis in Baṣrah. The Meccan school flourished under Abdullah ibn 'Abbās who outlived the other early exegetes and was spread to other regions by his students.

Rahman suggests that the early reluctance to interpreting the Qur'ān quickly gave way to a multitude of commentaries including many that proposed meanings that differed widely from the apparent meaning of the text (Rahman, 1979, pp. 40,41). These provoked a strong reaction from the jurists prompting the development of much more constrained and regulated approaches to exegesis. Abdul-Raof identifies the four principle approaches used by the earliest scholars as:

- Paraphrastic exegesis: concise commentary often providing synonyms to Qur'ānic expressions
- Narrative exegesis: textual commentary that adds details to the Qur'ānic text furnished
 by ḥadīth and materials from the isrā'īliyāt (Jewish and Christian writings)
- Legal exegesis: commentary focussing particularly on legal topics
- Linguistic exegesis: commentary featuring grammatical and philological issues and considering the impact of variant readings (Abdul-Raof, 2010, pp. 28,29)

Commentaries of each of the above types were written during the second century after the death of the Prophet[®] but one of the first to include all these approaches was that of Al-Ṭabarī (839-923 CE) who included references to many of the earlier exegetical works.

The science of <code>hadīth</code> also developed over time and the science as we understand it now did not exist until a hundred years after the death of the Prophet. This means that when reading the earlier works such as <code>Tafsīr</code> ibn 'Abbās or works such as <code>Tafsīr</code> <code>Tabarī</code> that reference the exegesis of Mujāhid we must remember that where they used <code>hadīth</code> to substantiate their interpretation the <code>hadīth</code> they used may not have been traditions that meet with the later developed criteria.

The word *tafsīr* is commonly understood to have been derived from the root *fassar* which mean to expound to, to elucidate or to interpret. According to some linguists that the word may have come from the root 's-*f*-*r*' denoting to uncover or to expose. This leads to the understanding of unravelling or uncovering of something which is hidden (Saeed, 2006, p. 57). According to Abdullah Saeed whatever its precise origins the meaning is closely related to this.

The word $ta'w\bar{l}$ has also been used to imply exegesis. The word $ta'w\bar{l}$ is derived from the root a-w-l which means 'a return to the origin of something'. It would connote delving into the nature of something, hence expounding and explaining (Saeed, 2006, p. 58).

Von Denffer states:

Ta'wīl is considered by some the explanation of the inner or concealed meanings of the Qur'ān, as far as a knowledgeable person can have access to them.

(Von Denffer, 1996, p. 122)

Abdul-Raof expands on this saying:

The discovery (istinbāṭ) of underlying significance of Qur'ānic words. In other words, it unearths the allegorical and esoteric significance of a given expression. Thus, the text analyst ignores the denotive and literal meaning

of the word and provides an interpreted signification that is established on probability (al-ihtimāl).

(Abdul-Raof, 2010, p. 102)

I would challenge this statement as in each and every example he then provides; the literal meaning has some relevance to the allegorical meaning (how could it not?). Of course, to interpret any verse in a way that was totally contrary to the apparent meaning would imply deceit in the text, which is contrary to the very nature and purpose of the Qur'ān. Nevertheless, the key to understanding ta'wīl certainly lies in the meanings that are not immediately apparent. One of the ways in which this kind of exegesis has been used has been to justify 'heretical' or divergent understandings of Islam such as the split that has developed between Shia and Sunni Islam. The inherent dangers of this kind of exegetical analysis have led some scholars to use ta'wīl to designate a 'bad' or objectionable commentary.

The Qur'ān is the most authentic and revered book of Muslims, hence the first principle of anyone wishing to understand or seek guidance from it is to approach it with sincerity and without preconceived ideas. The Qur'ān itself warns people:

Do not follow blindly what you do not know to be true...

Qur'ān 17:36 (Abdel Haleem, 2004, p. 286)

An in another place:

...you can ask those who have knowledge if you do not know.

Qur'ān 16:43 (Abdel Haleem, 2004, p. 273)

Philips quotes a *ḥadīth* related in The Ṣaḥīḥ of Bukhārī:

Allah won't remove knowledge after giving it to you by removing it (from you), rather he will remove it from later generations by taking the souls of the scholars along with their knowledge, until only ignorant people remain. They will be asked for religious verdicts, so they will issue verdicts based on their opinions, leading others astray and going astray themselves.

(Al-Bukhārī, 1985, pp. 305-6 Vol 9)

As a result of such warnings from the Qur'ān and Ḥadīth, the Muslim scholars have stipulated conditions for the person performing tafsīr to be known as mufassir (derived from the same root), or the one qualified to interpret the Qur'ān:

3.2.1 Qualifications of the Exegete (Mufassir)

There are many conditions placed upon the *mufassir*. The most common ones are stated below:

- 1 One with a sound knowledge of the Arabic language
- 2 One with a sound knowledge of the sciences of the Qur'ān:
 - a. Al-asbāb Al-nazūl; The reason or context for revelation
 - b. *Naskh;* abrogation etc.
 - c. Tafsīr al Qur'ān bil Qur'ān; Qur'ān expounding the Qur'ān
- 3 One with a sound knowledge of the Prophet Muḥammad s's sunnah and ḥadīth
- 4 One with a sound knowledge of reports of the Ṣahāba and Tābiʿ<u>u</u>n (companions and successors)
- 5 One with a sound mind and intellect

- 6 One who refrains from indulging in mere opinion
- 7 One who does not neglect the writings of other eminent scholars
- 8 One who is sound in belief

The above is a summary of the most important conditions. If the above are not followed the *tafsīr* would be regarded as defective etc.

3.2.2 Sources of Exegesis (Tafsīr)

The main sources of *tafsīr* in the *Sunni* schools are:

- 1 The Qur'an
- 2 *Ḥadīth* and *Sunnah*
- 3 Reports of the *şahāba* (companions)
- 4 Reports of the *tābi'ūn* (successors)
- 5 Reasoning

It is important to note that the Shia school of thought does not accept the reports from the companions or the Tābi'ūn. The Shia do however take authority from the 12 imams who are from the line of the Prophet Muḥammad[®].

In the words of Imam Muḥammad Husayn at-Tabataba'i in the preface to his *Tafsīr Al-Mizān*:

At the end of the commentaries, we have written some traditions of the Prophet and the Imams of Ahlu al-bayt (a.s.), narrated by the Sunni and Shi'a narrators. But we have not included the opinions of the companions and their disciples, because, first, there is too much confusion and contradiction in them; and second, they are not vested with any authority in Islam.

(At-Tabataba'i, 2015, p. 12)

Whereas the Sunni Scholars take their opinion to include the opinions of the first three generations from a number of *ḥadīth* including the following:

Narrated Abdullah: The Prophets said, "The people of my generation are the best, then those who follow them, and then those who follow the latter. After that there will come some people whose witness will go ahead of their oaths, and their oaths will go ahead of their witness."

(Al-Bukhārī, 1985, p. 498 Vol 3)

Thus, the basis for their opinion is the greater reliability of the first three generations of Muslims, also known as the *salaf*. In this study, I am concentrating on the Sunni schools of theology and jurisprudence, hence it is this approach I have used.

3.2.3 The Developed Method of Exegesis (Tafsīr)

3.2.3.1 Tafsīr bil Ma'athur or Tafsīr bil Riwaya (Exegesis based on transmission or narration)

These terms have been used to encompass those methods of exegesis that rely on the transmission of knowledge from one generation to the next or as Aḥmad von Denffer puts it 'all explanations of the Qur'ān which can be traced back through a chain of transmission to a sound source.' (Von Denffer, 1996, p. 124) Within this category, we have several subcategories:

3.2.3.2 Tafsīr-ul-Qur'ān bil-Qur'ān (Exegesis of the Qur'ān by the Qur'ān)

Using the Qur'ān to explain the Qur'ān or *Tafsīr-ul-Qur'ān bil-Qur'ān* is the most authentic form of exegesis. 'The Qur'ān is considered to be a unified whole with unity of purpose' (Saeed, 2006, p. 43). This means that the Qur'ān itself clarifies or gives extra information in another part of the Qur'ān. For example, if we consider the story of Ādam and Iblis:

In the second chapter al-Baq $\bar{a}r\bar{a}$ we have the story of how God commanded the Angels to bow before \bar{A} dam:

When We told the angels, 'bow down before Ādam,' they all bowed. But not Iblis, who refused and was arrogant: he was one of the disobedient.

Qur'ān 2:34 (Abdel Haleem, 2004, p. 7)

This verse leaves the reader unclear about the nature of Iblis and why he refused to bow down.

Later in the 18th chapter the same story is told but with more information:

We said to the angels, 'Bow down before Adam,' and they all bowed down, except Iblis: he was one of the Jinn and he disobeyed his Lord's command.

Qur'ān 18:50 (Abdel Haleem, 2004, p. 186)

So we now have the information that Iblis was in fact a Jinn.

Now cross-referencing to the fifteenth chapter we continue to refine the picture:

وَلَقَدْ خَلَقْنَا الإِنسَانَ مِن صَلْصَالٍ مِّنْ حَمَاٍ مَّسْنُونٍ وَالْجَآنَّ خَلَقْنَاهُ مِن قَبْلُ مِن نَّارِ السَّمُومِ وَإِذْ قَالَ رَبُّكَ لِلْمَلاَئِكَةِ إِنِّي خَالِقٌ بَشَرًا مِّن صَلْصَالٍ مِّنْ حَمَاٍ مَّسْنُونٍ فَإِذَا سَرَوَيْتُهُ وَنَفَخْتُ فِيهِ مِن رُّوحِي فَقَعُواْ لَهُ سَاجِدِينَ فَسَجَدَ الْمَلاَئِكَةُ كُلُّهُمْ أَجْمَعُونَ إلاَّ الْلِيسَ أَبَى أَن يَكُونَ مَعَ السَّاجِدِينَ قَالَ يَا إِبْلِيسَ مَا لَكَ أَلاَّ تَكُونَ مَعَ السَّاجِدِينَ قَالَ لَمْ أَكُن لِأَسْجُدَ لِبَشَرٍ خَلَقْتُهُ مِن صَلْصَالٍ مِّنْ حَمَاٍ مَّسْنُونٍ

We created man out of dried clay formed from dark mud – the jinn We created before, from the fire of scorching wind. Your Lord said to the angels, 'I will create a mortal out of dried clay, formed from dark mud. When I have fashioned him and breathed My spirit into him, bow down before him', and the angels all did so. But not Iblis: he refused to bow down like the others. God said, 'Iblis, why did you not bow down like the others?' and he answered, 'I will not bow to a mortal you created from dried clay'.

Qur'ān 15:26-33 (Abdel Haleem, 2010, p. 264)

This now helps us to understand that Iblis was not an angel as could have been implied by the first reference but was a creature created from fire and also that his reason for refusing to bow was that he considered his creation from fire to be superior to that of Ādam who was created from mud.

This form of explanation is the most authoritative as the Qur'ānic text has been established to be transmitted to us from Prophet Muḥammad by a continuous testimony or *tawatur* (Kamali, 2003, p. 16).

3.2.3.3 Tafsīr-ul-Qur'ān bil-Sunnah (Exegesis of the Qur'ān by the Sunnah)

The Qur'ān explained or interpreted by the Prophet. The Prophet Muḥammad is the best person to explain the Qur'ān. God says in the Qur'ān:

We have sent down the message to you too [Prophet*], so that you can explain to people what was sent for them, so that they may reflect.

Qur'ān 16:44 (Abdel Haleem, 2010, p. 273)

Many examples exist of this, particularly concerning the practical implementation of Qur'ānic injunctions. For example, the Qur'ān commands people to pray but does not give full details of how to pray. The Prophet® through his example showed the companions how to pray. The Prophet®'s life has been recorded in great detail and how he explained the Qur'ān can be

found in these source-Ḥadīth (sayings and actions), 'amal (the example of the people of Medina) and Sīrah (Biographies).

Key to this form of exegesis is the reliability of narrations in the Ḥadīth. Scholarship in ilm-ul-ḥadīth has not stopped since the time of the Messenger Muḥammad and a tradition that was understood to be sound by one scholar may have doubt cast upon it by a later generation of scholars. In addition, Orientalists such as Gustav Weil, Joseph Schacht and Ignaz Goldziher have sought to cast doubt on the authenticity of the vast majority of ḥadīth. Scepticism over the reliability of the ḥadīth has not been confined to orientalists. Abdul-Raof concedes:

It is an acknowledged fact that early tafsīr tradition has been plagued by doubts over the forgery of ḥadīth which has become a widespread practice after the death of the Prophet when the recording of ḥadīth started during the closing years of the first/seventh century.

(Abdul-Raof, 2010, p. 42)

The Shia/Sunni divide in particular prompted a considerable amount of <code>hadīth</code> forgery by individuals seeking to strengthen their political viewpoint or undermine that of their foes. Despite this exegesis of the Qur'ān would be extremely limited without the use of the <code>hadīth</code> and all major <code>tafāsīr</code> make use of the <code>hadīth</code>.

Tafsīr bil Qur'ān and Tafsīr bil Sunnah are the most fundamental ways of interpreting the Qur'ān and for the Traditionalists these are the only methods that are considered sufficiently reliable. For others amongst the muffassirūn other methods have been considered acceptable:

3.2.3.4 Explanations of the Sahaba (companions)

The companions of the Prophet® were the closest to the Prophet®, witnessed the occasions of revelation and were of sound character. Their opinions are viewed with the highest regard. Most famous of the companions for his commentary on the Qur'ān was Abdullah Ibn 'Abbās although the existent tafsīr bearing his name has been the source of a great deal of speculation over its authenticity. It has variously been attributed to Abdullah ibn 'Abbās (d 687 CE), al-Kalbi (d 763 CE), al-Dīnawari (d 920CE) and al-Fīrūzabādī (d 1414CE) (Al-Fīrūzabādī, 2008). Rippin suggests quite plausibly that the attribution to Abdullah ibn 'Abbās, the founder of the Meccan school of exegesis was made to gain the authority of an early figure from the family of the Prophet® with a reputation in exegesis and that one of the other authors is more likely to have originated the text (Rippin, 1999, p. xvi). In addition to this complete tafsīr, many individual traditions interpreting the Qur'ān have been attributed to ibn 'Abbās. Some are undoubtedly authentic whereas others are not and again Abdul-Raof provides a similar explanation for this, saying:

Qur'ānic exegetes often abused the name of Abdullah ibn 'Abbās in order to justify their exegetical views.

(Abdul-Raof, 2010, p. 21)

3.2.3.5 Explanations of the Tābiʿūn (Successors)

The next generation following the *Sahaba* have been termed the *Tābiʿūn* (lit. followers or successors). Many of these were the children of the *Sahaba* or their students. Interpretation and elucidation by the *Sahaba* and *tābiʿūn* is considered by some to be *Tafsīr bil Ma'athur* and by others to be *Tafsīr bil-Rayy*. Some famous among the successors are Mujāhid, Ata, and Ikrima from Mecca, Muḥammad bin Ka'b al Qarzi, Abu Aliya al-Riyah from Madina and Hasan

al Basri and Ibrahim al-Nakhai from Iraq. Notwithstanding the aforementioned hadīth we should consider that while there were knowledgeable and pious Muslims amongst the sahāba and tābi'ūn there were also hypocrites and evil-doers such as Yazid bin Muāwiyah who ordered his followers to kill the grandsons of the Prophet Muḥammad. To be a reliable source of guidance thus entails more than just being a member of the salaf (first three generations).

The Qur'ānic text and authentic $ahad\bar{\imath}th$ are the soundest authenticated sources and thus do not pose the same difficulties as the reports of the $sah\bar{\imath}aba$ and $t\bar{\imath}abi'\bar{\imath}an$. (Some interpreters have used reports of dubious nature and hence their analysis of the text of the Qur'ān cannot be relied upon. Although it may be possible to get some insight into the text to further delve into the topic by way of pointers and may lead to other sources of sound nature).

3.2.3.6 Explanation from the Isrā'īliyāt (Jewish and Christian Sources)

Some of the *muffassirūn*, particularly the early commentators such as Al-Ṭabarī, use *isrā'īliyāt* or Jewish and Christian sources such as the Old or New Testament of the Bible. These are not verifiable in terms of their authenticity and have thus been dismissed as without value by the majority of later scholars. This is an important point because of the status of the *Tafsīr* of Al-Ṭabarī as one of the earliest. Thus some of his commentary is revered whilst other parts are dismissed. For instance, in considering al-Ṭabarī's commentary on verse 6:12 Hamza et al. state:

...he cites numerous traditions... two of which explicitly rely on material said by its originator (Salman al-Farisi) to come from the Torah... His use of and inclusion of such isrā'īliyāt is instructive insofar as he finds it non-problematic, as opposed to later condemnations by the inclusion of such material.

(Hamza, et al., 2008, p. 305)

3.2.3.7 Tafsīr bil-Rayy (Using reasoning to form an opinion)

This is an endeavour on the part of the scholar to the utmost degree to clarify the verses without any ulterior motives. This is known as *Tafsīr bil rayy* (lit. exegesis by opinion). Those scholars who allowed this type of interpretation divided it into two categories. Where the *tafsīr* is in agreement with the principles of *tafsīr*, Arabic language and the rules of *Sharī'ah* it was termed *Tafsīr Mahmood* or praiseworthy. If, however, it was done without sound understanding of the principle and knowledge of the science of interpretation, Arabic language and *Sharī'ah*, it was termed *Tafsīr Mudhmūm* or blameworthy exegesis. Some scholars have suggested that no degree of opinion is to be indulged in; however, the majority have pointed to a number of verses of the Qur'ān and authentic *ḥadīth* to counter this:

Will they not contemplate the Qur'ān? Do they have locks on their hearts?

Qur'ān 47:24 (Abdel Haleem, 2004, p. 333)

This is a blessed scripture which We sent down to you, for people to think about its messages, and for those of understanding to take heed.

Qur'ān 38:29 (Abdel Haleem, 2004, p. 291)

We have already recounted the <code>hadīth</code> in which the Prophet^{**} prayed for his companion Ibn 'Abbās to be granted the ability to understand and interpret the Qur'ān. That some have been granted this ability is also confirmed in the Qur'ānic verse:

Whenever news of any matter comes to them, whether concerning peace or war, they spread it about; if they referred it to the Messenger and those in authority among them, those seeking its meaning would have found it out for them...

Qur'ān 4:83 (Abdel Haleem, 2010, p. 92)

Thus the balanced view is that opinion and understanding derived from personal reasoning or *ijtihad* is not only acceptable but necessary; however, we must constrain our reasoning to that which has a sound foundation and only speak from within our knowledge.

In *An Introduction to the Sciences of the Qur'aan,* Yasir Qadhi (2003) lists some of the ways in which the scholars have agreed that *Tafsīr bil rayy* may legitimately be used:

- To uncover meanings in a verse that conform with Arabic, and the Qur'an
- To discover certain hidden aspects of the Qur'ān within the realm of human limit. An
 example of this is when a certain linguist sees why one phrase or word has been used
 in a certain context over its synonyms
- To see the goals of certain verses and understand their perspectives. An example of this is when a scholar puts forth a certain relationship between a set of verses
- To extract and elaborate the morals that are to be gained from Qur'ānic stories
- To demonstrate the literary *l'jāz* or inimitability of the Qur'ān (Qadhi, 2003, p. 323)

3.2.3.8 *Tafsīr al-'Ilmī* (Scientific Exegesis)

This is the method of interpreting the Qur'ān based on scientific facts. Many $taf\bar{a}s\bar{i}r$ have employed this method amongst others; however, the methodology used by some exegetes has been heavily criticised. Yasir Qadi observes that some have tried to show that the Qur'ān formed the basis for all scientific disciplines, which he finds 'absurd' (Qadhi, 2003, p. 333). While I would agree with this in principle, there is a danger in dismissing this form of $tafs\bar{i}r$ completely simply because of those zealots who have taken such an extreme position.

Aḥmad Von Denffer also expresses caution pointing out that while there are many miracles in the Qur'ān, where the physical world we live in is described with detail and accuracy that was far beyond the ability of mankind at the time of revelation, one should be careful about proclaiming such miracles when new discoveries seem to match the Qur'ānic descriptions, as further research may produce new theories or understandings (Von Denffer, 1996, p. 153). This too is a valid point but this principle may also be seen to be applicable to any *tafsīr* that could be context sensitive. Early scholars such as the Kūfan school described above were so concerned about this that they avoided the preservation of any exegetical opinions.

Another common weakness of *Tafsīr al-'llmī* is that to be of equal rigor to the other forms of exegesis the scholar performing it would need to fulfil all the criteria I described above. In terms of knowledge of the Arabic language, knowledge of the Islamic sciences and on top of that they would need to have knowledge of the reality; that is, they would need to be scholars of the relevant science. A great deal of recent literature on *Tafsīr al-'llmī* has been carried out by scientists without training in the Islamic sciences, which opens them to errors in their comprehension of the text. This would include for example: *A Comprehensive Exploration of the Scientific Miracles in Holy Quran* by the Aerospace Engineer Mahdi La'Li (2003) and *A Scientific Tafsir of Qur'ānic Verses – Interplay of Faith and Science* by Consultant Urologist and Surgeon Dr Muneer Al-Ali (2013). I am not mentioning these texts as a means of criticising them per se but the lack of training in the Islamic sciences in the Authors means they must be treated with caution.

From the other side we have the absurd opinions voiced by some classical scholars who have been so isolated from the scientific world that they have failed to understand even basic ideas

that were clarified by Islamic scholars hundreds of years ago such as the flat earth assertion of the then Grand Mufti of Saudi Arabia Abdul Aziz Bin Baz.

This does not mean that this form of *tafsīr* is without value. In chapter 4 I will give many examples of great classically trained scholars who became giants in the scientific world. The issue here, which is one I will be returning to, is that currently it is rare to find such polymaths in the Muslim community because of the rigid separation of the Revealed and Rational Sciences.

3.2.3.9 The Importance of Language

One of the most crucial aspects of the science of exegesis is the Arabic language. None of the above methods of exegesis can be carried out without a sound knowledge of the Arabic language as all of the sources are in the Arabic language; Qur'ān, ḥadīth, the reports of the ṣahāba and tābi'ūn. During the early period of Islam, the Arabic language was understood well; however, as Bilal Phillips puts it:

...with the passage of time, words took on new meanings and old meanings became lost, foreign words entered into the language and vast sections of vocabulary fell into disuse. This natural process necessitated the explanation of some of the Qur'ānic words according to their literal and grammatical meanings.

(Philips, 1997, p. 39)

Ayatullah Subhani expresses this similarly saying:

Today, in the various 'Arabic dictionaries, we see that there are some words which have ten meanings to them and a person may actually think that a particular word has actually been formed to mean all ten things and actually has ten meanings to it! However, when a person refers to the work al-

Maqayis⁵, it would then be made clear to him that the word he is studying does not have more than one meaning associated with it and all other meanings are simply different facets of the original meaning, which, due to the passage of time, have been attributed to that word and taken as independent meanings.

(Subhani, 2006, pp. 17-18)

This issue is of particular concern to the Arab scholars as they must be cautious about interpreting the text in accordance with modern literary criteria, whereas for a non-Arab they might specifically learn the classical Arabic and bypass this problem.

One good example of a modern linguistically oriented translation-commentary is Muḥammad Asad's Message of the Qur'ān. This does not mean to suggest that he pays little attention to the above 4 principles of Qur'ānic *Tafsīr*; however, his careful and appropriate use of linguistic analysis and linking to the modern situations makes it one of the widely used translation-commentaries today.

3.2.3.10 Socio-Political-Historical Context

Anyone studying the Qur'ān needs to understand that this is a form of textual analysis specific to the Qur'ān. The Qur'ān has its unique history of delivery and recording in a Socio-political-historical context, which cannot be segregated from it. To expound on the Qur'ān without due regard for its history would narrow the breadth of understanding that the Qur'ān itself purposes. Any commentary of any age has its cultural baggage because of its particular context and the concerns related to it. The method of *tafsīr* provides a certain safeguard;

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⁵ Zakariyyā, Aḥmad b. Fāris b. – al-Maqāyīs al-Lugha- a six volume work analysing the meaning of the words in the Qur'ān and how they have changed with time.

however, to regard it fool proof would be ill conceived. The Qur'ān describes humans as weak beings who are able to make mistakes.

3.2.3.11 Thematic Exegesis

Although most of the works of *tafsīr* provide a line-by-line commentary of the whole of the Qur'ān, there have been some thematic commentaries such as those by Imam Tabataba'i and Muhammad al-Ghazālī.

Muḥammad al-Ghazālī states in Journey Through the Qur'ān:

...what I have done is attempt to produce a kind of tafsīr which deals with each sura of the Mighty Book according to its general subject matter, rather than the use the ayāt by āyāt approach of normal tafsīrs.

(al-Ghazali, 1998, p. 1)

Although other books and articles have spoken about the general subject of knowledge from different angles, none has thus far explored the subject of knowledge in a systematic and comprehensive form using *tafsīr* methodology.

Every commentator of the Qur'ān hopes to achieve his goal objectively. However, as I have discussed, the result is numerous commentaries, each with a different emphasis. There are many reasons behind these differences: social and cultural backgrounds, level of knowledge of the *exegete* and at times political pressures placed on the interpreters to interpret in line with official polices of the government. At times the scholars who resisted such pressures ended up in prison and some major works of great value have been written behind bars. Abu Kalām Azad wrote his Qur'ānic commentary in prison in India and others like Ibn Taymiyyah and Abu Ala Mawdūdi also produced some excellent work during their time in prison.

We are all influenced by our environment, both physical and intellectual and the best we can hope for is to be sufficiently aware of what we bring to the text (i.e. personal leanings and prejudices). This is known as eisegesis.

3.2.3.12 Hermeneutic Exegesis

Hermeneutics is a term borrowed from biblical exegesis. While there is no definitive etymology for the term, some believe it comes from Hermes the Greek God who was both messenger and a liar/trickster. Thus, the term highlights the double-edged sword of exegesis that it has the potential to reveal the truth or to deceive. The term hermeneutics has been used for a thorough analysis that takes into consideration all possible variables. In the context of *tafsīr* the additional parameters that we are referring to are for instance the context and nature of the reader. i.e. how does the reader's social conditioning affect their interpretation, is there any emotional reaction to the text that could affect the response, and what is the scholarly context i.e. what is the relationship between the *mufassir* and the wider body of scholars and indeed the community of believers.

Fazul Rahman is one of the contemporary scholars who has raised the need for a more inclusive approach to Qur'ānic exegesis. He criticised the verse-by-verse commentaries for failing to take into account the overall spirit and message of the book. He also advocated a recontextualisation (an idea he shared with Quṭb and Mawdūdī) to understand how the Qur'ān, a text all scholars agreed was not time bound, relates to modern man (Rahman, 1982, pp. 1-11).

3.2.4 Problems of Exegesis

One of the reasons for carrying out this study was to understand the Qur'ānic approach to knowledge. The method of Qur'ānic exegesis as it has been explained above on the whole provides sound guidance for the exegete; however, where sound reasoning is not applied at each and every stage of the process of exegesis the result can be contrary to the Qur'ānic principles. Asma Barlas has highlighted this in her book 'Believing Women' in Islam (Barlas, 2002).

Most of the commentaries are verse by verse as we have seen in chapter 2 in which case the exegete often misses the bigger picture. Those who interpret the Qur'ān literally, are also quite insistent upon restricting their sources of interpretation to the Qur'ān, the <code>hadīth</code> and the first three generations of Muslims from the time of the Prophet Muḥammad. In some cases, it may be perfectly fine to accept those opinions; however, as I demonstrated in chapter 2, you sometimes require a more in depth analysis of the historical context to establish the underlying principle.

The use of <code>hadīth</code> in particular may be problematic as so many do not have their detailed historical context preserved as will be discussed in the next section.

These problems will remain unless there are developments in *tafsīr* to mirror those in jurisprudence aimed at a hermeneutical method based upon the ethical principles of the Qur'ān. As Barlas points out, God does not do injustice to anyone, therefore God's speech (the Qur'ān) also will not do injustice.

3.3 The Science of Hadith

Scholars of <code>Hadīth</code> who collected, compiled and evaluated the many thousands of traditions had existed from the time of the Prophet Muḥammad; however, in many instances the transmission of these traditions was purely oral, perhaps in part because of the initial prohibition of writing them down issued by the Prophet. (This was probably to ensure there was no confusion between what text was the Qur'ān and what was from him.) With the increasing emphasis on <code>hadīth</code> as a source of law and the increasing difficulty in preserving so many traditions and investigating the soundness of their chains of transmission, <code>Hadīth</code> authentication developed into a science in its own right. The origin of this science is generally attributed to Imam Al-Shafi'i and his seminal <code>Al-Risāla</code>. In this text he addresses the challenges of understanding and validating the <code>hadīth</code> in his chapter on Problems Affecting <code>hadīth</code> Reports. This is expressed as a discussion between a questioner who was concerned about the use of <code>hadīth</code> and his perception of inconsistency in the way the 'ulamā applied them rather than in the manner of a modern text book; however, the key elements of what is now termed 'ulūm al hadīth are all clearly stated (Al-Shāfi'ī, 2015, pp. 91-106).

3.3.1 Historical Development

The compilation of books of sound <code>ḥadīth</code> reached a peak with, in particular, the authors of the six canonical collections or <code>Al-Ṣiḥāḥ</code> <code>al-Sitta</code>; Al-Bukhārī , Muslim, Abu Dawūd, Tirmidhī, An Nasā'ī and Ibn Majah.

3.3.1.1 Imam Al-Bukhārī (810-870CE)

Abū 'Abd Allāh Muḥammad ibn Ismā'īl ibn Ibrāhīm ibn al-Mughīrah ibn Bardizbah al-Ju'fī al-Bukhārī was born in Bukhara in Khorasan. His father Ismail ibn Ibrahim was a *muḥaddith* and an associate of the Jurist Malik Ibn Anas. Al-Bukhārī was blessed with a very retentive memory and it is said he memorised 2000 *aḥadīth* whilst still a child. From the age of 15, he travelled extensively gathering *ḥadīth*. At the time, the scholars of *ḥadīth* had already agreed that to be considered *ṣaḥīḥ* the *isnād* of a *ḥadīth* must contain a continuous chain of people who were righteous ('adl) and known to possess a good memory; however, Al-Bukhārī added the additional requirement that consecutive narrators in the chain must be known to have met each other. His *ṣaḥīḥ* collection contains around 2600 independent narrations. Both Al-Shafi'i and Ḥanbali followers claim Al-Bukhārī followed their school but the majority consider him to have been a Ḥanbali.

Towards the end of his life, Al-Bukhārī became involved in a controversy over the created or uncreated nature of the Qur'ān. His opponents accused him of denying the uncreated nature of it and ostracised him. This caused him to become very depressed and he is said to have supplicated to God asking to take him up to him. He remained in this state until his death soon after.

3.3.1.2 Imam Muslim (815-875 CE)

Abū al-Ḥusayn 'Asākir ad-Dīn Muslim ibn al-Ḥajjāj ibn Muslim ibn Ward ibn Kawshādh al-Qushayrī an-Naysābūrī was born in Naysābār (Nishapur), Khorasan. He collected around 300,000 aḥadīth but having examined them thoroughly retained only 4000 for his collection. He travelled extensively meeting scholars to collect the ḥadīth before settling once again in

Naysābūr. He was an associate of Imam Bukhārī. It is said by some that Imam Muslim was even more careful in his validation of <code>hadīth</code> than Bukhārī, particularly in terms of the text, <code>matn</code>, of the <code>hadīth</code> where he was careful to document even small differences in similar narrations. In terms of narrators, he refined Bukhārī's criteria to separate them into levels of reliability but according to some, he used more 'weak' narrators than his colleague.

3.3.1.3 Abu Dawūd (817-889 CE)

Abu Dawūd Sulaymān ibn al-Ashʿath al-Azdi as-Sijistāni was born in Sijistan, Khorasan. He travelled extensively in Khurasan, Iraq, Hijaz, Sham, Egypt, and Nishapur meeting scholars to collect and authenticate ḥadīth. He was a student of Imam Aḥmad ibn Ḥanbal and considered both a muḥaddith and a Ḥanbali faqīh.

3.3.1.4 Al-Tirmidhī (824-892 CE)

Abū 'Īsá Muḥammad ibn 'Īsa as-Sulamī al-Darīr al-Būghī at-Tirmidhī was probably born in Tirmidh, Khorasan, although some historians say he was born in Mecca. From the age of 20, he travelled widely to gather knowledge and hadīth visiting among others al-Bukhārī, Muslim and Abu Dawūd. He was blessed with an exceptional memory and was renowned for his piety. A number of later jurists considered him to be an independent Mujtahid (jurist).

3.3.1.5 Al-Nasa'ī (829-915 CE)

Aḥmad ibn Shu`ayb ibn Alī ibn Sīnān Abū `Abd al-Raḥmān al-Nasā'ī was born in Khorasan one of the famous centres of learning. At the age of 20 having been raised with the study of the traditional sciences he set off on a journey to gather knowledge and in particular ḥadīth from scholars in Iraq, Kūfa, Hijaz, Syria and Egypt where he finally settled. He lived an ascetic life,

fasting alternate days, spending much of the night in prayer and teaching during the day. It is said he made a great compilation of <code>hadīth</code> that he called Sunan Al-Kubra and presented it to the governor of Ramalah. The governor however asked whether the <code>hadīth</code> it contained were all <code>sahīh</code> and when he was told they were not he asked for a smaller volume containing only the more authentic traditions. Al-Nasā'ī did this and named his book Sunan Al-Sughra (the small Sunan) and Al-Mujtaba and Mujtana (both mean carefully chosen). This text is the book which we now know as Sunan An-Nasā'ī.

3.3.1.6 Ibn Mājah (824-887 CE)

Abū 'Abdillāh Muḥammad ibn Yazīd Ibn Mājah al-Rab'ī al-Qazwīnī was born and raised in the town of Qazvin, which had become known for its scholars of ḥadīth. He travelled to Khorasan, Iraq, Hijaz, Egypt and Sham to attend the gatherings of ḥadīth scholars. He also studied under scholars in Makkah and Madinah, and later travelled to Baghdad. He was considered a great Ḥadīth scholar, mufassir, and historian.

3.3.1.7 Lesser-known Scholars of Hadith

In addition to the six compilers of the *Al-Ṣiḥāḥ al-Sitta* important collections included the Musnad of Imam Aḥmad, The Muwatta of Imam Malik the Athar and the Musnad collections of Abu Ḥanīfah, Al-Shafi'i and Aḥmad ibn Ḥanbal. There are a number of other valuable collections, which have been detailed in Imam 'Abd al-'Aziz Al-Dihlawī's *Bustān al-Muḥaddithīn* (The Garden of the Ḥadīth Scholars (Ad-Dihlawi, 2007).

It is unsurprising that all of the scholars followed the juristic schools of Imam Al-Shafi'i or Imam Aḥmad, these being the schools who most relied upon the ḥadīth, and while all the schools

incorporated their collections into their teachings and methodologies their lack of neutrality is important to note. Imam Bukhārī, author of arguably the most important collection, in particular was a very strong critic of Abu Ḥanīfah and his school and refused to include any ḥadīth narrated by him. These intellectual conflicts are important in the background they provide to the increasing divide that developed between the schools. Regardless of their opposing views, the four *Mujtahids* themselves always showed respect towards each other and defended the diversity the schools established, but their students were considerably less accommodating. Later followers of Imam Shafi and Imam Aḥmad would for instance highlight the absence of ḥadīth narrated by Abu Ḥanīfah as indicative of his 'weakness in ḥadīth', which is a clear perversion of the historical record.

Also of particular interest is the fact that three of the *muḥaddithīn*, al-Bukhārī, Abu Dawūd and Al-Tirmidhī have been considered to be independent jurists by scholars of the *Ahle Ḥadīth* (e.g. Ibn Taymiyyah) although none of them founded new *madhabs*. This would seem to be influenced particularly by their belief that the knowledge of *Ḥadīth* is the key to sound jurisprudence.

3.4 Hadīth Analysis

We have already established that <code>hadīth</code> are a crucial source for Qur'ānic exegesis. This being the case the methodology by which they have been evaluated for use as a point of reference is clearly important and for this reason many texts on <code>tafsīr</code> such as <code>Kitāb Ma'rifat anwā' 'ilm al-Ḥadīth'</code> (Introduction to the Science of the <code>Ḥadīth'</code>) by Taqī al-Dīn Ibn al-Ṣalāḥ al-Shahrazūrī (d 1288CE) and more contemporary texts such <code>Schools of Qur'ānic Exegesis</code> by Hussein Abdul-Raof also include a chapter relating to the use of <code>hadīth</code>.

3.4.1 Ḥadīth analysis and Tafsīr

The scholars of hadīth have always been careful to document hadīth of all classes from the most reliable to the weakest but where a scholar is, for instance, using hadīth to develop an opinion in the field of law they will only consider a small subset of the strongest hadīth. When interpreting the Qur'ān, I have already highlighted that scholars have been careful not to exceed their authority in placing meaning on God's words by the use of opinion or the careless use of hadīth; however, the objective in interpreting a verse of the Qur'ān will also influence the hadīth that are considered. If the verse is simply being used in the context of a motivating speech less care will be taken than if we are developing jurisprudence.

3.4.2 Authentication of Hadīth

The science of <code>hadith</code> authentication has divided <code>hadith</code> into a number of different categories. How they are used by different schools of thought for different purposes varies but the basic categories are agreed on.

The top category of $had\bar{\imath}th$ is termed $mutaw\bar{a}tir$ (lit. recurrent). This indicates that the narration has been transmitted by multiple sound chains and may thus be regarded as completely reliable. The second category is $sah\bar{\imath}h$ (sound), the third is hasan (fair), the fourth is hasan (weak) and fifth is hasan (forged). $had\bar{\imath}th$ of all these categories are found in intellectual circles. Some writings do not state the source or even the category of $had\bar{\imath}th$, which is clearly a problem.

The translations of the names for the various categories I have chosen are from Dickinson's translation of Ibn al-Ṣalāḥ al-Shahrazūrī's *Kitāb Ma'rifat anwā' 'ilm al-Ḥadīth*. Other

translations that are common are to translate $sah\bar{i}h$ as 'authentic' and hasan as 'good'; however, I consider these to be seriously misleading and to have contributed to some misunderstandings over the nature of $had\bar{i}th$.

3.4.3 Criteria for Sahīh Hadīth

The criteria for a hadith to be classified as sahih in the present day are:

- Continuous isnād i.e. it must be supported by an unbroken chain of authorities each
 of whom have provided the authorities before them
- All authorities must be 'adl i.e. each person in the isnād must be of good character meaning that they were no known to have major or minor sins and were not known associates of people of lesser character
- No authorities should have been involved in forgery, or disputes of a sectarian, political or theological nature
- Proximity in time it must have been possible for each authority to have met those immediately before and after them. i.e. they must have been born sufficiently before the death of the person from whom they received the narration to have been able to understand it
- Soundness of memory Each authority must be known to have been sound of memory
- Sound matn the text of the ḥadīth must not show signs of weakness linguistically or in content
- Compatibility with Qur'an The text must be compatible with the text of the Qur'an
- Historically valid the text must be compatible with known historical events

- Reasonable the text must be in agreement with reason and common sense
- The narrator of a hadīth must not be unknown
- Student teacher relationship the <u>hadīth</u> must be connected via a strong studentteacher relationship
- The text and chain must be free from hidden defects i.e. if it is learnt that an authority
 concealed a defect or a detail of the hadīth it loses its authenticity

The rational basis for all these criteria is self-evident. Each rule is a logical step taken to improve the probability that the $had\bar{\imath}th$ was authentic. These criteria are found in one form or another in all the normative texts on the $had\bar{\imath}th$ sciences. Any $had\bar{\imath}th$ that does not meet these criteria should not be given the status of $sah\bar{\imath}h$ or indeed $mutaw\bar{a}tir$, which has the additional criterion that the narration must carry multiple chains of narration. As previously mentioned, Imam Al-Bukhārī was the only author of the $Al-sih\bar{a}h$ al-sitta to have insisted on proof that adjoining narrators actually met which demonstrates that the term $sah\bar{\imath}h$ was used somewhat differently by the other scholars of his day.

In addition to the disagreement on the criteria, their application has been far from consistent. Ibn Hajar al-Asqalani in his commentary of \$aḥīḥ Al-Bukhārī highlights that over 100 ḥadīth fail one or more criteria stated by Imam Al-Bukhārī himself. For instance, there are many ḥadīth in the \$aḥīḥ of Al-Bukhārī that are narrated by Ikrima, a slave of ibn 'Abbās yet by consensus he is acknowledged to have become a member of the *Khawārij*, a deviant group who pronounced takfīr on those who did not agree with them and considered it lawful to kill them. By the above-mentioned criteria, this should mean that none of the narrations from him is accepted as \$aḥīḥ yet we find this is not the case. In fact, because of his acceptance by Imam

Bukhārī later *muḥaddithīn* also accepted him. This acceptance was explained by the *muḥaddith* Al-Dhahabi (1274-1348 CE) who justified it by saying that as the *Khawārij* considered lying to be a sin punishable by death his word was to be trusted; however, I would question the acceptance of his narration for instance of the *ḥadīth* that is commonly used to justify the killing of apostates:

Narrated Ikrima, "Some atheists were brought to Ali and he burnt them. The news of this event reached ibn 'Abbās who said, "If I had been in his place, I would not have burnt them, as Allah's Messenger forbade it, saying, "Do not punish anybody with Allah's punishment (fire)." I would have killed them according to the statement of Allah's Messenger, "whoever changes his Islamic religion, then kill him.""

(An-Nasafi, 2015, p. 226)

Clearly Ikrima's involvement in a sect, that has been by consensus deemed deviant, whose beliefs were so extreme in respect to the application of the death penalty, must be of relevance to his sound transmission of this *hadīth*.

Concerns over other narrators of hadīth have been documented with the Shafi'i muḥaddith Imam al-Sakhāwi (831-902 CE) writing:

The status of Imam al-Bukhārī is higher than Imam Muslim... This is because Imam al-Bukhārī has taken narrations from 435 narrators; among these narrators there are only 80 weak narrators. Imam Muslim has taken narrations from 620 narrators. About 160 narrators are known to be weak from among these.

(Al-Sakhāwi, 2003)

In fact, most hadith narrators have had at least some negative reports so the criteria should be understood to be an ideal that was not always adhered to. Where 'exceptions' were made it may, depending on the case, be important to verify the 'excuses' provided for the

acceptance of a given tradition to ensure they are acceptable for the purpose for which the hadīth is intended to be used.

The criteria that adjacent authorities in a chain should hold a master and student relationship is perhaps particularly relevant to the Hanafi and Maliki schools where Abu Ḥanīfah preferred ḥadīth transmitted via a line of fuqāhā and Imam Malik insisted on only accepting a ḥadīth from someone with a clear understanding of the *matn* who would therefore be in a position to transmit to him as a 'master' to a 'student'.

3.4.4 Criteria for a Hasan Hadīth

The category of 'hasan' is close to that of $sah\bar{i}h$ except that one or more of the authorities in the $isn\bar{a}d$ is considered questionable in their accuracy. The questionable narrator will thus meet the criteria of ' $\bar{a}dil$ or good character but it will be established by, for instance, considering the $had\bar{i}th$ they have narrated alongside other more reliable authorities, they are known to make some errors in recording. This category was not initially considered separately and earlier literature subsumes this under the $sah\bar{i}h$.

3.4.5 Criteria for a Da'if Ḥadīth

Any $had\bar{t}th$ that fails to meet the criteria for hasan but is not considered to be forged is termed $had\bar{t}th$. This category has many subdivisions according to the nature of the weakness in the $had\bar{t}th$.

3.4.6 The Probabilistic Foundation of 'Ilm-al-Ḥadīth

Earlier I highlighted an objection to the terms 'authentic' and 'good' being used for <code>saḥīḥ</code> and <code>ḥasan aḥadīth</code>. To understand the science of <code>ḥadīth</code> it is crucial to realise that this is a disciplined and rational science based upon probability. The different criteria used to identify <code>aḥadīth</code> relate to the degree of confidence that may be placed in them rather than any absolute criteria of authenticity. A reliable authority is to be trusted more than one that has known defects of character or memory etc. Thus a <code>da'if ḥadīth</code> may be authentic and a <code>saḥīḥ ḥadīth</code> may be forged; however, the evidence gathered suggests that the <code>saḥīḥ ḥadīth</code> is more likely to be authentic than the <code>da'if ḥadīth</code>. For this reason, the status of a given <code>ḥadīth</code> is sometimes elevated when it is considered alongside corroborating evidence such as another similar <code>ḥadīth</code> as this alters the balance of probabilities.

This has been explained by the respected Muḥaddith Ibn Al-Ṣalāḥ Al-Shahrazūrī (1181-1285 CE) in his Kitāb Ma'rifat anwā' 'ilm al-ḥadīth (Introduction to the Science of Ḥadīth):

Ibn Salah said, "Sometimes the scholars disagree over the authenticity of some of the narrations because they disagree whether it meets the conditions of soundness or whether some of these conditions are necessary, such as the loose (mursal) narrations. When the scholars say this narration is sound (sahih), this means that its chain of narration (isnad) is connected and it meets the conditions of soundness, but this does not necessitate that the narration is sound in reality, since these conditions accept the narration of a single upright transmitter alone although this type of narration is not one of the reports which the community has unanimously accepted. Likewise, when they say that a narration is unsound, this does not necessarily mean that it is false, because it may in reality be true. Indeed, all that is meant is that its chain is not sound according to the conditions. Allah knows best."

(Al-Shahrazūrī, 2006, p. 5)

This way of expressing the science of the *muḥaddithīn* is conspicuously absent from contemporary literature but I would suggest that it could overcome many misconceptions in the use of the *ḥadīth* both by those who tend to be overly reliant on the use of *ḥadīth* and those who dismiss them as a valuable source.

3.4.7 Differences in the Madhāhib (Schools of Law)

As will be elucidated in chapter 3 there have always been differences in the way that the *madhāhib* have treated the *ḥadīth*. The writings of the *muḥaddithīn* however have been concentrated on the Al-Shafi'i and Ḥanbali schools. This is not to say that the later scholars of the Hanafi and Maliki eschewed the compilations of *ḥadīth*, for in fact they embraced their scholarship and incorporated their books into their *madhāhib*; however, the differences in the usage of the *ḥadīth* they compiled remain and will have impacted on the *tafsīr* of the scholars of those *madhāhib*.

3.4.8 Disagreements between the Scholars of Hadīth

In recent years a part of the literature seeking to discredit the validity of the <code>hadīth</code> has been that highlighting disagreements, sometimes of a vehement nature between the scholars of <code>hadīth</code>. It has been observed for example that Imam Bukhārī did not include <code>hadīth</code> from Imam Abu Ḥanīfah and this has been explained by the assertion of Na'im ibn Ḥammād that Imam Abu Ḥanīfah was a <code>Murji'ite</code> (an early heretical group). The assertion probably originated with the Muʿtazilites who were known to use labels such as this at those who rejected their ideas. Imam Bukhārī in turn was accused of denying the uncreated nature of the Qur'ān which led to him being ostracised by Imam Muslim. These conflicts and others have for some

overshadowed the work of these scholars; however, the overwhelming majority of scholars affirm the validity of all these scholars while at the same time accepting that they were all human and prone to error.

The science of hadith criticism continues to this day with contemporary scholars continuing to review the status of the documented hadith. Their work is valuable but it is commonly misunderstood by lay people, particularly those from the salafi tradition who for instance are known to insist on following a hadith that has been classified as ahith by their scholars and denying the validity of a ahith that is declared ahith, both of which are potentially incorrect actions without the detailed consideration of a knowledgeable ahith

3.4.8.1 The Science of Ḥadīth

In the early years of Islam, the <code>hadīth</code> or stories of the speech and actions of the Prophet Muḥammad were transmitted orally. At one point, the Prophet forbade the companions from writing these down to ensure they were not confused with the Qur'ān. There were individuals who would collect the <code>hadīth</code> purely to retransmit them whilst others would seek out <code>hadīth</code> to use them to derive the law. The number of <code>hadīth</code> recorded was over a million and as time went on the need became apparent to separate sound transmissions from those that were weak or simply fabricated. During the time of the Sunni Shia conflict many <code>hadīth</code> were fabricated by people seeking to 'prove' the arguments of their side and these needed to be identified and discarded so that no <code>faqīh</code> mistakenly used them to derive the law.

The science of the scholars of hadith developed and was refined and this continues until the present day with analysis of both the chains of transmission (isnad) and the text (matn).

The <code>hadīth</code> were not the only source for determining the Sunnah. Imam Malik lived in Medina and for him the persisting practices of the people of the first City of the Prophet® were a powerful source of evidence for the Prophet®'s Sunnah, the more so because a cultural practice evidenced multiple chains of transmission.

3.5 Summary of Findings in the Development of the Religious Sciences

The revealed sciences have been developed over a long period of time, motivated by the desire to comprehend as accurately and truthfully as possible the sources of revelation and apply that knowledge to the lives of people. They have been led by scholars who have been renowned for their piety and there is a perception that this piety has in part arisen from their acquisition of knowledge.

The processes of authentication, interpretation and application have however been entirely rational and the process of application, which is the development of Islamic law, has, in addition to the revealed sources, the essential rational source of the nature of the real world.

In this chapter I have traced the development of the religious sciences of jurisprudence, Qur'ānic exegesis and hadīth authentication and have shown that at every stage reason and revelation must be used together. Exactly what methods and processes should be used and the priority that should be given to each has never been agreed upon but these fundamental principles apply to every school of thought incontestably.

Sharīʿah by definition is the way of God, it is the path he wills humankind to follow in this life. Fiqh or jurisprudence is the law human beings have interpreted using their facility to reason, from the sources of revelation; the Qur'ān and Sunnah. Given that the Sharīʿah is specifically for this world, the dunyā, it must be built upon both the revealed will of God and the divinely

created reality to which it applies. Thus, the religious sciences are inextricably intertwined with the rational sciences at every level. The rational world is an essential source and reason as a process is employed at every stage to determine God's intent through both the revealed and the revelatory sources.

This gives some understanding to the reason why many $\bar{a}y\bar{a}t$ of Qur'ān enjoin contemplation upon the $\bar{a}y\bar{a}t$ of God in the Natural world.

Those who insist on limiting the understanding of the Qur'ān to the opinions of the early exegetes are locking in the understanding of the companions. They perceive this to be inherently 'good' or 'safe' but this is not the case. As I have repeatedly, reiterated context is always important and an opinion that is sound in one context may not be in another. In chapter 2 I demonstrated that the earlier exegetes despite their sound knowledge and great sincerity were limited to the understanding of the real world that existed in their time. In some cases, this makes their interpretations look foolish to us today. It is also not only a question of advances in rational knowledge. In some instances, an understanding is context sensitive and this needs to be clearly understood. This is why the jurists all emphasised the importance of understanding 'the reality' of a situation before making a judgement.

Asma Barlas highlights that those who use the Qur'ān to advocate sexual inequality or the oppression of women go against the spirit of the Qur'ān.

...as numerous scholars have pointed out, inequality and discrimination derive not from the teachings of the Qur'ān but from the secondary religious texts, the Tafsīr (Qur'ānic exegesis) and the Ahadith (s. ḥadīth) (narratives purportedly detailing the life and praxis of the Prophet Muḥammad).

(Barlas, 2002, p. 3)

She points to the Qur'an verse 39:18 which says:

who listen [closely] to all that is said, and follow the best of it: [for] it is they whom God has graced with His guidance, and it is they who are [truly] endowed with insight!

Qur'ān 39:18 (Asad, 2003, p. 798)

Fazlur Rahman is also concerned that the correct method of interpretation should be at the centre of Islamic intellectualism. He believes:

...there is a general failure to understand the underlying unity of the Qur'ān, coupled with a practical insistence upon fixing on the words of various verses in isolation.

(Rahman, 1982, p. 2)

4 THE DEVELOPMENT OF THE RATIONAL SCIENCES

The relationship between science and religion is not a new debate. Throughout history this subject has been discussed by philosophers, theologians and scientists as well as rulers more motivated by political ends. In this chapter I will look at the background to the explosion of the rational sciences in the Muslim world, considering the role of rationalism in science and the efforts of the polymaths to develop an understanding of knowledge that encompassed all its disparate forms.

That the rational sciences blossomed during the age of the Muslim Empire is undisputed; however, the questions that are pertinent to this study are:

- 1. Was this because of principles derived from the Qur'ān by Muslim exegetes or was it simply the rediscovery of the earlier Greek civilisation whose writings were uncovered as the Muslim traders and Armies moved into Persia, India and North Africa?
- 2. Did the scholars of the rational sciences place equal emphasis on the revealed sciences or was one more important to them than the other?
- 3. What was the motivation behind their study of the rational sciences?

Saliba highlights what he calls the *classical narrative* (Saliba, 2007, pp. 1-2). This begins with the understanding that the community of Muḥammad and his early followers was a barely literate community of desert nomads whose cities lacked the culture and science of the ancients. The civilisation that blossomed there then began to develop scientific thought only through contact with other more ancient civilizations, which were considerably more 'advanced', in part through abandoning the superstitious constraints of religion. These ancient

civilizations were specifically the Greco-Hellenistic civilisation to the west, and the Sasanian (and by extension the Indian) civilization to the east and the southeast.

In this *classical narrative* many commentators restrict their descriptions of the Islamic golden age to a mere rehearsal of the earlier Greek and Indian glories that functioned as crucial bridge, preserving the rational sciences until they could be taken up again by the Christian and Secular scholars of the European Renaissance.

The science historian Pierre Durhem is representative of the historians who interpret the historical sources in this way:

The revelations of Greek thought on the nature of the exterior world ended with the 'Almagest (by Ptolemy) which appeared about AD 145, and then began the decline of ancient learning. Those of its works that escaped the fires kindled by Mohammedan warriors were subjected to the barren interpretations of Mussleman commentators and, like parched seed, awaited the time when Latin Christianity would furnish a favorable soil in which they could once again flourish and bring forth fruit.

(Durhem, 1961, p. 141)

Jim Al-Khalili expresses this somewhat more moderately saying:

Even those in the West who have a vague awareness of the contribution of the Muslim world to science tend to think of it as no more than a reheating of Greek science and philosophy with the odd bit of originality subtly added, like Eastern spice to enhance the flavour. A grateful Europe then eagerly reclaimed its heritage once it awoke from its slumber during the Renaissance of fourteenth and fifteenth centuries.

(Al-Khalili, 2012, p. xix)

He is doubly surprised to find that this is not unique to Europe either. He tells us that growing up in Iraq he did learn at school about Ibn-Sīnā, Al-Kindi and Ibn Al-Ḥaytham but not in science lessons, only as historical figures:

For the teaching of science in the Muslim world follows the Western narrative. While it is not surprising that European children are taught that Copernicus, Galileo and Kepler were the fathers of astronomy, that nothing of note came before them, it is rather more disappointing that children in the Muslim world are taught the same thing.

(Al-Khalili, 2012, pp. xix-xx)

At the other end of the spectrum are the zealous advocates of what Hoodbhoy calls *Islamic Science*. They, he explains, "seek to establish that every scientific fact and phenomenon known today was anticipated 1400 years ago and that all scientific predictions may, in fact be based on the study of the Holy Book" (Hoodbhoy, 1991, p. 140).

In this chapter I will explore the way the rational sciences were developed and consider whether the evidence supports the *classical narrative*, or whether in fact it supports the idea that the intellectual revolution stemmed directly from the Qur'ān and the teachings of the Prophet Muḥammad or whether the true picture lies somewhere between these two polarised viewpoints.

In chapter 2 I examined:

- The definition of 'science' and its associated terms in Arabic and their relationship to the Qur'ānic concept of 'ilm; knowledge
- I asked whether the Qur'ān offers any suggestions or ideas that may relate to our understanding of science in the modern day and if so how this is expressed, keeping in mind our main question of whether this falls under the banner of revelatory knowledge or rational knowledge

Finally, I questioned whether there is an active promotion of the seeking of this kind
of knowledge from a religious or secular perspective and if so, what is the purpose or
motivation behind this promotion

While it would be relatively easy to consider these questions as purely theoretical, analysing them from the Qur'ānic text, our investigation was inevitably coloured by the attitudes prevalent today towards science, i.e. the context within which I conducted my exegesis. To understand the impact that these concepts had on the Islamic community as it evolved and the role the Islamic texts had on that evolution I will examine the historical development of science and its associated philosophical underpinnings.

4.1 Definitions

The word science comes from the Latin, *scientia*, meaning knowledge. How do we define science? According to Webster's New Collegiate Dictionary, the definition of science is:

Knowledge attained through study or practice, knowledge covering general truths of the operation of general laws, esp. as obtained and tested through scientific method [and] concerned with the physical world.

(Merriam-Webster, 1960, p. 757)

What does this really mean? Science refers to a system of acquiring knowledge. This system uses observation and experimentation to describe and explain natural phenomena. The term science also refers to the organized body of knowledge people have gained using that system. Less formally, the word science often describes any systematic field of study or the knowledge gained from it.

The Word science translated into Arabic is عُلُوْم 'ulūm, the plural of 'ilm.

e.g. Chemistry is علوم الكيمياء 'ulūm al-kīmia, Physics as علوم الفيزية 'ulūm al-fīsia. 'Ulūm therefore simply means a specialised branch of knowledge.

4.2 Science in the Qur'an

How is science as an activity sanctioned in the Qur'ān while the word 'Ulūm as understood to mean 'science' does not appear in the Qur'ān? In his book *Islamic Science: Towards a Definition,* Professor Alparsian Açikgenç argues that:

...in a civilisation no learning activity can be characterised 'scientific' unless there is already a body of knowledge defined as 'science' ... since any tradition of learning or an intellectual tradition can be described as 'scientific' only after the existence of sciences, scientific tradition is required for the emergence of sciences.

(Açikgenç, 2006, p. 2)

He goes on to introduce the term scientific consciousness instead arguing that is both conventional and universal - conventional on the basis of ways and manners adopted by the scientific community and universal on the basis of the epistemological character of our mind (i.e. cognitive).

In the beginning of the Qur'ān, it describes itself as 'a sure guidance without doubt for those who possess *taqwa* (variously translated as fear of God, God consciousness, piety etc.)'. The Qur'ān does not claim to be a book of science. I shall explore whether there is any justification for linking science to the Qur'ān. In chapter 2 I delineated the concept of knowledge in the Qur'ān and how that was further reiterated and elaborated in the sunnah of the Prophet¹⁸⁶, which leaves us in little doubt that the concept of 'ilm is of immense significance in the teachings of the Qur'ān.

Anis Hamedah in his article *The Concept of Science in Early Islamic History* (Hamadeh, 1996) regards *'ilm* as an indigenous concept of science and defines science *in immediate accord with the inherent criteria of 'ilm;* however, he goes on to say that it is rather surprising that the term '*ulūm* is missing from the discourse while very early on the cousin of the Prophet Abd Allah ibn al 'Abbas was teaching different subjects such as exegesis, law, the Prophet 's expeditions, pre-Islamic history, and poetry. He goes on to suggest that the earliest scholar to use the term '*ulūm* was the philosopher Al-Kindi and to suggest that the term '*ulūm* is not Arabic in origin.

In the Qur'ān it can be observed that not only does it encourage acquiring knowledge but also guides us as to how to acquire knowledge rationally. The Qur'ānic revelation itself is not just to be taken for granted, but rather revelation is to be corroborated rationally: In the pages of the Qur'ān the physical world is described as $\tilde{a}y\bar{a}tihi$ or signs, the same term used for the verses of the Qur'ān, so revealed knowledge is linked directly to rational knowledge with both referenced as sources of knowledge:

And among His SIGNS is the creation of the heavens and the earth...

Qur'ān 42:29 (Ali, 2004, p. 1254)

Thus reason and revelation are intertwined and one cannot understand one without the other.

How does the Qur'ān, if at all, lay a scientific foundation for human enquiry? Note that the Qur'ān repeatedly enjoins us to ponder over natural phenomena in a systematic way to understand the signs of God:

And among His signs are the ships, smooth-running through the ocean, (tall) as mountains.

Qur'ān 42:32 (Ali, 2004, p. 1255)

And it is He who spread out the earth, and set thereon mountains standing firm and (flowing) rivers: and fruit of every kind He made in pairs, two and two: He draweth the night as a veil o'er the Day. Behold, verily in these things there are signs for those who consider!

Qur'ān 13:3 (Ali, 2004, p. 587)

4.3 Earliest Scientific Study in the Muslim Community

The earliest references to the study of science in the Muslim community relate to the development of medicine. While the Prophet Muḥammad recommended the use of Qur'ān through its recitation to alleviate ailments he also encouraged the use of medicine:

Narrated Usamah ibn Sharik:

I came to the Prophets and his Companions were sitting as if they had birds on their heads. I saluted and sat down. The desert Arabs then came from here and there. They asked: Apostle of Allah, should we make use of medical treatment? He replied: Make use of medical treatment, for Allah has not made a disease without appointing a remedy for it, with the exception of one disease, namely old age.

(Abu Dawud, 1988, p. 1083 Vol 3)

In another narration:

Narrated AbdulAziz ibn Umar ibn AbdulAziz:

Some people of the deputation which came to my father reported the Messenger of Allah as saying: Any physician who practises medicine when he was not known as a practitioner before that and he harms (the patients) he will be held responsible. AbdulAziz said: Here physician does not refer to a man by qualification. It means opening a vein, incision and cauterisation.

(Abu Dawud, 1988, p. 1286 Vol 3)

Aiesha the wife of the Prophet²⁸ and the individual from whom Muḥammad²⁸ famously told the men they should take half their religion from, was also known to study medicine (Bewley, 2004, p. 4).

As scholarship developed in the Muslim community Medicine was perhaps the least controversial and most commonly praised science to be pursued. The first of the great jurists Imam Abu Ḥanīfah famously made the following statement:

Anyone who learns hadith without studying *fiqh* is like a pharmacist who has all the medicines but does not know for which conditions they are used. He must wait until the doctor comes. A hadith student must also wait for the scholar of *fiqh*.

The focus of the above statement is on law; however, the analogy he draws makes it clear that both doctors and pharmacists were known in his time. The statement of Imam Shafi'i that

Ibn Abi Hatim reported: Ash-Shafi'ee, may Allah have mercy on him, said, "Indeed, knowledge is of two types: knowledge of the religion and knowledge of the world. The knowledge of religion is to achieve understanding (fiqh) and the knowledge of the world is medicine. Do not settle in a land in which there is no scholar to inform you about your religion, nor a doctor to inform you about your body."

(Ali, 2011, p. 14)

evidences the respect that this leading Islamic jurist held for medicine as a science and a field of knowledge whose pursuit is praiseworthy.

The earliest example of a primitive or basic kind of hospital dates back to the battle of the trench when the Prophet® ordered a tent to be erected in his mosque in Medina to act as a field hospital:

On the day of Al-Khandaq (battle of the Trench) the medial arm vein of Sa`d bin Mu`ad was injured and the Prophet pitched a tent in the mosque to look after him. There was another tent for Banu Ghaffar in the mosque and the blood started flowing from Sa`d's tent to the tent of Bani Ghaffar. They shouted, "O occupants of the tent! What is coming from you to us?" They found that Sa`d' wound was bleeding profusely and Sa`d died in his tent.

(Al-Bukhārī, 1985, p. 269 Vol 1)

4.4 Scholarly Underpinnings of the New Sciences

In the previous chapter the science of jurisprudence was examined. Through necessity, this was the first science to be developed in the new, rapidly expanding Muslim community. Natural Science was slower to become established but as Bakar highlights, the development of the religious sciences, which in chapter 3 I established was an exacting and meticulous rational process, had already paved the way for the rational and empirical tools science would appropriate:

Muslims did not begin to cultivate the natural sciences in earnest until the third century of the Islamic era (the ninth century of the Common Era). But when they did so they were already in possession of a scientific attitude and a scientific frame of mind, which they had inherited from the religious sciences.

(Bakar, 1999, p. 2)

Thus it was not only the contact with translated Greek texts that stimulated the rapid growth of these disciplines.

4.4.1 Rationalism leading to an early 'Heresy'

Early in the development of Islamic thought the issue of rationalism brought about a split in scholarly opinion. The Mu'tazilah, founded by Wasil ibn Ata (699-749 CE), were extreme supporters of rationalism. They took the Qur'ānic concept of the ultimate justice of God in isolation and then pursued it to the conclusion that God *cannot* be unjust and this led to their doctrine of the promise and the threat; that is that God *must* punish evildoers with hellfire and *must* reward the good with paradise or He would cease to be supremely 'just'. Thus, as Rahman puts it:

...the Mu'tazila subsumed the idea of God under that of human justice, the orthodox subsumed the idea of justice under that of God.

(Rahman, 1979, p. 89)

For reasons that are by no means agreed upon, The Caliph Al-Mamūn (reign 813–833CE) launched a religious purge in 833 rounding up scholars and imprisoning any who did not at least feign adherence to the central principal of Mu'tazilite thinking; the created nature of the Qur'ān; they did not accept that the Speech of God is one of His divine attributes and thus rejected the doctrine of the *uncreatedness* of the Qur'ān which they asserted was simply one of God's creations and therefore lower in rank than Gods essential constitution – reason. This persecution of the Traditionalists termed the *Miḥnah* or 'trial', lasted through successive Caliphates until 898 when it was repealed by the Caliph Al-Mutawakkil (822-861 CE). This marked the end of the dominance of Mu'tazilite thinking and from that time the Traditionalists have dominated.

The staunchest of Traditionalists who suffered imprisonment and beatings at the hands of the Mutazilite rulers was Ahmed Ibn Hanbal, the founder of the fourth school of Sunni Jurisprudence (See chapter 3). He eventually went into hiding re-emerging only after Mutawakkil's U-turn. He thus was an obvious choice of hero for subsequent generations of Traditionalists.

Rahman asserts that they adopted from Greek thought the idea that reason was the 'essential constitution of God' which evidences the existence of the Greek writings within the Muslim scholarly community at this very early period (Rahman, 1979, p. 90). Translations of Jewish and Christian scholars are known to have existed in Persia; Goodman (1990, p. 477) highlights the fact that the translation of Greek texts began before the rise of the Islamic Empire amongst Christians, Buddhists, Zoroastrians and Pagans particularly in the area of Persia and Syria. It is significant however, that the Mu'tazilah were so determined to apply this thinking to the Qur'ān rather than promoting secular thought. This indicates that they felt a strong attachment to their religious heritage.

When the Islamic civilisation conquered the Sassanid empire it absorbed many of the scholars who had been engaged in this work and many of them converted to Islam. The Abbasid rulers saw great benefit in the absorption of all forms of worldly knowledge and personally sponsored the increase in scholarly translations of the Greek texts. Similarly pragmatic were the educated elite of the conquered societies for whom learning Arabic and adopting Islam was essential to their retaining positions of power and influence. This analysis is also shared by Saliba (2007, pp. 73-78). Thus pragmatism may be considered the origin of a greater

acceptance of the rationalist ideas of the Greeks by Persian Muslim scholars even if they later came to be accepted as genuinely in harmony with the teachings of the Qur'ān and Ḥadīth.

Mu'tazilite thought was a genuine power in the intellectual battlefield of the day as the state creed of the emperor Al-Ma'mun but it may be that the backlash from the Traditionalists went too far in rebutting their position and thus undermined the role of reason.

During the 8th and 9th centuries the first schools were developed independent of the state and funded by charitable trusts known as $awq\bar{a}f$ (plural of waqf). The structures of the different Islamic schools of jurisprudence, philosophy and the various traditional sciences of $had\bar{t}th$ validation, $tafs\bar{t}r$ etc. were developed and these led to the creation of detailed syllabuses.

Contemporary thinkers such as Açikgenç have proposed broader definitions of Islamic Science.

He offers:

That scientific activity which takes place ultimately within the Islamic worldview (which can now be defined as the Islamic conceptual environment); but as an extension of it directly within the Islamic scientific conceptual scheme (which can be identified also as the Islamic context of sciences)

(Açikgenç, 1996, pp. 35-38)

But while this resonates with the analysis carried out in the previous chapters of this thesis this is a modern understanding that the historical community I am examining did not necessarily share.

In this formative period the sciences were divided into three broad categories:

- The Revealed Sciences (Also termed the Islamic sciences).
- The Philosophical and Natural Sciences (also termed the rational sciences or the Sciences of the Ancients).
- The Literary Sciences.

Of these only the Revealed sciences were taught in institutions of learning. There is no doubt that learning from the earlier Greek civilisation entered the Islamic empire very early on.

Nevertheless, this was only studied in private and was viewed with a mixture of both respect and suspicion as Makdisi states:

...'the sciences of the Ancients', that is of the Greeks, while opposed for its 'pagan' principles by every believing Muslim scholar among the faithful, commanded nevertheless an unpublicised, silent, begrudging, respect. These sciences were studied in private, and were excluded from the regular courses of Muslim institutions of learning. The religious sciences were at the forefront of education. With the rise of dialectic, jadal, as applied to the study of legal theory and methodology, usul al-fiqh, the literary arts were relegated to the background.

(Makdisi, 1981, pp. 75-6)

4.5 Falsafa and its impact on scientific development

4.5.1 Al-Kindi (801-873 CE)

The Mu'tazilite movement arguably (Ivry, 1976) gave rise to the first great Muslim Philosopher, Abu Yusef Yaqoub ibn Ishaq Al-Kindi, who became the first of a number of scholars to develop a system of categorisation for knowledge based on the Islamic traditions. These systems were developed to further an understanding of knowledge itself and to make it easier to separate the valuable from the mundane or even blameworthy; however, they

were to play a significant role in the decline of rational scholastic endeavour in the colonial and post-colonial period.

Born less than two centuries after the death of the Prophet Muḥammad, Al-Kindi was a mathematician, astronomer, physician and a geographer as well as a talented musician. He was also one of the earliest Muslim scholars to be recognised as a philosopher (falsafa in Arabic) and was also one of the first to begin to classify knowledge. He divided human perception and knowledge into two types:

- Perception by the senses.
- Knowledge through the intellect.

and asserted that the existents are of two kinds:

- Particulars, which are perceived by the senses, and
- Universals, which exist in the mind.

The principal aim of his work was to know God (Al-Allaf, 2003) and was thus thoroughly rooted in the Islamic paradigm, however, from this simple starting point he began to derive structured methods for the acquisition and documentation of knowledge. He believed that different fields of knowledge, since they have different subject matter, must also have different methods of study and his methodological classification of sciences is based on the subject matter of each field of study. As he expressed it:

We ought, however, to aim at what is required for each pursuit, and not pursue probability in the science of mathematics, nor sensation or exemplification in the science of the metaphysical; nor conceptual generalization in the principles of the science of the physical; nor demonstration in rhetoric, nor demonstration in the principles of

demonstration. Surely if we observe these conditions the pursuits which are intended will become easy for us but if we disobey this, we will miss the objectives of our pursuits, and the perception of our intended objects will become difficult.

(Ivry, 1974, p. 66)

Here we can see an apparently rigid separation of the different fields of knowledge and Al-Kindi made it clear that it was the 'Universals' that he found more interesting and more important; however, it has been observed that he was the first to attempt in Arabic the gathering of the best of pre-Islamic thought into a universal theory of God, mind, soul and nature and hence the originator in Muslim intellectual thought of "human science" a science open to contributions from non-Muslims as well as Muslims as opposed to the divine science of revelation that was the sole province of the Muslim scholarly elite (Zimmermann, 1990, p. 366).

It is beyond doubt that Al-Kindi was heavily influence by the Greek writings that he came into contact with as shown by his extensive use of transliterated Greek words; however, Fritz Zimmermann, the Oxford scholar of the Graeco-Arabic tradition, asserts that he and his followers made no effort to Hellenise the Arabic language as had been done to Syriac, and so the language of their writings remained predominantly modelled on that of the Qur'ān (Zimmermann, 1990, p. 366). This indicates that either the Qur'ān remained central to their thinking or possibly that they were pragmatic in their choice of language because they were conscious of the extreme resistance to Greek ideas and knew they would suffer a backlash from the Muslim scholarly community. Either way their writings remained foreign and un-Islamic in the eyes of their contemporaries and their school soon waned.

4.5.2 Muḥammad ibn Zakariyā Rāzī (894-925 CE)

Muḥammad ibn Zakariyā Rāzī or Razes as he is known in orientalist texts, was one of the first great scientists of the Muslim civilisation. He was heavily influenced by Greek thought but unlike many of his contemporaries he was a free thinking philosopher not constrained by the peripatetic philosophy of Aristotle. His understanding of matter was extraordinarily ahead of his time. Stolyarov highlights this saying:

He proclaimed the absolutism of Euclidean space and mechanical time as the natural foundation of the world in which men lived, but resolved the dilemma of existent infinities by synthesizing this outlook with the atomic theory of Democritus, which recognized that matter existed in the form of indivisible and fathomable quanta. The continuity of space, however, holds due to the existence of void, or a region lacking matter... This is remarkably close to the systems yielded by the discoveries of such later European scientists as John Dalton and Max Planck, as well as the observational and theoretical works of modern astronomer Halton Arp and Objectivist philosopher Michael Miller. Progress, in the view of all these men, is not to be obstructed by a jumble of haphazard and contradictory relativistic assertions which result in metaphysical hodge-podge instead of a sturdy intellectual base. Even in regard to the task of the philosopher, Rhazes considered it to be progressing beyond the level individually elevating oneself onto a higher intellectual plane.

(Stolyarov, 2002)

Rāzī wrote extensively on metaphysics where he adopted some Greek thought; however, many ideas he rejected which led to him being criticised by Ibn-Sīnā. He nevertheless remained a believing Muslim attached to the *Sharī'ah* and believing in the afterlife. Rāzī certainly held some extremely unconventional views; some claimed for instance he denied the validity of prophethood per se, and for this he was attacked by orthodox scholars; however, he later concentrated his efforts on medicine where his advances were ground-breaking.

He was the first scientist to distinguish between measles and smallpox and he challenged the Greek scholar Galen's theory that the body comprised 4 humours, a theory based on Aristotle's theory of 4 elements. Thus in science he clearly did not merely 'carry' the Greek knowledge forward but criticised it and developed new understandings that were to later impact greatly on scientific thought.

Rāzī travelled extensively developing his medical science and the fact that he was able to do so despite his unconventional theological views demonstrates the tolerance that existed in Muslim society at that time. The influence his work in medicine had on later developments also demonstrates that his detractors were able to take the good work he had contributed without feeling obliged to link it to his heretical philosophical views.

4.6 The Neo-Platonists

Greek thought continued to have a major influence on many scholars and one particularly influential group that developed were the Neo-Platonists, so called because of their work in attempting to integrate the writings of the Greek scholars into Islamic thought. Foremost amongst these was Abū Naṣr Muḥammad ibn Muḥammad Fārābī, referenced in the classical Islamic texts as simply Abu Nasr and known in Europe as Alpharabius.

4.6.1 Al Fārābī (872-950 CE)

Little is known about Al-Fārābī's early life and many of the early texts concerning it are contradictory (Bakar, 1998, pp. 9-16). What is agreed upon; however, is that he was born in the city of Farab, Turkestan. He is thought by some to have been of Persian descent but his family were Turkish in language and culture. He would have received a traditional Muslim

upbringing centred on literacy and the learning of the Qur'ān augmented with the study of fiqh (jurisprudence), grammar and elementary mathematics. This observation is of central importance in understanding all the great scientists of the medieval world. Education at this time began with the study of the Arabic language, the memorisation of the Qur'ān and the study of basic Islamic jurisprudence. Thus every Muslim scholar no matter how focussed their studies came to be on the Natural sciences was also a religious scholar to the degree that this term is now used today.

Al-Fārābī began his working life working in the field of *Sharīʿah* but like many scholars of that period he developed into a polymath, studying widely from mathematics and science (although unusually not medicine) in the libraries and was a noted linguist. He left his position as a *Qadi* (Judge) to study philosophy in either Khurasan or Baghdad (historians are undecided which) (Bakar, 1998, p. 15).

Al-Fārābī wrote numerous texts on a wide range of sciences but his work *Kitāb 'Ihsa' al-'Ulūm,*The Book of the Enumeration of the Sciences, illustrates his belief about what can be learned and the range of that knowledge. He divided this text into five principle chapters: namely, science of language, science of logic, mathematical science, metaphysics and political science and then followed these with a treatise on the importance of acquiring knowledge.

Within the scope of this study the most fundamental idea to which Al-Fārābī subscribed is that of the unity and hierarchy of the sciences and it is also crucial that his views were rooted firmly in his understanding of Islam. Bakar quotes Al-Fārābī from his work *Risalat fi fadilat al-ulum wa'l-sina'at, Treatise on the Excellence of the Sciences and the Arts*:

The excellence of the sciences and the arts is only by virtue of one of three things: the nobility of the subject matter, the profundity of the proofs, or the immensity of the benefits in that science or art, whether these benefits are anticipated or are already present. As for the (science or art) which excels others because of the immensity of its benefits, it is like the religious sciences (al-'ulūm al-sharī'ah) and the crafts needed in every age and by every nation. As for that which excels others because of the profundity of its proofs, it is like geometry (al-handasah). As regards that which excels others because of the nobility of its subject matter, it is like astronomy ('ilm alnujum). However, all these things or any two of them may well be combined in a single science such as metaphysics (al- 'ilm al-ilahi).

(Bakar, 1998, p. 48)

Bakar highlights that such hierarchies are rooted in the Qur'ān which includes verses which themselves are of various grades in value yet are all believed to be of divine origin.

4.6.1.1 Al-Fārābī's Classifications

The cataloguing and classification of science such as we see in the works of Charles Darwin is often perceived to be a modern phenomenon that arose out of the pure science of the post-enlightenment period, yet when we look at the earlier Muslim scholarly community we find evidence to suggest that the development of this systematic approach to knowledge developed out of or at the very least was developed in a way that resonated harmoniously with the text of the Qur'ān. This became one of the driving and steering forces for scientific development in the Muslim world.

A detailed analysis of Al-Fārābī's classification of the sciences is not pertinent to this thesis however a brief overview does assist in understanding the way Islam and the Qur'ān influenced his thinking.

In one scheme Al-Fārābī provides his hierarchy of beings:

- 1 God
- 2 The Angels
- 3 The Celestial Bodies
- 4 The Terrestrial bodies

He regarded the natural sciences (including psychology but not philosophy) as the lowest of the philosophical sciences because they dealt with the terrestrial bodies; however, his study of many of the natural sciences evidences his belief that their being lower in station did not make them unworthy of study. Mathematics for Al-Fārābī occupied a station between Philosophy and natural science which demonstrates the high value he placed on human intellect while his high ranking of celestial bodies was related to his belief that the celestial bodies were mathematical entities possessed of intellect albeit limited compared to that of mankind.

Al-Fārābī's understanding of human virtues drew closely on Aristotelian thinking, dividing them between the rational and the ethical and sub-dividing the rational into the theoretical, the deliberative and the artistic (Bakar, 1998, p. 108). Their value however was determined by their ability to enable the possessor to gain happiness in this life and ultimately attain felicity in the life to come; thus once again his thinking was firmly rooted in the cosmology of the Qur'ān.

Saliba shows that Al-Fārābī saw himself and Islam itself as liberators of Philosophy (which included the natural sciences) following a period of oppression under Roman Christian rule (Saliba, 2007, p. 7). Unfortunately, his unconventional ideas which were seen by mainstream

Muslim scholars as heresy rooted in an excessive attachment to the ideas of the Greek philosophers. They believed that Al-Fārābī was trying to adapt the Qur'ānic paradigm to fit with the thinking of Aristotle and Plato rather than the other way round which led to an increasing resistance that would culminate in the aggressive rebuttal of *Falsafa* by Al-Ghazālī and Ibn Taymiyyah.

One of the most important concepts that Al-Fārābī and the *Falsafa* borrowed from Aristotle was the notion that God is perfect and must therefore be unchanging. They believed that this inevitably led to the conclusion that Allah did not act directly in either the creation or the management of the creation. Rather they believed that 'emanations' from God impacted upon the creation to influence it. This was one of the key concepts that many believed took Al-Fārābī outside Islam and caused scholars such as Al-Ghazālī to denounce him as an infidel a century later.

4.6.2 Ibn-Sīnā (980-1037 CE)

Al-Fārābī's work was extended by one of the most famous of Muslim Philosopher-Scientists Abu 'Ali Al-Husayn Ibn-Sīnā.

Ibn-Sīnā grew up near Bukhara the capital of the Samanid Persian dynasty in Khorasan. Like all educated people of the day he started studying the traditional sciences including memorisation of the Qur'ān and is said to have mastered them all by the age of ten. He then developed a fascination with medicine and the metaphysics of Aristotle which he struggled with until reading the commentary by Al-Fārābī. He began his medical study at 16 and was considered a qualified physician by the age of 18. His reputation in this field spread and so

when the Amir Nuh II became ill he was sent for. He treated the Amir who upon recovery was so please he gave him a formal appointment and provided him with access to his personal library. This gave him access to the wide range of literature he had craved and saw him soar in both philosophy and medicine.

Like Al-Kindi, Ibn-Sīnā developed his own theory of knowledge. With respect to the classification of knowledge he published both a general treatise; *Fi aqsam al-ulum al-'aqliyyah*, *Classification of the Rational Sciences* and a more detailed specific treatise on the classification of knowledge relating to healing in his text *Kitāb al-Shifā'* (The Book of Healing). Like Al-Fārābī his studies covered an extraordinary range of disciplines. Anawati produced a bibliography of his works which extended to 276 entries including no less than 8 encyclopaedias (Nogales, 1990, p. 392).

Ibn-Sīnā is renowned for his work on metaphysics in which he produced a unique synthesis of Aristotelian, Neo-Platonism, Iranian mysticism and Islam and through this he became the champion of Neo-Platonic thought in the Muslim scholastic community (Nogales, 1990, p. 395). At the same time in the realm of the rational sciences he is best known for his work in medicine, a discipline curiously missing from Al-Fārābī's repertoire, where he has been termed the Prince of Physicians.

In his theory of knowledge Ibn-Sīnā focussed on the mental faculties of the soul in terms of their epistemological function and like Al-Fārābī and Al-Kindi considered God, the pure intellect, to be the highest object of human knowledge.

4.7 Rebuttal of Falsafa

4.7.1 Ibn Ḥazm (994-1064 CE)

The great Andalusian scholar and leader of the literalist Zāhirī juristic movement was talented in many disciplines and his literary output, although most has since been lost, was second only to Imam al Ṭabarī in volume. While he is most well-known for his writings on *fiqh*, *ḥadīth* and grammar he was also interested in the Natural Sciences and while he considered the Revealed Sciences to be superior he nevertheless encouraged those with an aptitude for the Natural Sciences to study them:

Whomsoever has a natural leaning towards a science, even if it was less noble than another, should not abandon it for the other because if he did he would be like someone who would be growing coconuts in al-Andalus and olive trees in India, crops that would never fructify.

(Al-Hassani & Zaimeche, 2003, p. 7)

Thus, while he was one of the most literalist scholars he had no difficulty in accepting the 'good' scientific knowledge that had been developed by scholars he considered to be profoundly misguided. While ibn Ḥazm was deeply suspicious of speculative reason as he observed that human reason can be flawed and he asserted that 'sense perception' should be used instead for discovery or research; this may be seen as one of the early Islamic perspectives on empiricism. This fits with his rejection of *qiyās* (analogy) earlier discussed in the chapter on jurisprudence. He was however convinced of the value of logic, mathematics, geometry etc. His insistence on a purely literal and apparent interpretation of the Qur'ān meant that he did not indulge in the speculative metaphysical theories of Al-Fārābī and Ibn-Sīnā. He wrote extensively on comparative religion and in these writings he was very critical of the 'heretical' Muslim groups in which he included all the Muslim theologians, the

Mu'tazilah and the Ash'ariyah in particular, along with the philosophers, Falsafa and mystics, Sufis.

4.7.2 Al-Ghazālī (1058–1111 CE)

While the Neo-Platonists have received much acclaim in the west for their transmission of and expansion upon the great scientific and philosophical works of the Greeks it was Abu Hamid Muḥammad Al-Ghazālī, their most ardent critic, who was to take the classification of knowledge to the next level.

Abu Hamid Al-Ghazālī was born in 1058CE in the village of Ghazalah near Tus in what is now Iran. His father was poor and illiterate however he managed to arrange an education for his two sons Ahmad and Muḥammad. The young Muḥammad learned to read and studied the basic religious and linguistic sciences in Tus and Jurjan before travelling to Naysabur to complete his education at the Nizamīya College under the tutelage of one of the foremost scholars of the day Imām Al-Ḥaramayn Abd Al-Malik Abdullah Al-Juwaynī. The College under Al-Juwaynī was one of the most advanced of its day teaching not only the traditional Islamic disciplines but also logic and philosophy (Diyab, 1990, pp. 424-5).

In 1091, his talent was recognised at a debate with some 'Ulamā and he was appointed as a Professor at the Nizamīya College in Bagdad. Al-Ghazālī had studied Neo-Platonic and Aristotelian philosophy but this gave rise to a source of great concern for him. He firmly believed that personal knowledge should lead one to engage in good deeds, whereas the Aristotelian view was that the purpose of knowledge was simply for the achievement of mental satisfaction and pleasure. This caused him to doubt his own sincerity and question his

own motivations for maintaining his prestigious position at the college. This anxiety led to him suffering a breakdown that manifested in a speech impediment that forced him to suspend his teaching. In his autobiographical text *al-Munqidh min al-Dalal, Deliverance from Error* (Al-Ghazali, 1980, pp. 55-58) Al-Ghazālī states that he had begun to question knowledge itself, losing trust in reason and even his own senses. At the end of this period he underwent a spiritual experience in which he states that God cast a light into his breast, curing him of his spiritual malady.

He resigned his position which was taken up by his brother Ahmad and sold most of his possessions, giving most of the money to the poor. The remainder he gave to his family and then he left for Damascus. After a trip to Jerusalem he settled in Damascus where he lived in a minaret of the Umayyid mosque. It was during this period of seclusion that he wrote his seminal work *Iḥyā ʿUlūm al-Dīn* - the Revival of the Religious Sciences (Diyab, 1990, p. 427).

Al-Ghazālī wrote *al-Munqidh min al-Dalal* after he was persuaded to return to teaching. In this text he analyses the state of his fellow Muslims that had led him to despair of scholarship. His view on spiritual maladies was that they are simple and straightforward and would be recognised in any age. He mourns for instance, Ibn-Sīnā who, while professing a respect for the importance of the *Sharī'ah*, excused himself for his continuing indulgence in wine for its 'medicinal properties'; nor is he more sympathetic towards those who profess extreme spirituality but claim to have achieved a station that made the guidance of the *Sharī'ah* redundant for them. It is apparent; however, that his greatest concern is that the study of science and philosophy had weakened the faith of those who pursue it to the point that their practice of basic tenets of Islam has been to a greater or lesser extent abandoned.

A poignant example here is his attitude towards Mathematics. He acknowledged the attributes of mathematics; that it gives clarity and precision; however, he was concerned that a student of mathematics might develop the expectation of achieving similar precision in religious doctrine and not finding it might have their faith undermined. He used this perverse justification and the idea that the student of mathematics would develop respect for scholars such as Ibn-Sīnā whom he regarded as having left the fold of Islam as adequate reasons for asserting that Mathematics should not be studied (Deen, 2007, p. 161) (Hoodbhoy, 1991, p. 105).

It is important to remember the context within which Al-Ghazālī made this attack on the rational sciences. He was writing at a time in his life when his own faith in the revealed sciences had been shaken, or at least he had come to believe that they were not enough and that a spiritual quest was at least as important. Mathematics representing the opposite of this approach may have seemed to him to have been a science that took the student away from God as he felt excessive attention towards the traditional sciences had taken him away and weakened his faith.

I would postulate that were Al-Ghazālī able to consider the rational sciences today he would not have held the same harsh view of mathematics and physics. His concern is expressed in terms of the bad that they could lead to in terms of drawing the student towards the ideas of the heretical philosophers rather than any inherent evil. A similitude can be drawn here with Al-Ghazālī's attitude towards music. While many of the scholars condemned music per se, Al-Ghazālī understood the ḥadīth of the Prophet® as contextual and warning that music, whilst not inherently evil, could lead the devotee into sin. This he explained was because music at

the time of the Prophet® was associated with places where alcohol was served and prostitution took place, thus in pursuing music one would be led towards sinful acts. In a different context he asserted that music could be good or bad or merely a waste of time and was known to play the flute himself.

Returning to the subject of mathematics and physics, the inextricable link he perceived with the philosophers has now ended and these sciences are now considered simply to be divorced from any particular world view unless, as some may assert, one links them with atheism. This view is supported by Al-Ghazālī's own work *The Book of Knowledge* in which he divides the rational sciences into the Praiseworthy, Permissible and Blameworthy and concludes that Mathematics in some circumstances may be praiseworthy and even *Farḍ Kifāyah* (collective obligation) meaning that it is obligatory for some within the community to engage in it without it being a necessity for all (Al-Ghazālī, 1998, p. 30).

A further perhaps even more convincing evidence for the value and potential 'goodness' of mathematics would be the work of Al-Khwārizmī in algebra, a higher level of mathematics than mere arithmetic yet one that he showed held benefit in the context of *fiqh* for the determination of complex issues of inheritance.

4.7.2.1 Al-Ghazālī's Classification of the Sciences

Al-Ghazālī famously divided knowledge initially into two broad groups; intellectual knowledge, 'Ulūm al-'Aqliyya and divine knowledge 'Ulūm al-Sharī'ah (Bakar, 1998, p. 205), but also went on to define knowledge in terms of Obligatory (Farḍ Ayn) knowledge, knowledge that is important but not for everyone in the community (Farḍ Kifāyah), useless knowledge and

blameworthy knowledge. Within each of these categories he then proceeded to develop a hierarchy of knowledge which sought to emphasise the relative importance of each branch.

This work has been immensely influential in the subsequent development of the Muslim intellectual community.

4.7.2.2 Blaming Al-Ghazālī for the Decline of Science

As the champion of Asharite theology and one of the foremost critics of the Neo-Platonist philosophy, Al-Ghazālī has become the target for many looking for the cause of the decline in Muslim science. Pervez Hoodbhoy, a physicist and writer on Islam and science from Pakistan makes a common observation:

Ancient orthodoxy was indeed outspoken in its opposition to the ulum-al-awa'il [Greek Sciences] and the rational sciences, but all this did not amount to anything much and could not affect the assimilation of science into Muslim society. The turning point, however, came when the greatest and most influential of the orthodox ulema, Imam Al-Ghazzali, led the orthodox to final victory by providing them with political power.

(Hoodbhoy, 1991, p. 104)

Razi Naqvi goes one step further:

What Saint Justinian did for Christianity, Imām Ghazālī was to do for Islam: blot out the spirit of free enquiry and gag the philosophers.

(Naqvi, 2015, p. 48)

But how fair is this criticism? There is no doubt that Al-Ghazālī was concerned that the rational sciences could detract from a more valuable spiritual enquiry but he also considered that the revealed sciences held such dangers. He also attacked the theology of the Neo-Platonists but they were still theistic in their outlook and firmly attached to their Islamic faith. The real evidence would be if there was a sharp decline in engagement in the rational sciences

following his condemnation of Ibn Sīnā and Al-Fārābī and this too is not borne out by history.

George Saliba agrees with this observation saying:

...the decline of Islamic science, which was supposed to have been caused by Ghazālī's attack on the philosophers or by his introduction of the "instrumentalist" vision, does not seem to have taken place in reality. On the contrary, if we only look at the surviving scientific documents, we can clearly delineate a very flourishing activity in almost every discipline in the centuries following Ghazālī.

(Saliba, 2007, p. 21)

We, therefore, have to look for an alternative explanation for the decline in the rational sciences. The most plausible explanation I would suggest is simply that the rational sciences always required patrons and these were abundant when the society as a whole was prosperous. It was, therefore, the decline in political power and economic downturn that was at the root of the contraction in the engagement with the rational sciences.

4.8 Science independent of philosophy

While the *Falsafa* included many of the great Muslim scientists it is important to note that there many other giants of scientific discovery that did not ascribe to the metaphysical concepts that earned the wrath of the traditional theologians and jurists:

4.8.1 Al-Khwārizmī (780-850 CE)

Abu Abdullah Muḥammad b. Ahmad Al-Khwārizmī is best known for his work in mathematics. The word Algebra is taken from his book Ḥisāb al-Jabr wal-Muqābalah in which he published the oldest surviving text on Algebra, while the term algorithm is taken from a weak transliteration of his name (Essa & Ali, 2010, p. 97). He has been credited by many scholars with inventing algebra although the discovery of earlier Neo-Babylonian documents has cast

doubt on this. His introduction of the numeral zero and his contribution to furthering algebra, geometry and geography has led him to be considered one of the giants in the history of Mathematics.

No texts exist that explicitly reveal his motivation for the study of this area; however, in his texts he emphasizes the practical applications for algebra saying:

...what is easiest and most useful in arithmetic, such as men constantly require in cases of inheritance, legacies, partition, lawsuits and trade, and in all their dealings with one another, or where the measuring of lands, the digging of canals, geometrical computations, and other objects of various sorts and kinds are concerned.

And later continues:

That fondness for science, ... that affability and condescension which God shows to the learned, that promptitude with which he protects and supports them in the elucidation of obscurities and in the removal of difficulties, has encouraged me to compose a short work on calculating al-jabr and almuqābala, confining it to what is easiest and most useful in arithmetic.

(Morgan, 2007, pp. 91-2)

Hogendijk (2005, p. 31) points out that there were few if any practical applications for the use of quadratic equations at this time and that he believes Al-Khwārizmī's motivation was primarily recreational; however, this is to deny his own explanation. Further when we look at the practical examples he cites the first he mentions, inheritance, was in fact one of the most complex and demanding aspects of *Sharī'ah* at that time. Some rules for apportioning a deceased person's estate are given explicitly in the Qur'ān but in other circumstances the calculations become highly complex and algebra would have been a great asset in solving those problems.

I compare this to the concern of Imam Al-Ghazālī who was driven to become an ascetic recluse by the concern that knowledge should result in good deeds, that it should result in some beneficial, practical outcome and it should not be for mere pleasure or pride. It can reasonably be hypothesized that it was the ethics and morality from the Qur'ān that informed Al-Khwārizmī's concern to demonstrate the practical benefits of his research. This idea is supported by the last part of Al-Khwārizmī's notes which indicates that he believed his love and aptitude for the rational sciences were in fact gifts from God indicating that he remained rooted in the religious tradition.

Al-Khwārizmī's also produced a key work on the classification of the sciences. In *Mafātih al-'Ulūm, Keys of the Sciences* he, like his predecessors drew a distinction between what he termed the Islamic Sciences and the Foreign Sciences. Hill describes his work as 'essentially a vocabulary of terms used' in all the sciences of the day which thus provides a key snapshot of the range and extent of the scientific knowledge at the end of the tenth century (Hill, 1990, p. 250).

One of the key features of Al-Khwārizmī's work in the context of this study is that it predates the development of Neo-Platonic philosophy and while we can expect him to have had contact with translated Greek writings, there is very little evidence that he was motivated by philosophy or ethics derived from outside of the Islamic teachings.

4.8.2 Abu Ali ibn Al-Ḥaytham (965-1040 CE)

At first glance Al-Ḥaytham's (known in orientalist texts as Alhazen) scholastic life story would seem to support the idea that he was a convert to secularism. Like all educated people of his day he was tutored first in the traditional sciences and having excelled in his studies he was appointed chief minister of Basra. This position brought with it the necessity to study and debate matters of religious dispute, debating with scholars of all schools of thought. Al-Ḥaytham became an expert on the various sects and was determined to uncover the truth, to discover which of the mutually exclusive belief sets was correct. Steffens quotes from his autobiography:

having gained an insight into the intellectual bases of the sects I decided to dedicate myself to the search for truth so as to tear away the veil of superstitions and doubts, which an elusive vision has cast on people, and so that the doubting and the sceptical people may lift their gaze freed from the membrane of spell and scepticism.

(Steffens, 2007, p. 31)

The more he investigated the less satisfied be became until ultimately he realised that the differences were based not on rigorously developed law or theology but on social context and politics:

I am now convinced that... whatever differences exist between them are not based on the basic tenets of faith or the Ultimate Reality but on sociological content.

(Steffens, 2006, p. 32)

Having become disenchanted with this, he withdrew to the study of scientific texts and in particular was attracted to the rational discussions of Aristotle:

I saw that I can reach the truth only through concepts whose matter are sensible things, and whose form is rational... I found such theories present in the logic, physics and theology of Aristotle.

(Steffens, 2006, p. 34)

However, this was not a rejection of his faith. In fact, the opposite was the case:

It became my belief that for gaining access to the effulgence and closeness to God, there is no better way than that of searching for truth and knowledge...

(Plott, 2000, p. 465 Pt. II)

He resigned his prestigious government position and thereafter dedicated himself to the study of the Natural Sciences.

Al-Ḥaytham went on to become an outstanding scholar and advanced the field of optics tremendously by, amongst other things, establishing that the mechanism by which we see does not involve the emission of particles from the eye as had been previously believed. He is widely credited with originating the scientific method. Jim Al-Khalili quotes this passage from Al-Ḥaytham's *Book of Optics:*

We should distinguish the properties of particulars, and gather by induction what pertains to the eye and what is found in the manner of sensation to be uniform, unchanging, manifest and not subject to doubt. After which we should ascend in our enquiry and reasoning, gradually and orderly, criticizing premises and exercising caution in regard to conclusions — our main aim in all that we make subject to inspection and review being to employ justice, not to follow prejudice, and to take care in all that we judge and criticize that we seek the truth and not be swayed by opinion.

(Al-Khalili, 2012, p. 170)

This rigor has led to him acquiring the epithet 'the first scientist'. But was this methodology which at once scorned the blind following of ancient texts and at the same time promoted a powerful self-reflective and sceptical approach to the formation of theories based on scientific observation, really a rejection of his faith, or simply a particular manifestation of it?

Elsewhere he expounded his belief in the unique perfection of God, a very traditional Islamic perspective, and explained that because mankind has been created flawed, he believed the only way to uncover divine Truth was through eliminating human opinion and allowing the creation to 'speak' through physical experimentation. Far from embracing atheism Al-Haytham was emphatically bearing witness to the supremacy of the one God and the weakness of Mankind. He was accepting the challenge of the Qur'ān to uncover divine Truth through contemplating the creation.

Unfortunately, although Al-Ḥaytham's contribution to science is now well established, a rising wave of enmity and suspicion towards philosophy and the philosophers was growing, even during his lifetime, and through this many of his writings were suppressed and lost forever. Even other scholars of the natural sciences contributed to this purge with the Historian and sociologist Ibn Khaldūn asserting:

...the problems of Physics are of no importance for us in our religious affairs and our livelihoods... Therefore, we must leave them alone.

(Ibn Khaldun, 2005, pp. 401,402)

4.8.3 Abū Rayḥān Al-Bīrūnī (973-1048 CE)

Al-Bīrūnī was undoubtedly a Polymath but unlike Ibn-Sīnā and Al-Ghazālī he did not show the same interest in the Revealed Sciences that he did in the Rational Sciences. He was known for his work on Astronomy, History, Geography and Engineering. Sultan Mahmud of Ghazna (971–1030 CE) took him to Ghazna in Afghanistan from where he began a campaign to conquer India. Al-Bīrūnī employed all his diverse skills and interests to study India and its peoples and the resulting publication has been translated into many languages, a mark of its importance to this day (Al-Biruni, 1971, pp. v-vi).

Far from being a mainstream theologian Al-Bīrūnī was court astrologer to the Sultan and wrote the most authoritative text on the subject (Al-Biruni, 1938). (Astrology has always been considered a 'blameworthy' science by Muslim scholars because it involves predicting the future).

Al-Bīrūnī was much more of a 'pure' scientist than many others and was for instance assiduously fair in his analysis of Hinduism to the point that his analysis has exasperated many subsequent Muslim commentators, (Khan, 2001, p. 74) but while his compulsive objectivity would resonate with any scholar of the rational sciences we still find that his choice of research topics was influenced by his faith. For instance, his text *Taḥdid nihāyāt al-amākin li-taṣḥīḥ masāfāt al-masākin, The Demarcation of the Coordinates of Cities* was in fact a guide to the direction of *Qibla*, the direction towards which Muslims must face when offering the 5 daily prayers.

Al-Bīrūnī engaged in correspondence with his contemporary Ibn-Sīnā but much of his comments were in fact highlighting the errors both gross and small of the Greek texts that were in circulation. The final piece of the puzzle that defines Al-Bīrūnī's character may be found in his text *Al-Ṣaydanah fī'l-Ṭibb, Pharmacology in Medicine,* where he describes himself as being first and foremost a Muslim who believes that of the multitude of languages he learned in his travels Arabic, the language of the Qur'ān and the international language for Muslims was the most suitable for Scientific discourse (Saliba, 1990, pp. 420-1) (Saliba, 1982, p. 251).

4.8.4 Ibn Khaldūn (1332-1406 CE)

Abū Zayd 'Abd ar-Raḥmān ibn Muḥammad ibn Khaldūn Al-Ḥaḍramī, known now as simply Ibn Khaldūn was born in Tunis to an upper class Andalusian family of Arab descent. His father and grandfather had held political office but later retreated from the public sphere to join a Sufi order. He began his studies with the memorisation of the Qur'ān and then went on to study all the Revealed sciences for which he was awarded *ijāza* in Arabic linguistics, Qur'ān, *ḥadīth*, *Sharī'ah* and *fiqh*. He then went on to study mathematics, logic and philosophy. *Ijāza* (lit. permission) is often an abbreviation of *ijāzat al-tadrīs* meaning permission to teach (Jockisch, 2007, p. 614). This is the classical qualification for scholars of the revealed sciences. This is the class His parents died in the Black Death when he was just 17 and he then went on to achieve political office in the tradition of his family.

Ibn Khaldūn was a polymath with a passion for history and after a number of exciting years in senior political office for various rulers with periods in prison as reward for backing the wrong

people he retired to work on his history of the world. The first volume of this; the Muqaddimah was a seminal work in the field of history and has led some to describe Ibn Khaldūn as the father of historiology. The social analysis was also one of the first detailed texts on sociology thus he was a pioneer in both fields. The text also summarises the state of education in many countries and provides a description of evolution that is as ambitious as the writings of Darwin despite predating him by some 400 years:

One should then look at the world of creation. It started out from the minerals and progressed, in an ingenious, gradual manner, to plants and animals. The last stage of minerals is connected with the first stage of plants, such as herbs and seedless plants. The last stage of plants, such as palms and vines, is connected with the first stage of animals, such as snails and shellfish which have only the power of touch. The word 'connection' with regard to these created things means that the last stage of each group is fully prepared to become the first stage of the next group.

The animal world then widens, its species become numerous, and, in a gradual process of creation, it finally leads to man, who is able to think and to reflect. The higher stage of man is reached from the world of monkeys, in which both sagacity and perception are found, but which has not reached the stage of actual reflection and thinking.

(Ibn Khaldun, 2005, p. 75)

This passage is remarkable for a number reasons. Firstly, it highlights that theories of evolution were by no means just a product of Darwin but had been previously discussed by Muslim scholars for hundreds of years. Secondly, it is surprising to many because of the current prevalence of crude creationist ideas in the Muslim community. It is also significant because it highlights the close link between the revealed sciences and the rational sciences. The passage is on a topic used by many atheists to show the creation has no need for a creator and maintainer god yet for Muslim scientists it was considered merely an exploration of the process of creation. The passage is in a section of his book headed *The Real Meaning of Prophecy* and is part of a longer description highlighting the place of Prophets, the highest

form of human, in the creation as a whole. It would thus seem to be firmly rooted in the Qur'ānic, Islamic paradigm.

Ibn Khaldūn summarises the various different sciences, both revealed and rational and criticises the philosophers, accusing them of foolishly extending their speculation beyond its reasonable application. In particular, he asserts that speculative theology and philosophy, which he observes have overlapped or merged in his day, should not be applied to the revealed sciences stating:

The intellect has nothing to do with the religious law and its views.

(Ibn Khaldun, 2005, p. 389)

He explains this by describing the higher logic and reasoning that was available to the Prophet Muḥammad through his divine inspiration:

The perceptions that Muḥammad had are wider (than those of the philosophers), because they go beyond rational views. They are above them and include them, because they draw their support from the divine light. Thus they do not fall into the canon of weak speculation and circumscribed perceptions. When Muḥammad guides us towards some perception, we must prefer that to our own perceptions. We must have more confidence in it than in them. We must not seek to prove its correctness rationally, even if (rational intelligence) contradicts it. We must believe and know that we have been commanded (to believe and to know). We must be silent with regard to things of this sort that we do not understand. We must leave them to Muḥammad and keep the intellect out of it.

Despite this he concedes that philosophy sharpens the mind and enable us to formulate arguments in accordance with the rules of logic and he uses these tools of the philosophers to develop what Majid Fakhry, Emeritus Professor of Philosophy at Georgetown University, terms his 'science of civilisation' and a philosophy of history grounded in the dialectic of social development or transformation (Fakhry, 2009, pp. 135-6).

4.9 Later Critiques of Science and Philosophy

4.9.1 Ibn Taymiyyah (1263-1328 CE)

Despite the attack on Greek Philosophy by Al-Ghazālī the *Falsafa* movement continued to gain supporters amongst which perhaps the most significant were Ibn Rushd (1126-1198 CE) and Nasir-al-din Tusi (1201-1274 CE). While Ibn Taymiyyah is best known for his writings on the revealed sciences of *Tafsīr*, *Ḥadīth* and *Fiqh* he also critiqued the various Muslim groups as well as Judaism and Christianity. His approach was to separate out those ideas that were sound from those that were erroneous rather than to make a general attack on a group. Thus in discussing the writings of the Greeks he began by praising their brilliance in Physics and Mathematics. Founder of the Oxford Centre for Islamic Studies and Rector of Darul 'Ulūm Nadwat al 'Ulamā Abul-Ḥasan 'Ali Nadwi reports his statement:

A greater part of the discussions of these philosophers relating to physics is quite clear, detailed and convincing. They possessed intellect and aptitude to understand these subjects and, instead of being predisposed to any particular view, they seem to be searching for what is right and correct. The mathematical formulas dealing with numerals are quite convincing and are unanimously accepted by all scholars. Every man has to have some knowledge of these for one needs them for conducting his daily business as also for further studies. Who can dispute that one is not half of two? Of a fact their equations are acceptable, for they have no inexactness to which any objection could be raised.

(Nadwi, 2005, pp. 95-6)

This shows that the concerns that worried Al-Ghazālī were not shared by ibn Taymiyyah who was happy to separate out these rational sciences from the metaphysics that seriously concerned him:

The philosophers bringing their mind top bear upon physics show their mettle, but in metaphysics they appear to be unenlightened folk without any knowledge of what constitutes the truth. Very little of metaphysics has been handed down from Aristotle, but even that contains numerous faulty concepts.

(Nadwi, 2005, p. 96)

This statement would have been very difficult for the followers of the philosophers to bear as they praised Aristotle to an extraordinary degree, displaying unreserved reverence and an uncritical acceptance of all of his writings.

Ibn Taymiyyah's writings were crucial in that like Ibn Ḥazm he separated out the Natural Sciences from Aristotelian philosophy making them acceptable by divorcing them from the teachings that conflicted so strongly with accepted Islamic belief. In the light of this Al-Ghazālī's denouncement of Ibn-Sīnā and Al-Fārābī as apostates could be accepted without necessarily criticising the natural sciences they had been so skilled in.

Although there are other scholars I could discuss, from the 15th Century when Muslim Spain was finally taken over by the Catholic King Ferdinand and Queen Isabella there was a steady decline in the development of the rational sciences across the Muslim world. I will, therefore, turn my attention now to the Indian Sub-Continent.

4.9.2 Muhammad Igbal (1877-1938 CE)

Muḥammad Iqbal was born in Sialkot in the Punjab to humble but religious parents whose own parents were converts to Islam from the highly privileged Kashmiri Brahman Hindu cast. His father was a tailor and his mother was noted for the generosity towards the poor. He was sent to study the Qur'ān at an early age but did not pursue traditional Islamic education to a higher level. Instead he enrolled in the Government College of Lahore where he graduated

with a bachelor's degree in English Literature, Philosophy and Arabic and a Master's Degree in Philosophy following which he was appointed as a lecturer in History, Philosophy and Political Science at Oriental College, Lahore. He always had a love of language and his poetry in Urdu was published in *Makhzana*, a highly regarded Urdu journal.

He then travelled to the UK where he graduated with an Honours degree in Philosophy and Economics from Cambridge. He briefly taught Arabic at the University of London before travelling to Munich where he obtained a doctorate in Philosophy. Returning to London he qualified as a barrister and taught at the London School of Economics. While his studies were not directly in the field of Islamic studies he was an avid reader and gave many seminars on Islamic subjects. He returned to Lahore where he practiced in Law (Nadwi, 2002, pp. 1-7).

Iqbal was a passionate Muslim and wrote both poetry and literature in which he expressed his regret at both the sorry state of the Muslim community and his anger and frustration at the iniquities carried out by the western colonial powers. The concept of a Muslim state in India that was to become Pakistan came from him, although it has been said that he had some second thoughts about the wisdom of this idea when he saw the terrible bloodshed that marked the creation of the state.

One of the most important writings to come from Iqbal was his text *The Reconstruction of Religious Thought in Islam* (Iqbal, 1974) in which he analyses the state of Islamic thinking and the reasons for the decline of Muslim civilisation.

Iqbal was critical of the Neo-Platonist philosophers, asserting that while Greek thinking broadened their outlook it actually obscured their vision of the Qur'ān (Iqbal, 1974, p. 3). He declared that it took them 200 years to appreciate their error and blamed them for the polarised position of Al-Ghazālī which he believed to also be flawed in its deep rooted philosophical scepticism. Iqbal's focus on the Qur'ān came from the passion he developed for it from his early childhood when his father enjoined him to recite it as though it had just been revealed on him. Abul-Hasan 'Ali Nadwi says of him:

Iqbal devoted his whole life to the study of the Quran. He read the Quran, thought the Quran and spoke the Quran. It was his favourite book, which opened new vistas of knowledge for him and gave him fresh awareness and strength. As his study of the Quran progressed, his mind attained greater loftiness and his faith developed further mellowness since it was an eternal Book, revealing transcendental truths and leading on to everlasting happiness.

(Nadwi, 2002, p. 16)

With Iqbal's linguistic genius, love of his faith and his acuity of mind focussed on this, the primary source of Islam, it is perhaps less surprising that he was held in such high esteem by the traditional scholars despite not being a graduate of any *madrassa* (college) himself.

Iqbal wrote on a number of topics relating to knowledge and its acquisition, critiquing both contemporary and traditional educational institutions both of which he found deeply flawed. His reflections on the centuries over which scientists and traditional scholars fought battles of words led him to assert that, where many western commentators believed that the scientific method developed by Muslim scientists was the result of the acceptance of Greek thought and some Muslims had characterised it as a compromise he characterised is as the result of a prolonged intellectual warfare with it (Kamali, 2003, p. 120).

4.10 Conclusions

In this overview of the development of the rational sciences in the Muslim World I have shown that the historical evidence does not support the idea that leading scholars within the Muslim community abandoned their faith to pursue science from a secular perspective. There was undoubtedly a major impact from the translated texts of the Greek philosophers, notably Aristotle and Plato, and even their metaphysical speculations were seen to have a profound influence on some of the most influential and ground breaking polymaths; however, this alone does not account for the rapid adoption of rational knowledge and the speed with which it was integrated into the pursuits of the scholarly community.

In the Muslim world today there is a complete divide between the revealed and rational Sciences and few outstanding scholars have arisen in the past 50 years that are respected widely in both fields. It is perhaps surprising to note therefore, how tolerant the Medieval Muslim community was towards scholars of the rational sciences that subscribed to metaphysical ideas deemed heretical. While we do have the example of Al-Ghazālī denouncing Ibn-Sīnā and Al-Fārābī as apostates this only took place after their death and during their lives they were able to pursue both their science and philosophy with little impediment. The same can be said of Muḥammad ibn Zakariyā Rāzī even though in some ways his ideas were even more heretical. Nevertheless, it cannot be denied that all of these scholars strove to integrate their understanding of the revealed and revelatory sciences.

In chapter 3 the juristic role of Ibn Ḥazm was discussed who was an extreme literalist and very strongly against speculative reasoning; however, even he was supportive of the Natural Sciences. Similarly, Ibn Taymiyyah who wrote extensively and polemically about those he

considered to hold heretical views seemingly had no difficulty in separating out the philosophy from the science and was able to condemn Neo-Platonist philosophy while he wrote in positive terms praising the rational sciences.

The assertion made by some that the decline of science was the result of supposedly antirationalist philosophy (Asharism is often blamed) has no basis in the reality since there was nothing 'more rational' or 'more scientific' about the philosophy of al-Fārābī or Ibn-Sīnā and in fact many of the great scientists such as Ibn Al-Ḥaytham followed the Ashari school of theology.

There was evidence however to support the theory that the scientific methodology and the motivation for the advancement of scientific enquiry was rooted in the Qur'ānic text. Major scholars were identified that understood the investigative study of the real world to be a valid and praiseworthy branch of scholarship that could, like the revealed sciences, lead to a better understanding of the divine. For some such as Ibn Al-Ḥaytham this was even considered a preferred route because of the lack of ambiguity in scientific experimentation and mathematics compared to the contestable interpretation of scripture. I also identified some suggestions in the academic literature that suggest the rapid take-up of the rational sciences was indicative of the development of a rational culture that originated in the revelatory sciences.

In a society where faith in the Qur'ān was the norm and all educated people would have a thorough grounding in the Qur'ān and the religious sciences it would be only reasonable to expect the majority of individuals to want to balance their intellectual formulations with their

faith and to express their wonder at the beauty and complexity of the physical world in religious or spiritual terms.

While ultimately the rational sciences gained acceptance from the orthodox scholars, in the initial phase scientific advancement often went hand in hand with philosophical writings that were strongly opposed by the Islamic jurists. This leads us to question whence these scholars received their support and to what degree were their ideas accepted by the mainstream Muslim community. To uncover this, I now need to examine the impact of rational knowledge on the institutions of learning and any other places where rational knowledge was developed. This will provide insights into whether the advances were purely made by maverick lone wolf scientists or if there was more widespread support from the scholarly community or the ruling elite or even from the wider Muslim Community.

5 THE TRANSMISSION OF REVELATORY AND RATIONAL KNOWLEDGE

5.1 Introduction

In the preceding chapters, I have explored the widespread presence of verses in the Qur'ān discussing the physical world as a signpost to knowledge leading to God and learned about the importance individual scholars have placed on learning the rational sciences as well as the revealed sciences. The suggestion has been put forward that the study of the Qur'ān historically led to an interest in and dedication to both. I have also; however, exposed the tensions that have existed between those who have pursued rational knowledge and others who have considered it to be lacking in merit or even blameworthy.

In this chapter, I evaluate the development of the knowledge based institutions with regard to their use of the revealed and rational Sciences. Education is the institutionalised acquisition of learning and the tools of learning. Mainstream compulsory education takes as its curriculum what our society deems necessary for every citizen to know. In Arabic Islamic terminology this is the knowledge the study of which is *Farq al-'ayn*, an individual responsibility. Higher education in contrast is additional study that one chooses to engage in to satisfy a personal interest or craving for knowledge or to prepare for a specialist career. This could be knowledge that is necessary for some to study but not all – *Farq al-Kifāyah*, a collective responsibility such as medicine or agriculture.

To give concrete examples of this from present day England; all children are expected to study mathematics and English as these subjects are necessary for all citizens to function in society. Some may then go on to study science or medicine or law so that our society has the scientists, doctors, lawyers etc. that it needs to function efficiently. The subjects that are chosen for

these areas change over time as society changes and our attitudes to different subjects change. In the 1930s, it was common for Latin to be a compulsory subject in British grammar schools, whereas now this is considered an unusual option. Citizenship in contrast had not been developed as a school subject in the 1930s but is now compulsory across the UK.

By examining the changing curriculum of schools in the Muslim world a picture can be developed of the attitudes prevalent in society towards the study of different branches of knowledge. This may give a different picture to the highlighting of exceptional individual scholars who historically have often challenged the orthodoxy of their day.

I will further explore, in this chapter, how the centres of Islamic learning were founded and the curricula they pursued and the relationship between the study of the religious sciences and the rational sciences and seek to identify whether it is the institutions that have changed or if some other phenomenon is responsible for the current situation. In either case, I seek to identify the reason behind the current schism between the two domains.

I will examine particularly closely the historical development of institutions in the Indian Subcontinent and Saudi Arabia. India is an area that is often covered in less detail; Ira Lapidus for example in her *A History of Islamic Societies devotes* just 30 pages out of almost 1000 to this region, (Lapidus, 2007, pp. 356-381) and the tremendous influence on contemporary centres of learning will be demonstrated. In addition, in terms of the interaction with the West in the 21st Century, India, Pakistan and Bangladesh are amongst the most crucial of societies which needs to be understood as it is from these areas that most of the Muslims now resident in the UK originate and hence it is their customs and social history that have the greatest bearing on the development of Muslim educational institutions and culture here in the UK.

5.2 The First Islamic Institutions

The first Muslim schools were established at the beginning of the 7th Century during the lifetime of the Prophet Muḥammads. The first words of the Qur'ān to be revealed were:

Read: In the name of thy Lord who creates Creates man from a clot Read: And thy Lord is the Most Bounteous Who teaches by the pen Teaches man that which he knew not اقْرَأْ بِاسْمِ رَبِّكَ الَّذِي خَلَقَ خَلَقَ الْإِنسَانَ مِنْ عَلَقٍ اقْرَأْ وَرَبُّكَ الْأَكْرَمُ الَّذِي عَلَّمَ بِالْقَلَمِ عَلَّمَ الْإِنسَانَ مَا لَمْ يَعْلَمُ

Qur'ān (96:1-5) (Pickthall, 2006, p. 388)

This established the importance of literacy but then further verses added weight to this such as:

O ye who believe! When ye contract a debt for a fixed term, record it in writing. Let a scribe record it in writing between you in (terms of) equity...

Qur'ān 2:282 (Pickthall, 2006, p. 32)

This established the necessity of writing down contracts and a business man or woman would need to be literate in order to document their contracts. The first mainstream curriculum was therefore one dominated by literacy.

In the beginning, reading and writing skills were scarce and some teachers in these first schools were non-Muslim (Shalaby, 1954, pp. 16,17) including some who were captured in the battle of Badr. The Andalucian scholar, Ibn Al-Kattānī (951–1029 CE) records in his *at-Tarātī al-Idārīya* that according to the early *ḥadīth* narrator Qatāda (d 736 CE) the Prophets set up a school, the *Ṣuffa* upon arriving in Medina to teach literacy and provide students with food

and a place to sleep and that approximately 900 companions took up this offer (Al-Azami, 2003, p. 61).

Financial contracts were only a small part of the required practices of the Muslim community and the entire Qur'ān described itself as a source of guidance, so classes for learning the Qur'ān and then for the teaching of Islamic beliefs and practices were then established. The first schools were set up in mosques but because these were free, and the seeking of knowledge was given such a high priority in the Islamic teachings, the mosques were quickly overwhelmed and separate school buildings began to be erected adjacent to the mosques or as part of a mosque complex (Makdisi, 1981, pp. 27,8).

Essa & Ali explain this enthusiasm for learning by suggesting that this was a 'melioristic society' (Essa & Ali, 2010, p. 11) brimming with the zealous optimism that was born out of the rapid and dramatic change that the Prophet Muḥammad had brought to them. A community of primitive and at times savage nomads had been moulded into a benevolent society in which the Qur'ānic teachings about respecting and helping your neighbour and wondering at the beauty of the creation were on everyone's lips. The desire to share the Qur'ān led many to study the revealed sources and strive to better themselves. This sounds rather idealistic and there is no doubt that there remained many very bad elements in society as witnessed by the assassination of the Caliphs and the divisions created by the Kharijites (an early sect) and the Shia—Sunni divide; however, given the passion so many new converts to Islam evidence today, I would suggest that so close to the time of the Prophet when people who had actually met him and been personally inspired by him walked the streets, this kind of infectious passion may well have been widespread.

This perspective is reinforced by what Michael Lecker (2010, p. 63) calls the didactic, edifying, propagandistic and entertaining' characteristics of the early biographies of the Prophet which he points out were 'products of their time, as were of course the informants and compilers who created them' (Lecker, 2010, p. 62). The more historical and one could say objective accounts appeared later after the initial period of pious zeal had passed.

Despite the primitive stage of the community there was from the beginning an understanding that each child's needs varied and were unique. The companion of the Prophet Muḥammad 'Utba Bin Abī Sufyān (d 664 CE) likened educators to medical doctors warning that one should not prescribe medicine before making a diagnosis (Giladi, 2005, p. 100).

For those not satisfied by a basic education the revealed sciences began to be taught at a deeper level, initially informally; with knowledgeable individuals sitting in the mosques and answering questions from anyone who chose to listen to them. In some cases, these classes became very large and without the benefit of modern day PA equipment, systems of repeaters had to be established. These were students who would listen to the teacher and then repeat loudly what they heard for those who were farther away. This approach was first established for large congregations to enable them to pray together. For even more specialised classes such as those for trainee jurists, lessons would take place in private homes in small groups or even one-to-one.

5.3 First Institutions for the Rational Sciences

The first institution for the study of the rational sciences in the Muslim world was not a product of this new phenomenon of Islamic education, but was a legacy of the Persian Zoroastrian civilisation. The concept of travelling to acquire knowledge, spreading knowledge

and taking advantage of new sources of knowledge when they have been discovered had been established by Prophet Muḥammad who said on one occasion:

Words of Wisdom are the lost property of the believer, so wherever he finds them he has more right over them.

(Al-Tirmidhī, 2007, p. 160 Vol 2)

5.3.1 The Academy of Jundaysābūr (Est 638 CE)

In 638 CE the armies of the rapidly expanding Muslim empire took over the Sassanid Kingdom ruling Persia. One of the gems of this civilisation was the Academy of Gundishapur, later named Jundaysābūr in Arabic literature, in the southern province of Khuzestan. The Academy was originally established in 271 CE by King Shapour I (240-270CE) and then took on even greater significance when King Shapour II (309-379 CE) adopted the city as his capital. King Khosrow I (496-579) extended the Academy by adding one of the world's first medical colleges and following an influx of Greek philosophers and Syriac-speaking Nestorian Christians fleeing religious persecution by the Byzantine empire he commissioned the translation of the classical Greek texts into Pahlavi, the Persian language that would become modern day Farsi (Nakosteen, 1964, p. 17). 'Pahlavi' is now used to reference the script they used prior to the conquest by the Muslims and the introduction of the Arabic script.

The principle of adopting and using scholars was first established by the Prophet Muḥammad who gave scribes captured in the wars with the Meccan armies their freedom in return for their teaching ten of the illiterate how to read and write (Salahi, 2006, p. 283). As the Muslims spread into new lands this was then replicated and the Academy of Jundaysābūr became the first centre for the learning of the rational sciences in the Muslim world and the centre from which translations of the Greek texts would emanate. Many of the scholars who had been

engaged in the work of translating the Greek texts embraced Islam either through personal conviction or to preserve their privileged status (Goodman, 1990, p. 477). Learning Arabic and adopting Islam was essential to their retaining positions of power and influence (Saliba, 2007, pp. 73-78). The Abbasid rulers saw great benefit in the absorption of all forms of worldly knowledge and personally sponsored an increase in their endeavours. Thus pragmatism may have been a significant motivator in the development of early educational institutions of all kinds.

The Muslim community had clearly gained a valuable resource so one has to wonder why it was so long before we have evidence of major scholars developing in the Muslim Empire and why, when they did appear they were not the product of the Academy. I would suggest two possible explanations:

- 1. The culture of the Academy was not the development of new science but the preservation and translation of the earlier Greek writings. This idea has some merit as despite being in existence for several hundred years by the time the Muslim empire took over we have no record of any major scholars from the earlier Zoroastrian and Christian scholastic communities apart from some Christian scholars who migrated there to escape oppression.
- 2. The Muslim community was not yet ready to adopt science as a respected discipline and the best minds in society were encouraged instead to pursue revealed knowledge. *Fiqh* has been highlighted as the highest and most noble science which was revered amongst the early scholars and it is likely that their schools would attract the best talented youth.

The plethora of contemporary literature that seems to claim that the revealed and the rational sciences were always a part of the grand domain of the Islamic Sciences would lead one to expect that this great institution would have been replicated across the Muslim world and that the teaching of the Natural sciences would have been incorporated into the *Kutub* (elementary schools Singular *maktub*) and *madrassas* (colleges) across the empire; however, this was not the case. In the early period, schools were generally attached to mosques and the scholars of Qur'ān and *fiqh* were typically critical of the study of the rational sciences. These institutions and the scholars who taught in them remained separate from and independent of the rulers so support from the leadership for the rational sciences did not spread far into society.

The education system that came out of the Hijaz, teaching Arabic and the Revealed sciences was continuously replicated and became the norm whist the rational sciences were studied by a small number of generally privileged people in private. Caliphs and princes and successful traders etc. were typically the only members of society who would have been able to develop their own libraries, although, as I will discuss later, they were generous in making these facilities available to the wider community.

5.4 Creation of the first Madrassas

During the 8th and 9th centuries schools were developed independent of the state and funded by $awq\bar{a}f$ (plural of waqf) - charitable trusts or endowments. The structures of the different Islamic schools of jurisprudence, philosophy and the various traditional sciences of $had\bar{a}th$ validation, $tafs\bar{i}r$ and fiqh etc. were developed and these led to the creation of detailed syllabuses.

Contemporary thinkers such as Açikgenç have proposed broader definitions of Islamic Science.

He offers:

That scientific activity which takes place ultimately within the Islamic worldview (which can now be defined as the Islamic conceptual environment); but as an extension of it directly within the Islamic scientific conceptual scheme (which can be identified also as the Islamic context of sciences).

(Açikgenç, 1996, pp. 35-38)

In this formative period the sciences were divided into three broad categories:

- The Religious Sciences (Also termed the revealed sciences).
- The Philosophical and Natural Sciences (also termed the Rational Sciences or the Sciences of the Ancients).
- The Literary Sciences.

Of these only the Islamic sciences were taught in institutions of learning as the need to understand the requirements of *Sharīʿah* was dominant. There is no doubt that learning from the earlier Greek civilisation was present; however, this was only studied in private by the already educated elite and was viewed with a mixture of both respect and suspicion by the masses. Makdisi states:

'the sciences of the Ancients', that is of the Greeks, while opposed for its 'pagan' principles by every believing Muslim scholar among the faithful, commanded nevertheless an unpublicised, silent, begrudging, respect. These sciences were studied in private, and were excluded from the regular courses of Muslim institutions of learning. The religious sciences were at the forefront of education. With the rise of dialectic, jadal, as applied to the study of legal theory and methodology, usul al-fiqh, the literary arts were relegated to the background.

(Makdisi, 1981, pp. 75-6)

5.5 Promotion of Rationalism by the Ruling Dynasty

The *Mu'tazilah* movement promoted rational interpretation of the revealed texts and might have been expected to further the integration of revealed and rational knowledge. The fierce independence of the Jurists blocked the dominance of this thinking; however, and when the Caliph al-Mamūn made adherence to the central doctrines of the school obligatory there was a backlash from the traditionalists, in particular the supporters of Imam Ahmed for his abuse by the authorities. This was not the limit of the Caliph's support for rational knowledge; however, as he also established the first new institution for the study of the rational sciences.

5.6 House of Wisdom (*Bayt al-Hikma*) (Est 832 CE)

In 832 CE Cailiph al-Mamūn founded the house of wisdom (*Bayt al-Hikma*) in Baghdad, acquiring many of the staff from the Academy of Jundaysābūr (Halm, 1997, p. 72). This lavish library, college and medical college established Baghdad as the centre for scientific research and discovery for the world. Unfortunately, stripping the Academy of Jundaysābūr of its talent caused the earlier institution to go into decline and by the time Al-Muqaddasī wrote his *Aḥsan al-Taqāsīm fī Ma'rifat al-Aqālīm — The Best Division of Knowledge of the Regions* in 985 CE - there was no surviving institution and the entire city had faded:

Jundaysābūr was a capital populous and important, an ancient town, and was the metropolis of the region. Now however, it has been overthrown, the Kurds have taken it over, and tyranny and vice have arisen there.... Here are also jurisprudents, prosperity.

(Al-Muqaddasī, 2001, p. 334)

Thus what might have been an expansion of the development of the natural sciences was really only a relocation.

The pioneering science historian George Sarton of Harvard University suggests that the period of state sponsorship came to an abrupt end with the leadership of Al-Mutawakil, who ended the era of state sponsored *Muʿtazilah* thought and instead promoted Sunni orthodoxy with equal vehemence:

The great toleration shown to non-Muslims (sic) by the early Abbasid cailiphs, and especially by Al-Mamun and Al-Mutassim, came to a sudden end under Al-Mutawakkil (847-861), who approved himself a fanatical champion of Sunnite orthodoxy and persecuted with equal cruelty the people of other faiths and the Mutazila, that is the liberals of his own faith. Yet Al-Mutawakkil continued to protect men of science, chiefly the physicians, and encouraged the school of translators headed by Hunain ibn Ishaq.

(Sarton, 1927-48, p. 583)

Given the oppression of the orthodox scholars I have already discussed in chapter 3 (The *Mihna*), we should be somewhat cautious with this statement. It may evidence the personal preference of a scholar who was more willing to forgive the persecution of the religiously orthodox than he was the persecution of the rationalists. This is a timely reminder that historical commentary cannot be a neutral and wholly objective act as all historians are themselves human beings with their own social conditioning and intellectual leanings.

An even stronger description is given by Wiet et al of the later theologian Abu al-Hasan Al-Ashari of Basra:

His (Al-Ashari) ideas were seized on by the pious bigots, and it was this group that precipitated this decline of Islamic intellectual life. Its pietist rigour could lead nowhere but to the enslavement of thought; its ideas were imposed on the believer in the form of a catechism.

(Wiet, et al., 1971, p. 567)

The strength of condemnation displayed seems to identify these scholars as outsiders to the Islamic paradigm as in the cases of Al-Haytham and Al-Birūni (discussed in chapter 4); both

were followers of the 'aqīdah (theology) of Al-Ashari and did not find this a barrier to their pursuit of the rational sciences. The historical record demonstrates the ongoing tensions that developed between proponents of rational knowledge and those who were concerned because of aspects of the theology of some of its adherents. (E.g. Al-Ghazali's rebuttal of the philosophical thought of Ibn Sīnā and Al-Fārābī discussed in chapter 4).

In fact, the wider society remained remarkably tolerant of the increasing numbers of libraries that developed and Bayt al Hikma retained its position until it was actually the Mongol hordes led by Hulagu Khan in collaboration with the city's Georgian Christians that destroyed the libraries, hospital and palaces leaving little trace of Baghdad's once proud heritage of learning. Journalist and historian Ian Frazer describes the scene graphically:

...for a period of seven days, the Mongols sacked the city, killing (depending on the source) two hundred thousand, or eight hundred thousand, or more than a million. The Mongols' Georgian Christian allies were said to have particularly distinguished themselves in slaughter. Plunderers threw away their swords and filled their scabbards with gold. Silver and jewels and gold piled up in great heaps around Hulagu's tent. Fire consumed the caliph's palace, and the smoke from its beams of aloe wood, sandalwood, and ebony filled the air with fragrance for a distance of a hundred li. (A li equalled five hundred bow lengths—a hundred li was maybe thirty miles.) So many books from Baghdad's libraries were flung into the Tigris that a horse could walk across on them. The river ran black with scholars' ink and red with the blood of martyrs.

(Frazer, 2005)

By this time other great repositories of learning had been developed as the creation of libraries and centres for learning the rational sciences became a hallmark of the ruling elite. In 1005 CE the Shi'a Ruler of the Egyptian Fatimid Dynasty Al-Hakim established Dar-al-ilm (lit. house of knowledge) in the Azḥar mosque in Cairo (Halm, 1997, pp. 71-78). This was the first Islamic college to offer a wider curriculum that included both the revealed and rational sciences.

5.7 The Mainstreaming of the Colleges of Revealed Science

Concerned that the Shia school would start to win converts from the Sunni community through this major innovation, the Sunni rulers in Baghdad responded in kind with the establishment of Sunni *madrassas*. These flourished and multiplied under the leadership of Nizam-al-Mulk Nur-al-din (Shalaby, 1954, p. 58). This became the standard that was taken and then developed for education in the Muslim world.

The *madrassas* were set up purely for the teaching of the Religious sciences such as Arabic, Qur'ān, Ḥadīth etc. (Makdisi, 1981, p. 75). They were based upon charitable trusts or *awqāf* and whereas a *waqf* established for a Mosque immediately removed the *Waqif's* (endower) influence on that Masjid, in the case of educational institutions it was understood that the vision of the founder must be maintained (Kadi, 2007, p. 9). It is unsurprising that the philanthropists that founded these centres of learning would emphasise on Islamic studies, given that their intention was to please God and achieve salvation in the hereafter⁶. This led to the complete domination of institutions where only the Islamic Sciences were taught, institutions that could not adapt and change because of the nature of the founding *waqf* deed.

Nizam ul-Mulk did not merely establish the standard he personally saw to it that no corner of the empire was without educational facilities. In his *Tarikh Al-Saljuk, History of the Saljuks*, the bureaucrat, historian and graduate of the Nizamīya school in Baghdad Imad al-Din al-Isfahānī (1125-1201 CE) states:

⁶ The theological basis for a *waqf* is *sadiqa jarryah* or continuous charity. The sponsor donates money for the trust in the expectation that they will continue to earn reward for their charitable giving (*sadaqa*) even after their

-

death.

Whenever he finds a learned man in any town, Nizam al-Mulk immediately founds a school for him to teach in, endows it and supplies it with a collection of books.

(Shalaby, 1954, p. 58)

And a similar story is told in the *Tabaqat al-Shafi iyyah al-Kubra, Classes of the Shafi'ites of Kubra*, of the *ḥadīth* master, Shafi jurist and Qur'ānic exegete Taqi al-Din al-Subki (1284-1355 CE) who states:

It is said the Nizam al-Mulk has a school built in each town of al-Iraq and Khurasan.

(Shalaby, 1954, p. 58)

This monumental effort tremendously reinforced the traditional teachings and without doubt ensured that all of the later scholars of the rational sciences would have had a rigorous education in the revealed sciences before he engaged in the rational. All the *madrassas* were given libraries; however, because of the *waqf* deeds these would have excluded the natural sciences even if the teachers in the madrassa were in favour of learning about them. Rational texts had to be sought in the independent libraries.

5.8 Libraries

Independent libraries were established all over the Muslim world and books were seen as holding both a moral value and a certain status so that it was not unusual for a wealthy person to develop a library even though they were not learned enough to take advantage of its contents themselves (Shalaby, 1954, p. 78). These libraries were able to include books on any subject and an important feature of the society was that despite the promotion of traditional fields of study there was very little censorship in the Islamic world. No formal lecturing could take place in libraries; however, there is no doubt that some teaching and debating did occur (Makdisi, 1981, pp. 24-27). A good library was not merely a passive repository of books, but

would actively encourage its usage by providing food for students who visited and even financially supporting the poor. The librarian would be in charge of lending and this was dependant primarily on the user's ability to benefit from a book; however, if two people were interested in the same book preference was to be given to the poor over the rich on the basis that the latter could purchase their own copy (Shalaby, 1954, p. 73).

5.9 Medical colleges

Hospitals were also centres for the teaching of medicine and the related sciences. George Saliba postulates somewhat uniquely that the division in the sciences stemmed from a triad of distinct groups of scholars (Saliba, 2007, p. 73). Those whose main value was a mastery of the 'foreign sciences' - notably the Persians, those whose value depended upon their mastery of the Arabic language and the religious scholars. The problem with this analysis is that in the early period language was studied through the lens of the Qur'ān and though this and the fact that all mainstream schools taught exclusively the revealed sciences, all three groups would have been highly literate in the Islamic sciences regardless of whether this was their primary area of interest. This is borne out by a study of biographies of the great scientists and literary figures who with few exceptions were polymaths gifted in the religious sciences who also studied the rational sciences and the Arabic language. Professor Mehmet Ipsirli of Fatih University in Turkey further highlights that under the Ottomans there was a strong relationship between the religious scholars and the poets and that many members of the 'Ulamā were average or high ranking poets having personal divans (volumes of collected poetry) (Ipsirli, 2004, p. 11).

The great polymaths of the medieval period were not all products of the rapidly expanding Nizamīya madrassa system. Many were from privileged backgrounds which enabled them to study privately with the greatest scholars of their day. Many of them later taught in the great centres of learning, but we cannot say from this brief analysis that the Qur'ānic principle of knowledge acquisition from all sources both revealed and rational was institutionally embedded, only that there was a significant number of 'enlightened' individuals who taught the broader curriculum privately.

While the private libraries were not centres of teaching, they did however, function as centres of scholastic networking and thus were crucial in the propagation of the rational sciences beyond the influence of their literary resources.

It has already been highlighted that key scholars such as Al-Khwarizmi, Al-Fārābī and Ibn Sīnā all began their scholarly careers with the study of the Religious sciences and were all highly proficient in them before they extended their interests to Greek philosophy and the rational sciences. This was the norm for all educated people regardless of whether they studied in the *madrassas* or were from families that were wealthy enough to arrange for them to be privately tutored. This meant that even those who ultimately focussed more exclusively on the rational sciences would have been steeped in their religion and in a relatively homogeneous society it is unlikely that they would have found their faith challenged. It is therefore reasonable to suggest that their religious and rational ideas can be expected to have had a high degree of integration.

5.10 Madrassas of the Ottoman Empire

The Early Islamic Empire was a patchwork of small emirates. In 1281 CE Osman (aka Uthman I) came to power in one region of western Anatolia. Osman was very ambitious and, taking advantage of the weakened Byzantine Empire, he made rapid territorial gains into Europe. This began the expansion of an empire which was to become the largest Islamic empire in history (Lapidus, 2007, p. 250).

Under the Ottomans, the Nizamiah *madrassas*' curricula were developed further. Makdisi's research indicates that the rational sciences were never taught formally in the madrassa and that any teaching of the rational sciences by madrassa teachers would have been strictly informal and on top of their regular duties. İhsanoğlu (2005) agrees with this in the Pre-Ottoman and early Ottoman periods; however, he finds evidence suggesting that less restrictive trust deeds began to appear, particularly from the reign of Sultan Mehmet II (1432-1481), the conqueror of Istanbul, who was known to have taken a personal interest in the rational sciences. This is backed up by Robinson (2001, p. 240) who provides a summary of the curriculum of the Ottoman *madrassas* as follows:

- Grammar and Syntax
- Jurisprudence
- Principles of Jurisprudence
- Ḥadīth Studies
- Qur'ānic Exegesis
- Logic
- Philosophy and Theology

Robinson does not provide a date for when this curriculum came into use; however, he cites the inclusion of texts in Grammar and Philosophy by Mullā Fanari, who died in 1430 CE shortly before the rule of Sultan Mehmet II, and in his analysis he references the inclusion of Ottoman

commentators who died in the mid-sixteenth century, which indicates that this was from at least this period and given the suppression of the rational sciences which reoccurred in seventeenth century, it could not have been later than this.

ihsanoğlu also provides the specific example of Qutb al-Din al-Shirazi (1236 - 1311 CE) who, it is recorded, wrote an important text on Astronomy whilst teaching at the Gokmedrese in Sivas and taught this to his students (İhsanoğlu, 2005, p. 270).

Examining the *waqf* deeds of *madrassas* established from the time of Sultan Mehmet II İhsanoğlu further identifies a clear pattern of gradual inclusion of the rational sciences starting with the requirement that teachers of the Fatih Kulliyesi Madrassa (founded between 1463 and 1470 CE) must "be knowledgeable in the principles and basics of both transmitted and rational sciences" (İhsanoğlu, 2005, p. 275) and culminating in the trust deeds of a *madrassa* founded during the rule of Suleiman the Magnificent (1520-1566 CE) which specified that the task of the *mudārris* should be "to teach the student religious sciences and to enlighten him with true knowledge" and that the Students were to be taught both transmitted and rational arts through the questioning of one another and through the discussion of topics" (İhsanoğlu, 2005, p. 276). The independence of the educational *awqāf* meant that the precise content of the syllabus followed varied across the Muslim world. This feature was highlighted by Ibn Khaldun (1332-1406 CE) in his *Muqaddimah* (Ibn Khaldun, 2005, p. 421).

From the reign of Suleiman the magnificent however, the Ottoman Empire experienced a decline. Once its expansion had stalled it was beset by internal revolts and uprisings and by attacks and military defeats from outside (Lapidus, 2007, p. 275). This decline was mirrored in

the educational system and there was a rapid return to the conservative Traditionalism that excluded the rational sciences.

Whereas the early *madrassas* were established primarily to ensure the 'correct' understanding of Islam was maintained and propagated through the empire, by this time *madrassas* had taken on a broader role, namely to prepare an educated class of workers who could run an empire based upon the Islamic *Sharīʿah*. Thus the primacy of studies in Islamic law remained but the need for graduates to have a broader understanding was understood.

While the *madrassas* or colleges were significantly improved under the Ottomans, Ibn Khaldun highlights that the muktubs or elementary schools had deteriorated significantly into institutions devoid of the blessings of the passionately faithful:

Teachers are weak, indigent and rootless. Many weak professional men and artisans who work for a living aspire to positions for which they are not fit but which they believe to be within their reach.

(Ibn Khaldun, 2005, p. 28)

He goes on to explain that the first teachers were the noblest in society who taught not as a profession but because of their passionate belief that others must learn about the Qur'ān and the sayings of Muḥammads; thus they were passionate zealots whose selfless instruction caused Islam to become 'firmly established' and 'securely rooted'. Clearly he believed that this vision and commitment was sadly absent from the teachers of his day who simply worked to serve the vision of the rulers and so he says teaching came to be an occupation restricted to 'weak', 'despised' individuals (Ibn Khaldun, 2005, pp. 26-27). This grim picture may well exaggerate the situation for many; however, it does give some potential insight into some of the root causes of decline.

Elsewhere in his Muqaddimah, Ibn Khaldun highlights the fact that the study of the rational sciences to any effective degree was restricted to the secure and prosperous regions which thus excluded Spain where only Granada remained of the once vibrant Andalusian society (Ibn Khaldun, 2005, p. 341).

5.11 Madrassas of the Safavid Dynasty

Where rule in Turkish society was traditionally the result of military conquest Iran had a strong tradition of monarchs and family dynasties. Following the upset of the Mongol invasions the region remained quite unstable until a Sunni Sufi movement founded by Shaikh Safi al-Din in 1252 CE took hold in 1501 CE (Lapidus, 2007, p. 233). This established a dynasty that would extend until 1722 CE. Under Shaikh Junayd (1447-1460 CE) the Safavid Empire expanded aggressively attacking first the Christians in Georgia and Trebizond and then the neighbouring Muslim states that he denounced as infidel regimes. The Empire then renounced its attachment to Sunni Islam and Shah Ismail (1487-1524 CE) declared himself to be the hidden Imam, the incarnation of Ali, the incarnation of Khidr etc.

Just as the Shia Fatimid Dar-ul-Ilm was more inclusive of the rational sciences so too were the *madrassas* of the Safavid Empire. Robinson (2001, pp. 244-248) summarises their curriculum as follows:

- Grammar and Syntax
- Rhetoric
- Jurisprudence
- Principles of Jurisprudence
- Traditions
- Qur'ānic Exegesis
- Logic
- Philosophy and Theology
- Mathematics

As the Ottoman Empire declined, scholarly links between the Safavids and Ottomans also declined; however, there was more free trade with the Mughal Empire in India and their more liberal curriculum was transmitted there to influence the later Dars-i-Nizamīya of Farangi Mahal.

5.12 The University of Azhar

Established in 975 CE by the Fatimid Shia dynasty Azḥar rapidly developed as a centre for learning of both the revealed and the rational sciences. When in the 12th Century the Dynasty was overthrown by Ṣalāḥ Al-Dīn Ayyūbi, the founder of their Ayyūbid dynasty, the libraries that had been developed were all sold to make way for Sunni texts. Ṣalāḥ Al-Dīn was determined to make a complete break from the previous Shia era and so while he did not close Azḥar, neither did he support it. Teaching continued to take place there albeit entirely Sunni but it was under the later Mamluk rulers (1250-1517CE) that it regained its prominent position as a great centre of learning.

Under the Ottomans Azḥar again received little investment; however, it continued to function as one of the most important centres for learning in the Muslim world. In the 19th Century the University expanded its rational sciences thanks in part to the influence of the reformer Jamāl al-Dīn Afghanī and his student Muḥammad Abduh, both of whom taught there and have been credited with founding Islamic Modernism. While this did improve the integration of the revealed and rational sciences their ideas were seen as heretical by many traditionalist scholars. In particular, Muḥammad Abduh while adhering to most classical Islamic teachings was quite happy to discard any ḥadīth that stood in the way of synthesising the revealed and the rational sciences (Rahman, 2002, p. 221). This undoubtedly undermined the status of

Azḥar in the minds of many and made the rejection of Azḥari scholars from the Hijaz in favour of the Wahhabi-Hanbali traditionalists straightforward. This will be discussed later.

5.13 The Indian Subcontinent

The Indian subcontinent like Persia never came under the rule of the Ottoman Turks and so its educational institutions remained independent. This became extremely important later on as following the collapse of the Ottoman Empire the Indian sub-continent proved one of the most resilient in retaining the traditions of learning despite the challenges they faced under British colonial rule.

The primary influence on this region came from Persia and although the Indian Muslim community remained mainly Sunni the openness to the rational sciences of the Safavids was transmitted. A prime example of this is the *Madrasa-ī-Rahimīya* in Delhi. This highly influential Madrassa produced some of the most noted scholars including the reformer Shah Wali Allah Dehlwi. Sufi (1941, pp. 68-70) provides its syllabus in outline as follows:

- Grammar
- Rhetoric
- Theology
- Jurisprudence
- Principles of Jurisprudence
- Traditions
- Qur'ānic Exegesis
- Logic
- Astronomy & Mathematics
- Medicine
- Mysticism
- Philosophy

While one of the most detailed analyses in the English language of the Indian Madrasas is that of Sikand (2005), his initial analysis of Islamic thinking and hence his interpretation of the historical development is very much an 'outsider' view. His analysis is based on the idea first expounded by Goldziher and Schacht that the early scholars developed the different schools of thought or madhabs through the use of "conflicting, weak and concocted hadith reports" (Sikand, 2005, p. 14), whereas this assertion has since been thoroughly discredited by for instance Nabia Abbott (1967) and Al-Azami (2003). He is also highly critical of the various different rulers and dynasties which he asserts were very weak in their adherence to *Sharīʿah*. As I have discussed throughout this thesis there has always been an element of Islamic scholars who worried that the Natural Sciences and an emphasis on rational knowledge would take people away from the core of their faith; however, I have also identified a great many scholars who despite being amongst the most knowledgeable in the revelatory sciences have considered the rational sciences to be equally Islamic. Ghazanfar Khan provides a more rigorous and balanced account in his text The History of Islamic Education in India and Nadvat Ul-Ulama (Khan, 2004, pp. 1-40).

Throughout the various dynasties that controlled the Indian sub-continent, systems of schooling were steadily developed with each ruler's contribution depending upon their personal interests (Khan, 2004, pp. 10-37). A sample of these areas of personal interest is given below:

- Mahmūd Ghazni (11Century CE) promoted poetry and literature
- Qutb ad-Din Aibak (1206-1210) was a scholar of Arabic and Persian and also of science
- Sultan Iltutmish (1211-36) promoted philosophy

- Ghiyāth ad-Dīn Balban promoted literature and introduced Music
- Sultan Lodi (15th Century CE) made education compulsory, especially for his administrators and military officers

When the Mughals took over they extended the range of free educational provision through the establishment of many *awqāf* or charitable trusts. Mainstream Madrassa education up until this point still heavily emphasised the traditional sciences. The changing point according to Robinson was during the time of Sultan Akbar. Sultan Akbar ensured that *madrassas* were made more open and under his educational policy Muslims and Hindus were educated together with each receiving their own personal religious instruction. In terms of the rational sciences he was influenced heavily by the great Persian polymath Fathullah Shirāzi who 'combined the great qualities of a scholar, scientist, and statesman with that of an educationist' (Sufi, 1941, p. 55). This was the start of a chain of transmitted scholarship that was to extend through Mullā 'Abd al-Salām Lahāwri (d.1627) through Mufti 'Abds al-Salām of Dewa (d. ~1630CE) and Shaykh Daniyāl of Chawrāsa to Mullah Quṭb al-Din Sihālwi. In 1692 CE Mullah Sihālwi was murdered by local Muslim *zamindars* and his library of 900 books was torched (Robinson, 2001, p. 44).

Sultan Aurangzeb (1658-1703) was a religious zealot. He was well educated in the traditional sciences, a scholar of Arabic, Farsi and some Turkish languages and also of arts and the rational sciences (Khan, 2004, p. 26). He was liberal in terms of his support of learning amongst many of the Muslim sects including, for instance, the Bohra's of Gujrat, but he was intolerant of the non-Muslim communities. Where earlier rulers had worked with the majority Hindu population he believed fervently in the supremacy of Islam. He revoked the policy of giving

equal rights of education to Hindus, invested heavily in Islamic education and worked hard to expand his empire (Lapidus, 2007, pp. 378-379).

Amongst the many projects he sponsored was the aforementioned Madrasa-i-Rahimīya in Delhi; however, this was to be overshadowed by another in Lucknow:

Sultan Aurangzeb was outraged by the murder of Mullah Quţb al-Din Sihālwi and the loss of such a great library. In 1695 he assigned to the Mullah's sons the house of a European Merchant. The family moved to this house and established it as a Madrassa which came to be known as Farangi Mahāll.

5.13.1 Origins of the Dars-i-Nizamīya

It was the Mullah's third son Mullah Nizām al-Dīn who led the Madrassa. He oversaw the development of a new curriculum that combined both the rational sciences and the traditional sciences. This new curriculum came to be known as the Dars-i-Nizamīya after its founder (and crucially not after the earlier Nizamīyah *madrassas* of central Asia) and it has influenced Madrassa curricula in South Asia ever since with all *madrassas* in the present day using this name for their course of studies despite changes in the content that will be discussed further.

5.13.1.1 Content of the Original Dars-i-Nizamīya Curriculum

The Indian historian G.M.D Sufi (1941, pp. 73-5) summarises the original curriculum as follows:

- Grammar & Etymology
- Syntax
- Rhetoric
- Philosophy
- Logic

- Scholasticism
- Qur'ānic Exegesis
- Jurisprudence
- Principles of Jurisprudence
- Traditions
- Mathematics

To this list Robinson adds Theology which he determined in part through his discussions in 1980 with Mufti Rada Ansari of Farangi Mahāll (Robinson, 2001, p. 50). He additional elicited the specific texts used, which makes him a better source than Sufi despite his research taking place later.

In terms of broad categories this mirrored the earlier Madrasa-i-Rahimīya curriculum with the removal of Medicine and Mysticism; however, such a superficial overview conceals the dramatic change in emphasis that came with this new syllabus. The two indicators we can use here are the number of texts studied in each area and the new commentaries that arose out of Indian scholarship. These show that <code>hadīth</code> studies were significantly contracted so that only Mishkāt al-Masābih was studied in <code>hadīth</code> studies (an abridged compendium of <code>hadīth</code> taken from the <code>\$ahīh \$itta</code>) rather than the full individual texts, a full 11 volumes of logic were studied, Philosophy was increased from one volume to three and of the new commentaries the vast majority were of texts on the rational sciences.

In addition to this the whole approach to study was changed from the traditional emphasis on memorisation to a new emphasis on **understanding**. This enabled students to complete the entire course in their late teens.

In seeking to explain this paradigm shift in educational philosophy Robinson highlights the need for administrators trained in the Islamic sciences that were required to push forward Aurangzeb's reforms and increase the Islamisation of the Mughal Empire. As he expresses it:

The study of advanced books of logic, philosophy and dialectics sharpened the rational faculties and, ideally, brought to the business of government men with better trained minds and better formed judgement.

(Robinson, 2001, p. 53)

This would also explain the omission of mysticism from the curriculum despite the fact that the scholars of Farangi Mahāll were, with very few exceptions, Sufis.

The influence of the scholars of Farangi Mahāll spread across India and into Arabia through the travels of the descendants of the founding family and through scholarship. Documents commenting on the texts developed for the Dars-i-Nizamīya have been identified in Azḥar (Egypt) and in Tashkent (Uzbekistan).

5.13.2 Impact of the British Colonisation of India

The *madrassas* that were established during the Mughal period and by earlier dynasties were, like their counterparts in the Ottoman Empire, largely decentralised with individual schools being independent institutions supported by charitable trust or *awqāf*. This kept them secure as long as the country was under Muslim rule as they were respected by the various rulers regardless of whether they followed the same schools of thought or not. The British however, did not share their reverence and in fact deliberately set about dismantling the educational systems of the country so that they could replace them with their own. They confiscated the land and property that financed the schools, leaving them with no means to pay their staff or maintain their buildings (Sikand, 2005, p. 61).

Nor were the British truly interested in developing an education system for the entire populace; initially only concerning themselves with educating the ruling Europeans, they then set about the creation of an Indian elite educated and indoctrinated with British thought and values. Lord MacAulay expressed this clearly in his famous *Minute on Indian Education* speech to Parliament in 1835:

We must at present do our best to form a class who may be interpreters between us and the millions whom we govern; a class of persons, Indian in blood and colour, but English in taste, in opinions, in morals, and in intellect. To that class we may leave it to refine the vernacular dialects of the country, to enrich those dialects with terms of science borrowed from the Western nomenclature, and to render them by degrees fit vehicles for conveying knowledge to the great mass of the population.

(Macaulay, 2006, p. 375)

This was motivated both by the knowledge that this would secure for them control over the country and through a complete failure to perceive any value in the existing literature and education of the country. As Lord Macaulay expressed it:

It is, I believe, no exaggeration to say, that all the historical information which has been collected from all the books written in the Sanskrit language is less valuable than what may be found in the most paltry abridgments used at preparatory schools in England....

...I am quite ready to take the Oriental learning at the valuation of the Orientalists themselves. I have never found one among them who could deny that a single shelf of a good European library was worth the whole native literature of India and Arabia.

(Macaulay, 2006, p. 374)

In 1765 a decision was taken to educate Indians to provide local administrators (Khan, 2004, p. 37); however, the Muslim community, even more than the Hindus, were deeply suspicious and few attended these schools. Then in 1835 CE English was made the official language for all administration purposes and the polarisation became even more pronounced. As Rahman (1999, pp. 60-61) puts it:

When the state...used Persian in the domains of power, the language was necessary for instrumental reasons (empowering oneself and family through powerful state offices) and as a passport to elite discourse and interaction... When the state, with British anglicists in the ascendant, replaced Persian with English and the approved vernacular languages of India, the symbol of elite culture became English. The language of instrumental gain and prestige too became English.

Under Lord Cornwallis (1786-1793 CE) the number of Muslims in Government offices was 75% but this then declined to a mere 4% in 1871 CE (Hunter, 2002, p. 161). Sir William Hunter, a British army officer serving in India describes the situation saying:

...the Muhammadans have now sunk so low, that, even when qualified for government employ, they are studiously kept out of it by Government notifications.

(Hunter, 2002, p. 167)

The uprising of 1857 CE was participated in by Hindus and Muslims alike; however, the aftermath was particularly severe for the Muslims with the massacre of over 200,000 Muslims in Delhi alone. The British army rounded up dozens of scholars and either killed, imprisoned or deported them (Sikand, 2005, p. 68).

While this was undoubtedly a massive setback in the development and maintenance of Islamic education in the Indian sub-continent, the subsequent explosion of Islamic Education institutions was, as Hefner eloquently puts it:

...the largest movement for Muslim mass education the world has ever seen. (Hefner, 2007, p. 19)

In the South the Muslim community had been generally more integrated into the pluralist society and so Sir Sayyid Ahmad Khan, an employee of the East India Company and supporter of the British Empire, was able to gather support for an approach which sought to integrate the best features of western education with the best of the traditional Islamic systems. English

was for him the key to raising the standing of Muslims in India; they had to learn the language of their rulers. As he expressed it:

All good things, spiritual and worldly, which should be found in man, have been bestowed by the Almighty on Europe, and especially on England.

(Cragg, 1965, p. 49)

He heavily promoted the rational sciences and founded Aligarh College which was to become one of the most prestigious universities in India.

Contrary to the propaganda of his detractors, Sayyid Ahmad Khan was far from irreligious; however, like the earlier *Falsafa* movement he was convinced by the concept of *conformity to nature* that was popular in Europe; through that he rejected the doctrine of miracles and he resurrected their emanation philosophy and its description of God as the 'First Cause' (Rahman, 2002, p. 218). These views alienated him from the mainstream scholarly community. Khan was convinced that one of the most important tasks for Muslims was to give them the confidence to refute the challenges of the Christian Missionaries that had flourished under British Rule (Khan, 2004, pp. 83-84). Hugh Goddard, a leading scholar of Christian-Muslim relations, highlights the fact that there was a great deal of complicity between the British ruling India and the Christian Missionaries. He quotes William Muir, then an assistant of the Lieutenant-Governor James Thomason:

Mohammedanism is perhaps the only undisguised and formidable antagonist of Christianity. From all the varieties of heathen religions Christianity has nothing to fear, for they are but the passive exhibitions of gross darkness which must vanish before the light of the Gospel. But in Islam we have an active and powerful enemy.

(Muir, 1897, p. 2) Quoted in (Goddard, 2000, p. 131)

Sayyid Ahmad Khan's promotion of the English language was too objectionable for many Muslims who saw it as a symbol of the British challenge to Islam and rejected it outright with some scholars going so far as to declare the language *najis* or spiritually impure.

5.13.3 Darul Uloom Deoband

One group that initially opposed the use of English was the founders of Darul Uloom Deoband, founded in 1866 CE by Sir Syed Maulāna Qāsim Nanautāvi. They associated English with secularism and saw all secular learning as detracting from the teaching of Islam. They therefore sought to eliminate it from their curriculum as much as possible. Ashraf 'Ali Thanwi was one of its most influential early scholars and his books are still used regularly for the Friday sermon in British Deobandi Mosques. He is recorded as saying:

It is, in fact, a source of great pride for the religious madrasas not to impart any secular (duniyavi) education at all. For if this is done, the religious character of these madrasas would inevitably be grievously harmed. (Sikand, 2005, p. 221)

Many Muslims in the Northern regions were descended from Arab and Persian migrants and had enjoyed considerable privilege under the Mughal rulers. They had thus been affected the most severely by the policies of the British and this approach resonated with them. While they may have been conservative in this respect, in other ways they were quite radical reformers. Metcalf (2002, pp. 97,98) emphasises the importance the Deobandi founders gave to reflexivity and the need to change to meet new circumstances. Rather than trying to reestablish the *awqāf* that had been destroyed by their colonial masters, the new Deobandi movement founded their institutions instead on the establishment of groups of living benefactors. This, they believed, would ensure they remained relevant and responsive to the

needs of their community whereas, as has been previously discussed, one of the drawbacks of the *Waqf* system had been the need for any institution to remain true to the vision of its founding *Waqif*.

The Deobandi movement was not monolithic and within their ranks there developed significant differences of approach. The *'Ulamā*, in what was to become modern India for instance, were on the whole against the partition of Pakistan and actually favoured the views of Ghandi and Abu Kalām Azād; that India should be a secular state with a multitude of semi-autonomous faith communities, (Metcalf, 2007, p. 91) & (Tabassum, 2006, p. 7). Those who settled (or originated in) Pakistan became more active in national politics (Zaman, 2007, pp. 70-77).

Deobandi institutions in Northern Pakistan and Afghanistan have also been the focus of much media attention, because they have been blamed for the extremist understandings propagated by the Taliban. These groups have their origins in the anti-British militant movement founded by Mehmūd-ul-Ḥasan. He was a student of the founder Nanawtāwi and he used Afghanistan as a base for guerrilla attacks against the British in the battle for India's independence (Tabassum, 2006, pp. 182-3).

Two other major Muslim groups with a strong representation in the Indian sub-continent are the *Ahle-Ḥadīth* and the *Barelvis*. The *Ahle-Ḥadīth* developed out of the *Mujāhid* movement founded by Shah Ismail (1786-1831 CE), the grandson of the acclaimed scholar and revivalist Shah Waliullah of Delhi. Shah Ismail was inspired by Muḥammad ibn Abdul Wahhab (1703-1792 CE) the puritanical reformer who violently opposed decadence, Sufism and the rigid following of the four Sunni Schools of jurisprudence. The *Ahle-Ḥadīth* are characterised by

their rejection of the cultural practices of worshipping at the shrines of Muslim Saints and their understanding that the Prophet Muḥammad was 'just a man'. They take their name from their principle of following the Qur'ān and Ḥadīth rather than the interpretations of the later scholars.

At the other end of the theological spectrum are the *Barelvis* for whom these practices and the deep veneration of the Prophet Muḥammad as $n\bar{u}r$ or divine light (Qamar, 2001) are central to their religious philosophy. They may be seen as more authentically following the thinking of the earlier Sufis such as the Farangi Mahāllis; however, their movement originates with Imam Aḥmad Rāza Khān. He is said to have accused both the *Ahle-Ḥadīth* and the *Deobandis* of being heretics and enemies of Islam and even went to the extreme of saying they had apostated and deserved to be killed (Sikand, 2005, p. 59).

Despite the credal differences between the three main Sunni groups in the Indian Subcontinent, it is interesting to note that their *madrassas* all follow a similar curriculum and that this curriculum is known as the *Dars-i-Nizamīya*, nevertheless it has been changed from its original liberal and inclusive origins to more closely resemble the conservative syllabus of the medieval period.

5.13.4 Darul Ulūm Nadwat al 'Ulamā

One of the few institutions to have successfully retained a more integrated curriculum is *Darul Ulūm Nadwat Al-Ulama* (lit. House of Knowledge for the Scholars Club). This is highlighted in Mohammad Akram Nadwi's book *Madrassa Life: A Student's Day at Nadwat Al-Ulama* (Akram Nadwi, 2007). Akram Nadwi is a graduate of the College and a former teacher there but has

since moved to the UK where he has links with the Oxford Centre for Islamic Studies and is currently establishing his own institution, Cambridge Islamic College. (Not to be confused with the existing Cambridge Muslim College which will be discussed later). The text gives some insight into the broad curriculum and critical approach to Islamic studies taken there. It highlights for example the popularity amongst the students of the writings of the French Existentialist philosopher Jean-Paul Sartre which would be hard to comprehend for students and staff at the other Sub-Continent *madrassas* (Akram Nadwi, 2007, p. 48).

This Madrassa was led by Abul-Ḥassan Ali Nadwi from 1961 until his death in 1999. He has been internationally acclaimed as one of the leading scholars of the 20th Century and amongst his achievements were the establishment of the Oxford Centre for Islamic Studies and hundreds of publications in Arabic, Urdu, English and Hindi.

5.14 Education in Saudi Arabia

The history of the Indian Islamic educational movement was highlighted in part because of its tremendous impact on the British Muslim community through the large numbers of migrants that came from India, Pakistan and Bangladesh. Migration from the Arabian Peninsula has been mainly from Yemen rather than Saudi Arabia and has been considerably less than that from the Indian Sub-Continent, however, Saudi Arabia has had a major impact through the export of ideas. I will now trace the origins of this intellectual colonisation.

Although the Muslim education movement began in Medina, the history of educational development in the Muslim world revolves around the centres of power and after the early period Mecca and Medina were left as centres for pilgrimage and meeting points for scholars but no further development took place there until the 20th century. Scholars existed in Arabia

throughout; however, their training was either private or through the institutions elsewhere in the Muslim world.

Prior to the 1930s high status was given to religious scholars in the Arabian Peninsula; however, education was very poor compared to other parts of the Muslim empire. The vibrant Hijaz region had a constant flow of pilgrims travelling to Mecca and Medina. The 'Ulamā there were generally from the Hanafi, Shafi'i or Maliki madhabs and were typically trained in Azḥar. The larger Najd region however, remained very primitive. Scholars rarely had their training in madrassas but were typically educated by their fathers which explains the very strong attachment they retained to their ancestry. 'Senior' scholars were those with the greatest depth and length to their lineage rather than outstanding students of known institutions or teachers. The Najdi 'Ulamā were typically Wahhabi-Hanbali following the puritanical teachings of the 18th Century militant reformist Abdul Ibn-Wahab (Yamani, 2009, pp. 45-51).

In the 1920s, the Wahhabi movement gradually took over by force and in 1924 hundreds of 'heretics' were slaughtered by their army in Taif including the Shafi'i Mufti and the guardians of the Ka'ba. The Meccans agreed to adopt their *madhab* and support Wahabi-Hanbali as the state religion. In 1932, the country was united under the rule of the Najdi Al-Saud ruling family supported by the former colonial rulers, the British.

The second Saudi King Saud Al-Saud (1953-64) enforced conservatism robustly and installed Najdi 'Ulamā in the main mosques of the Hijaz but he gradually lost power to King Faisal who was more accommodating of the Hijazi scholars. This policy was reversed with King Khalid in 1975 and his half-brother successor King Fahd who ensured total domination of the Wahhabi-Hanbali school of thought. This meant the country came to be dominated religiously by insular

and conservative scholars most of whom had received little formal training in the religious sciences and almost none in the rational sciences. It is worth reflecting on the words of Ibn Khaldūn in the 14th Century text *The Muqaddimah*:

It is a remarkable fact that, with few exceptions, most Muslim scholars, both in the religious and in the intellectual sciences have been non-Arabs [He clarifies later that he means from the perspective of ethnicity]... The reason for it is that at the beginning of Islam had no sciences or crafts, because of the simple conditions and the desert attitude. The religious laws, which are the commands and prohibitions of God, were in the breasts of the authorities. They knew their sources, the Qur'ān and the Sunnah, from the information they had received directly from Muḥammad himself and from the men and women around him. The people at that time were Arabs. They did not know anything about scientific instruction or the writing of books and systematic works. There was no need for that...

..crafts are cultivated by sedentary people and that of all peoples the Bedouins are least familiar with the crafts. Thus the sciences came to belong to sedentary culture, and the Arabs were not familiar with them or with their cultivation.

(Ibn Khaldun, 2005, p. VI 42)

When the leaders of Saudi Arabia placed the Najdi scholars in charge of the religious affairs of the country they were placing Islam in the hands of those who for 1400 years had seen no need to develop any sciences, religious or secular, and for them it was much easier to freeze the culture of the country in 6th Century Arabia rather than to overcome 1400 years of reinforced ignorance.

Education in general was desperately poor in the region; the US Countrystudies site reports:

In 1970, in comparison to all countries in the Middle East and North Africa, the literacy rate of 15 percent for men and 2 percent for women in Saudi Arabia was lower only in Yemen and Afghanistan.

(Federal Research Division of the Library of Congress, 2015)

Higher education was purely informal until 1945 when *Dar al Tawhid* - the Taif School of theology was established. This was then followed by the Islamic University of Medina and the Imam Muḥammad ibn Saud Islamic University in Riyadh in the 1990s.

5.14.1 The Export of Wahhabi-Hanbali Thought

The discovery in 1938 of vast quantities of Oil in the Arabian Peninsula completely changed the balance of power in the Muslim world and marked the start of the mass export of Wahhabi-Hanbali thinking across the world. Former Christian Nun, journalist and writer of a biography of Prophet Muḥammad Karen Armstrong wrote in the New Statesman:

The soaring oil price created by the 1973 embargo – when Arab petroleum producers cut off supplies to the US to protest against the Americans' military support for Israel – gave the kingdom all the petrodollars it needed to export its idiosyncratic form of Islam. The old military jihad to spread the faith was now replaced by a cultural offensive. The Saudi-based Muslim World League opened offices in every region inhabited by Muslims, and the Saudi ministry of religion printed and distributed Wahhabi translations of the Quran, Wahhabi doctrinal texts and the writings of modern thinkers whom the Saudis found congenial, such as Sayyids Abul-A'la Mawdūdī and Qutb, to Muslim communities throughout the Middle East, Africa, Indonesia, the United States and Europe. In all these places, they funded the building of Saudi-style mosques with Wahhabi preachers and established madrasas that provided free education for the poor, with, of course, a Wahhabi curriculum.

(Armstrong, 2014)

Consequently, the new oil money funded the development of conservative traditionalism in the Muslim communities of the UK and other western countries. This is evident for instance in the creation of the European Council for Fatwa and Research. On the surface the establishment of a panel of senior scholars to consider contemporary issues in the Western world has merit; however, when it was created it was realised that it was crucial for the majority of the panel to have a detailed understanding of the context. This can only come from

living in the European countries studying the rational sciences that have formed their thought, culture and technology. To date the vast majority of the panel are Arab scholars with little or no knowledge of Europe and even less of the rational sciences (Lewis, 2007, p. 93). It has been proposed by some that Fatwas should be developed by a committee of scholars where experts in the relevant rational fields are invited; however, the possibility of consensus through understanding would seem slight. Without a basic knowledge of the rational sciences the religious scholars will lack the intellectual framework to understand their 'expert' advisors. To give a practical example of this problem, Architects work with Engineers for their specialised knowledge but to do so they receive basic training in structural design. Without this training they could not communicate and the two could not work together. 'Ulamā cannot give a legal opinion relating to say medicine if they have no training in it. They do not need to be at the level of the best surgeons but they must have a full grasp of the domain.

The other major weakness of the European Fiqh council is the lack of scholars from the Indian Subcontinent. Pakistanis, Bengalis and Indians make up the majority of Muslims in the UK and as we have seen, their scholars have had better access to the historical intellectual resources of the Madrassa system than many of their Arab counterparts. Their absence therefore greatly weakens the council.

5.15 The Muslim Community in the UK

Muslims have been a substantial presence in Britain since the end of the 19th Century when Yemeni Lascars (sailors) first settled in Liverpool. Considerably more economic migrants then came to Britain in the 1950s from Pakistan, India and Bangladesh. This mass migration of

Muslims to fill the factories and rebuild post-war Britain's economy was mainly from rural areas such as Mirpur and Sindh (Ansari, 1988, pp. 145-7).

The affiliation of the communities from the sub-continent was generally *Deobandi* or *Barelvis*, both groups being rooted in the Hanafi Sufi traditions of India. A smaller number were from the *Ahle-Ḥadīth* group which was more Arab Hanbali influenced.

At first these communities were fairly self-sufficient. They established shops for halal meat and converted houses to function as local mosques. Imams were brought across from the villages but these were very limited in their ability to teach the children through their lack of English and lack of training. In rural communities in the sub-continent the village imam was often chosen, not for his piety and sharp mind but as someone who was too poor in stature to work in the fields and too weak intellectually to become a teacher, doctor or engineer. It was thus not uncommon for the imam to be handicapped in some way. They were able to fulfil a useful role rather than simply being a burden on society. They were not however, highly respected.

Christian writer on the British Muslim Community Philip Lewis provided a snap shot of the issues when he quoted a Bradford Imam with some 15 years' experience in his 1994 publication *Islamic Britain- Religion, Politics and Identity among British Muslims:*

The majority ... lack a thorough knowledge of Islam. Their knowledge is limited to the sectarian parameters ... [they] do not know anything about the context in which they are resident. They can neither speak the English language nor are they acquainted with the socio-political context of the dominating British culture ... [the imam] is dogmatic or does not know how to reason.

(Lewis, 1994, p. 114)

In an effort to raise standards and establish a British scholarly Islamic tradition the communities started to develop *madrassas* in the UK. The term madrassa had already been subverted to refer to the supplementary schools for teaching Qur'ān so the new *Deobandi* establishments took the name *Darul 'Ulūms* following the name *Darul Uloom Deoband* in India.

The first two such colleges to be founded were the Deobandi Darul Uloom Al-Arabiyyah Al-Islamiyyah (better known as Darul Uloom Bury) (Est 1973) and the Barelvi Al-Hijaz College was established in Coventry in 1979 (it has since moved to a Country house outside Nuneaton). Since that time there have been a number of similar institutions established with Deobandi Darul 'Ulūms established in Dewsbury, Leicester, Kent, Bolton etc. and Barelvi Darul 'Ulūms established in Birmingham and Nottingham. The speed with which these colleges have been established has been remarkable; however, they have struggled to overcome the community's negative attitude towards the role of Imam, so more often the gifted and talented youth would be encouraged to study the rational sciences so they could become doctors and lawyers. This has meant that many low ability children and those with behavioural problems are often the ones to request places at the Darul 'Ulūms.

Each of the institutions was founded by an inspirational leader who had studied in a Sub-Continent *Madrassa*. For instance, Darul Uloom Bury was established by Yusuf Motala, an Indian trained *Muḥaddith*. The poverty in the Muslim community has meant that the college's fees have had to be kept at a low level and this has limited the investment they could make in terms of additional highly trained staff. Most Islamic colleges are now staffed mainly by their own graduates.

The post-colonial conservatism of institutions in the sub-continent has already been discussed. It is therefore not surprising that the UK satellite institutions that have developed have been similarly narrow in their perspective. Due to pressure from the community and the government all now have rational subjects but in most cases these are taught as a separate curriculum often with many non-Muslim teachers taking the rational subjects. While one might have hoped to see a more integrated approach, in fact the opposite has been true. It may be surprising to note that the UK *Darul 'Ulūms* are currently narrower in their curriculum and thinking than many of their Indian parent institutions.

Those following the Arab-Hanbali influenced *Ahle-Ḥadīth* school of thought have developed somewhat differently. Partly due to their smaller numbers and probably influenced by their attachment to the Arabic language they have chosen not to set up colleges in the UK. Instead they have developed more part-time study centres (a model that has to some degree been copied by the other schools seeking to extend their provision and influence.) Mosques such as the Green Lane mosque in Birmingham have developed detailed training programmes while students wishing to complete the traditional 'ālim or scholar's training are encouraged to travel overseas to study in Mecca or Medina where scholarships are plentiful.

5.15.1 Cohesion of the British Muslim Community

As the British Muslim community has expanded and increased in prosperity, groups that once were forced to coexist found that they had the resources to establish their own centres. This has resulted in a mushrooming in the religious institutions so that sectarian, national and spiritual divides determine in a very narrow way the composition of most mosques and

education centres. In the areas of dense Muslim population Indian *Deobandis* now remain separate from Pakistani *Deobandis*, *Barelvis* have their own mosques as do the *Ahle Ḥadīth* and even the smaller Sufi *Ṭarīqahs* now commonly have their own mosques or *Zāwiyahs*. There are also divides within the *Ahle Ḥadīth* so that the more tolerant Pakistani *Ahle Ḥadīth* are separated from the Saudi-Wahhabi inspired *Salafiyyah*. Even religious bookshops are now divided on sectarian lines in the larger Muslim population centres. This has had a damaging impact on tolerance in the Muslim community where now it is common for preachers to speak openly against the 'other' groups.

5.15.2 Reason and Revelation in the Education of British Muslims

Compulsory education in the UK means that literacy levels are extremely high and all children are required to study science and mathematics until the age of 16. This means that even those children who decided to study the religious sciences all have a basic knowledge of the rational sciences. This could be said to be a mirror image of the education in the Muslim world during the medieval period where all students began by being educated in the Revealed Sciences and could later choose to study the rational sciences.

The negative attitude towards the religious sciences rooted in the customs of the rural communities have already been mentioned but this was made worse by the stark contrast in environment and pedagogy between the school and the evening 'madrassa'⁷. Children would commonly attend a well-resourced, clean and modern secular school where some the staff

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⁷ The use of madrassa here is accurate but potentially confusing. In the UK madrassa is used for a basic level evening or weekend supplementary school for learning Qur'ān and Islamic studies.

commonly inculcate a negative attitude towards religion in general through portraying it as the 'superstitions' of primitive cultures. In the evening however, the children would attend the mosque classes where they would sit on the floor of run-down properties memorising the Qur'ān by rote from poorly printed books with teachers who spoke little English. Under circumstances like this it is hardly surprising that many children would develop a negative attitude towards the religious sciences. In the past decade there has been a marked improvement in standards in the *madrassas*; however, the methods of instruction have changed little.

The picture painted above is far from static and there are many initiatives taking place to improve the Islamic educational provision. At the elementary and secondary schooling level many Muslim schools have been established, some privately funded and some state funded. They cater to a small percentage of a rapidly growing community but strive to offer a more integrated curriculum. At the level of higher education Bauman and Contractor (Scott-Baumann & Cheruvallil-Contractor, 2015, pp. 46-7) have identified several new initiatives including Cambridge Muslim College which provides post-graduate training to the *Darul 'Ulūm* graduates adding critical thinking, philosophy, and academic writing and UK social studies to expand their study of the Revealed sciences. Other institutions such as Ebrahim Academy in London have worked to establish links with mainstream British Universities. These initiatives are however, currently in their formative stages and there does not yet exist any institution that offers a program of learning that integrates the revealed and rational sciences.

5.16 The Establishment of a Muslim Priesthood

One of the major issues that has arisen through the separation of the revealed and the rational sciences is the de facto establishment of a Muslim Priesthood which is contrary to the principles of the Qur'ān.

During the Golden Age of Islamic civilisation all educated people were 'ulamā. A doctor was also an 'ālim, a mathematician was also an 'ālim, a civil servant was also an 'ālim. No serious study could take place until one had completed a basic study of the Revealed Sciences which held the status of basic high school education. Now the two branches are completely separate which has led to an 'ālim requiring a specialist role. Marriages are conducted by 'ulamā, divorces are conducted by 'ulamā etc. Jurisprudence has also developed much more so that it has become a specialist subject that no 'lay person' is permitted to voice their opinion on. This could be seen to mirror the separation of Church and State that is the norm in the Christian community.

The result is that a small elite are defining what is lawful, *halal* and what is unlawful, *haram*. The Qur'ān warns against this situation saying:

They take their priests and their monks to be their lords in derogation of Allah, and (they take as their Lord) Christ the son of Mary; yet they were commanded to worship but One Allah. There is no god but He. Praise and glory to Him: (Far is He) from having the partners they associate (with Him).

Qur'ān 9:31 (Ali, 2004, p. 446)

It is narrated from `Adi bin Hatim that when the Prophet Muḥammad revealed this verse, he ('Adi) commented:

`They did not worship them.'

to which the Prophet responded:

Yes they did. They prohibited the allowed for them and allowed the prohibited, and they obeyed them. This is how they worshipped them.

(Al-Ṭabarī, 2005, p. 3974 Vol 5)

This <code>hadīth</code> shows the grave dangers of allowing a small group of specialist scholars to dictate what is lawful and what is unlawful. This is made much worse by the recent trend that was described in chapter 3 where scholars instead of showing tolerance for different legitimate legal opinions have become dogmatic and authoritarian condemning opinions other than their own.

5.17 Conclusions

Taking a long view of the history of Muslim educational institutions, there is a repeating pattern of increased integration of the rational sciences followed by a contraction of the syllabi when the Muslim society is under duress from either outside forces or through internal strife. The first such contraction followed the rise and subsequent fall of the *Mu'tazilites* and was seen as a reaction to their extreme theological views that promoted rationalism to the level of or even beyond that of revelation.

A similar contraction was observed of the Ottoman syllabi during the decline of the Ottoman Empire and the Indian *Dars-i-Nizamīya* syllabus during the Colonial and post-colonial period. During the times of insecurity, the rational or as they have sometimes been labelled 'foreign' sciences have been seen as a threat to Islam and have been shunned by the centres of Islamic

learning. Ironically, I would assert, this separation of the rational and the revealed sciences is the very thing that has made the religious scholars lose touch with the scholastic developments leading to them being seen as out of touch and increasingly irrelevant to the educated classes.

The Abbasids recognised the value of the rational sciences from a material perspective and this led them to pursue them even before any theological justification had been formulated by the religious scholars. In the twentieth and twenty-first centuries, a similar spectrum of rationales may be witnessed for the adoption of the rational sciences in the Muslim world. Materially the Muslim world is struggling as a collection of post-colonial third world nations to raise itself to the level of its western counterparts. Secular thinkers in the Muslim nations are in favour of developing academic institutions modelled on western Universities and these are being built in most Muslim countries.

Muslim thinkers also highlight the fact that it was during a time when Muslim scholars rose up as champions of the rational sciences that the Muslim empire enjoyed its 'golden age'. They are locked in battle, however, with conservative religious scholars who like many of their forefathers see a return to the exclusive study of the revealed sciences as the 'safe' course of action to preserve the core teachings and values of Islam. Recontextualising their faith and engaging in scholarly reasoning is perceived to be too risky and so they promote the idea of restoring the original context of the traditional teachings. This can be seen practically in the puritan *Salafiyyah* movement who insist on adopting Arabian dress in the UK despite its intemperate climate!

There are however, a number of key scholarly initiatives to overcome the current disconnect between the rational scholars and the scholars of religion. In the UK, Muslim schools are increasing in number, inspired in many cases by the writing of the Indian scholar Sir Muḥammad Iqbal (1877-1938 CE) who wrote mourning the limitations of both western schools and *madrassas* (Nadwi, 2002, p. 35). They include both schools following the British National Curriculum but supplementing it with classes of Islamic studies and those that began as orthodox *madrassas*, but now perceive the need to also include the rational sciences (Mandaville, 2007, p. 238). Once again it may be that the pragmatic motivation of needing to prepare their students for a working life in British society is a powerful motivator; however, there are also many who see this development as important through their understanding of the Qur'ānic text.

One of the lessons that can be derived from this historical analysis is that institutions can often promote a static viewpoint that can only be challenged by those from the outside. In the present day, it may be unreasonable to look for scholar sultans like Akbar or Suleiman to impose reform and advancement on a conservative society but it may be realistic to expect contemporary figures evolve to emulate the revitalising impact of scholars like Al-Fārābī and Ibn Sīnā.

Perhaps the most advanced Muslim nation in the world today from this perspective is Malaysia. Both theoretical scholars, legislators and educators are working together at every level from the schooling of children (Hashim, 2004, pp. 70-95) to the development of the Islamic University of Malaysia where dual honours degrees that include for instance Islamic studies and Engineering are the norm (Abusulayman, 2007, p. 16).

The historical overview of Muslim Educational institutions in this chapter indicates that traditional centres of the Revealed Sciences have, during periods of prosperity and political stability, accepted the place of the rational sciences as a legitimate course of learning that can contribute to the understanding of the Divine as espoused in the Qur'ān. It does however, confirm that this understanding quickly evaporated during periods of recession and as a reactionary response to the challenge of competing cultures and philosophies. Currently most Muslim countries are in recession and the Muslim communities within the prosperous western nations are feeling under siege, which is stifling the efforts of reformers to push for the reintegration of the rational sciences with the revealed sciences.

The country which has remained almost untouched by the developments of the *madrassas* and the integration of the rational sciences is Saudi Arabia. There, most of the scholars governing religious thought come from a tradition of scholarship that remained in simple bedouin communities from the time of the Prophet Muḥammad to the 20th Century. Their teachers rarely perceived the need for development of the religious sciences because their social context was static. They have been pushed into the limelight by the power of the house of Saud which came from its military prowess in Arabia, not its knowledge or advancement. They have then been given the opportunity to disseminate their primitive ideas, not through the developments in their scholarship but through the money that oil has brought to the region. This has completely distorted the evolutionary process of educational institutions in the Muslim world and to an extent unravelled centuries of progress.

The dominance of the Wahhabi-Hanbali scholars has distorted the balance dramatically and for as long as it continues, this will fuel the apprehension and concern felt by Muslims in

general towards the rational sciences. It is perhaps surprising to note then that even in Saudi Arabia rational science institutions are being constructed. This seems to be an implicit acceptance that the form the religious sciences have taken there cannot be effectively integrated.

In western countries the rational sciences have been elevated through their development while in the Muslim world the religious sciences have regressed. This decline requires reversal for reintegration to become possible.

In terms of a long term strategy, I would suggest that the Muslim world revisits its educational curriculum. Schools need to teach an integrated curriculum that includes both rational and revelatory subjects. High school graduation should imply a sound grasp of all the basic rational sciences plus Arabic and the Qur'ān and an understanding of the core sciences of hadīth, tafsīr and fiqh. Memorisation should be given a lower priority as it is comprehension that is crucial. Freedom of thought would thus be restored as Islam would be freed from the tyranny of an elite 'priesthood'.

Once graduated students should then be able to choose between rational and revelatory sciences at degree level and joint honours programmes would be a valuable addition as it could produce scientists who possess a deeper understanding of religion and religious scholars with a deeper understanding of the rational sciences.

There are already a number of outstanding individuals who have qualified at a high level in both the religious sciences and the rational sciences. Jasser Auda for example completed two PhDs, one in Engineering and one in Islamic studies and has gone on to author many books in

both Arabic and English including *Maqāṣid Al-Sharīʿah as Philosophy of Islamic Law – A Systems Approach* (Auda, 2008). Scholars of this calibre and flexibility are, however, rare. The scholars discussed in chapter 4 were all exceptional and outstanding individuals; however, if broader more integrated education can be provided for all, the prospects for producing such outstanding scholars, who are truly able to develop knowledge where the revealed and rational aspects are integrated, will be greatly improved. Consequently knowledge could then be developed in line with the Qur'ānic paradigm so that the rift that has occurred between the two branches of knowledge can be healed.

6 CONCLUSIONS

One of the foremost conclusions of this study is that reason is indispensable in the context of the revelation. Those who insist on giving more weight to the exegesis and understanding of the earliest generations, do a great disservice to the Qur'ānic vision of knowledge as it was expounded in chapter 2. From Tabarī to Zamakhsharī to ibn Kathīr their understanding of the text of the Qur'ān was, on the whole, rooted in their own context. By this I do not mean that they were unable to adapt. In fact, although they were careful to relate the opinions of scholars from an earlier age, they did, either consciously or subconsciously, recontextualise the Qur'ān in accordance with their knowledge and situation; their knowledge reflected the world around them. From time to time however, Zamakhsharī was able to give a more rationalistic view of the text, perhaps because of his personal leaning towards a rational theology. There was no thematic discussion given on knowledge by the exegetes. On the whole they would simply give an apparent meaning to the text, verse by verse and often phrase by phrase.

In fact, reason played an even bigger role in the Qur'ānic discourse than I imagined. There is a symbiotic relationship between the knowledge man acquires from the natural world using his reason and the revelation that helps him to unlock some of its mysteries. As it was seen from the succeeding chapters, the more man uses his faculties to understand the world around him, the more he begins to understand who he is, what he is doing, where he is going. It is that very sincere and unrelenting quest embarked on without any thought of personal gain that raises his status to that of a scholar, who does not succumb to the whims and doubtful objectives of kings and politicians. He keeps his integrity intact in humility before God.

The revelation guides him and assists him to continue in his quest without going astray. He does not exceed his authority and become arrogant by suggesting he knows better than everyone else, and so usurping the rights and freedoms of others.

Each time period binds mankind. The world advances inexorably on and so does knowledge, developing and changing. More and more knowledge is being sought and acquired which is useful to man. Without taking advantage of new knowledge, man's knowledge will be restricted and he will fail to achieve a greater understanding of the revelation and the signs of the creation. Each generation accumulates their own knowledge bank and each succeeding generation adds to this knowledge bank. Those who insist on sticking to the knowledge that has reached us and refuse to use their reason to refine the knowledge in their own unique context, are at risk of usurping the rights of others, which is a crime in the Qur'anic discourse. They are warned that they will be punished for failing to use the intellect God has given them. The Qur'anic epistemology of knowledge leaves the door wide open for each seeker of knowledge to embark on a wide road, and pursue his own unique interests with sincerity and humility and without arrogance, to work for the benefit of humanity. This is his duty as God's vicegerent, khalifah, on earth. In our modern age we increasingly aware of the damage we have already caused to the environment. While it is the Qur'an that provides us with the knowledge of our responsibility as khalīfah, we cannot fulfil this responsibility without acquiring the rational tools of science.

In chapter 3, the revealed sciences were examined in some detail. This highlighted that not only was reason an essential tool for their development and use, rational knowledge itself was crucial. All the revealed sciences are completely dependent on reason, which has been used to develop the principles and is used to apply them in each and every case. The case of Saudi

Arabia was presented where the scholars have been cut off from the development of the sciences that took place in the rest of the world and because of their static and unchanging society, they did not feel the need to develop the sciences themselves. Now their society is changing rapidly and they are failing to adjust.

Islamic jurisprudence does not exist in a vacuum. Its area of application is specifically and uniquely the world we live in. The reality of that world is therefore an essential parameter that every jurist must account for and this is why many rulings are completely specific to a time and place. Jurisprudence was for centuries considered the jewel of the revealed sciences, because it was a practical science that had the potential to benefit mankind. For some, it now seems to have become an end in itself which, far from exalting it, has demeaned it.

In chapter 4, I analysed some of the great scholars of the rational sciences. In every case, I found that they had not pursued science in conflict with their faith but had actually pursued it to fulfil it.

Some of them changed their understanding of Islam through their pursuit of rationality and this brought controversy down upon them, while for Al-Ḥaytham natural science provided a safe haven away from the petty arguments of the theologians, where he could explore God's signs in the creation uninhibited.

Great achievement and advancement are beneficial and can facilitate a better earthly life. The rational sciences should thus be pursued and taken advantage of; however, one should always be looking to see how progress in any field of knowledge informs us about the nature of the Creator and mankind's relationship to Him.

It is often said that knowledge is power. The Qur'ānic discourse on knowledge gives abundant evidence to suggest that human beings' potential is enormous when they make use of

knowledge that has been given to them using their intellect. The Qur'ānic discourse highlights that God does not want some to monopolise knowledge and conceal it from the masses. This selfishly restricts the potential others have in order to control their minds and their movements. As long as knowledge remains with the elite, the common people can be enslaved. If people are given handouts like beggars, their intellectual abilities are not equipped to produce knowledge for themselves. The intellect is a gift from God but like all of humankind's gifts, it remains a mere potentiality until it is trained and used.

The historical record did show a resistance from the wider community of scholars to the rationalist scholars because of the Greek inspired philosophy some had adopted. Over time; however, their science was found to be independent of their philosophy and so what was originally seen as a major drawback to the natural sciences melted away.

In chapter 5, I considered the educational institutions and here I was expecting to find monolithic bodies rooted in stubborn intransigence. Undoubtedly, they were shown to be slow to adapt to the rapidly developing field of rational science, but there was no inherent barrier to its adoption. The pattern of growth and decline was related more to the state of society with wars and poverty producing regression and times of prosperity fuelling confidence and development. This gives me hope for the future as the British Muslim community may feel under siege from bigotry and islamophobia but they are relatively speaking affluent. Thus, at least some of the circumstances required for development and growth are present.

Some scholars now claim that to be a polymath jurist has become impossible because every avenue of life has become so complex, that for one person to study both the revelatory and rational sciences would take too long. I believe this idea has arisen out of the 'now' syndrome

of our culture whereby we are as a society perpetually dissatisfied with the pace of change. In chapter 3, we learned that Aḥmad ibn Ḥanbal would not presume to give a juristic opinion until he had memorised a staggering number of traditions and had accrued the wisdom from 40 years of life. This new opinion is predicated however, on the perceived need to be giving juristic opinions whist students of knowledge are still in their twenties, an age at which the early scholars would have considered them mere youths not yet ready to take on such a serious task.

Throughout this thesis, I have shown how reason is a fundamental tool for the acquisition and development of all branches of knowledge. The Qur'ān constantly urges man to develop belief through witnessing God's signs, understanding their import and acting upon that knowledge. This is the transformative Qur'ānic vision of knowledge.

Looking ahead to the future, I would suggest that the Muslim community will never achieve its potential, either spiritually or materially, unless they are able to reintegrate the revealed and rational sciences. Muslim countries attempting to 'ape' the secular education systems have thus far failed to match the standards of the original western institutions. I would suggest that they never will for as long as they neglect the spiritual dimension, because Muslim society remains attached to its faith. They can be successful but only through taking their own path that is guided by the Qur'ānic discourse. Developing an integrated education system where the rational sciences are taught alongside and integrated with the revealed sciences has been achieved in the past and can be again. This approach would allow each individual to develop in accordance with their personal interests and aptitudes, without ever perceiving a clash between the two disciplines. This would also have the benefit of removing the religious hierarchy's hold over the common people.

Glossary

Arabic	English	Arabic	English
ʿadl	righteous, just	faqīh (pl. fuqā	hā) jurist
aḥad	unique	farḍ	obligatory, obligation
āḥād	solitary(<i>ḥadīth</i>)	farḍ 'ayn	personal obligation
aḥadīth	pl of <i>ḥadīth</i>	farḍ kifāya	collective obligation
aḥkām (pl of Ḥ	nukm) laws, values	fiqh	law
ʻamal	act, practice, precedent	fiṭrah	primordial human nature
ʻaqīdah	creed	ḥadd	limit, prescribed
ʻaql	intellect, reason		punishment
athar	deeds and precedents of the companions	ḥadīth	tradition (especially about Muḥammad繼)
āyah (pl āyāt)	sign, indication, Qur'ānic	ḥaqq	truth
	verse	ḥilm	forbearance
bāţin	internal	ḥukm (pl aḥkā	im) law, value, ruling
dalīl	proof, evidence	ʻibādāh	worship
dunyā	worldly	i'jāz	inimitability (i.e. Qur'ān)

Arabic	English	Arabic	English
ijmā'	consensus	khashiah	awe
ijtihād	juristic reasoning	Kutub	elementary schools
	(lit. exertion,)	madhab	school of jurisprudence
ikhtilāf	juristic disagreement	madrassa	college, (now also
ilhām	inspiration		children's evening classes)
ʻillah	effective cause	maqāṣid	goals and objectives
isnād	Chain of narration	maktub	elementary school
istiḥsān	juristic preference	maşlaḥah	consideration of public
			interest
istiṣḥāb	presumption of continuity	matn	text (of <i>ḥadīth</i>)
istişlāḥ	consideration of public		Calculated Consort
	interest	mawḍū	fabricated, forged
jadal	dialectic	mīzān	balance
jahl	ignorance	mubāḥ	permissible
jāhilīyyah	time of ignorance	mufassir	exegete
jihād	godly struggle	muffassirūn	exegetes
kalām	theology (lit. speech)	muḥaddith	scholar of <i>ḥadīth</i>

Arabic	English	Arabic	English
mujtahid	scholar who engaged in	rijs	filth
	ijtihad	rūḥ	spirit / soul
mursal	discontinued or	rukn	pillar
	disconnected <i>ḥadīth</i>	șa <u>ḥ</u> īḥ	valid, authentic
musnad	hadīth with a continuous chain of transmitters	sanad	basis, proof
mutawātir	ḥadīth with multiple chains	Sharīʿah	God's way/law
	of transmission	shūrā	consultation
muṭlaq	absolute, unqualified	sīra	biography of Muḥammad #
naqlī	transmitted	takfīr	Denounce as apostate
najis	impure	ta'līl	ratiocination
naskh	abrogation	ta'wīl	exegesis (commonly
nașș	explicit textual ruling		allegorical)
qāḍī	a judge	taqlīd	imitation, following the
qaţ´ī	definitive, free of		opinions of others
	speculation	taqwa	God-consciousness
qiyās	analogy	tawātur	continuous recurrence

Arabic	English	Arabic	English
ʻulūm	science	wājib	obligatory, obligation
ummah	community	waqf (pl. awq	nāf) charitable trust /
uṣūl	science, principles		endowment
uṣūl al fiqh	principles of fiqh	wāqif	endower
uşūl al tafsīr	principles of exegesis	<i>zann</i>	speculation
uṣūl al ḥadīth	principles of <i>ḥadīth</i>	<u> </u> zāhir	manifest, apparent
waḥid	One, alone, singular	Peace	and Blessings be upon him
waḥy	divine revelation		

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