THE THEOLOGICAL THOUGHT OF FETHULLAH GÜLEN:

RECONCILING SCIENCE AND ISLAM

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The transliteration scheme followed in this thesis follows the guidelines set forth by the *International Journal of Middle East Studies*. Islamic vocabulary that appears in the *Oxford English Dictionary* (Qur'an, Sunna, Hadith, madrasa, etc.) has not been transliterated. Technical terms from the original Arabic that have been appropriated by the Turkish intellectuals covered in this thesis remain in the form that they are used. Examples of this include *ma'rifa*, *insan-i kâmil*, and *mürşit*.

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Introduction THE REASON-REVELATION DIVIDE IN ISLAMIC HISTORY

The modern conflict between the natural and religious sciences is not a recent phenomenon, but one preceded by centuries of disputation amongst clerics and philosophers reaching back into the earliest centuries of Islam. The clash between revelation and reason, two categories of knowledge in seeming contradistinction ever since the reception of Muhammad's prophetic message in seventh century Arabia, has deeply influenced Islamic intellectual history. Entire schools of religious thought have been charged with delineating the appropriate boundaries separating the two fields of learning. Theologians, mystics, and philosophers have long grappled with the attendant issues arising from the concomitant existence of two potentially valid epistemologies of knowledge.

Most major Islamic thinkers have addressed the subject, central as it is to any systematic treatment of man's comprehension and submission to the dictates of the Qur'an. The Turkish Islamic modernist scholar Fethullah Gülen is one such intellectual, heir to an identifiable intellectual and theological tradition. He exhibits a coherent strand of thinking regarding the question of natural science's role in Islam that recalls the positions of specific classical scholars and mystics. He has also come under the sway of contemporary intellectual trends, both religious and secular, adopting a modern approach to the centuries-old dispute. Both traditional and modern influences in Gülen's treatment of science will be analyzed in this thesis, in an attempt to understand the relative novelty of his theological project.

Gülen's modernist theology is predicated on the rehabilitation and

vernacularisation¹ of modern science, appropriating its methods and potentialities to enable the Muslim subject to achieve mastery of the world. Gülen exhorts his believers to "use the same tools of science and technology to show that they do not contradict Islam and to lead people to the right path."² Science in the hands of the Muslim activist, and the 'golden generation' (*altın nesil*),³ would better serve the nation and humanity. Reminding readers of humanity's role as *khalīfa*⁴ on Earth, Gülen writes:

Created to rule Creation, we need to observe and read, to discern and learn about our surroundings so that we can find the best way to exert our influence and control. When we reach this level...everything will submit to us and we will submit to God.⁵

To Gülen, science and religion are "two expressions of a single truth."⁶ By vernacularising

science and resisting the antagonism between the religious and secular sciences, Gülen

prepares a generation of rising Muslim activists for a critical engagement with modernity

in advance of its Islamisation.⁷

¹ Hakan Yavuz defines 'vernacularisation' as an effort by modern Islamic social movements and intellectuals to "redefine the discourses of modernity (nationalism, secularism, democracy, human rights, the liberal market, and personal autonomy) in their own Islamic terms." M. Hakan Yavuz, *Islamic Political Identity in Turkey* (Oxford, Oxford University Press, 2003), p. 5.

² Fethullah Gülen, Key Concepts in the Practice of Sufism: Emerald Hills of the Heart, Vol. 1, Ali Ünal, trans. (Fairfax, Va.: The Fountain, 1999), p. 100.

³ The *altın nesil* denotes "Gülen's plan to rear pious, youthful, and action-oriented Muslims who 'combine rational 'enlightenment' with true spirituality, wisdom, and continuous activism.' Erol Gulay, 'The Gülen Phenomenon: A Neo-Sufi Challenge of Turkey's Rival Elite?' *Critique*, 16 (2007), p. 43; originally from: 'Fethullah Gülen and his Meeting with the Pope,' *The Fountain*, 23 (1998), p. 16.

⁴ Vice-regents of God in the administration of Earth.

⁵ Fethullah Gülen, *Essentials of the Islamic Faith*, Ali Ünal, trans. (Fairfax, Va.: The Fountain, 2000), p. 272.

⁶ Fethullah Gülen, *Prophet Muhammad: Aspects of his Life*, Vol. 1, Ali Ünal, trans. (Fairfax, Va.: The Fountain, 1995), p. 134.

⁷ Olivier Roy describes Islamisation as the attempt to "create an authentically Muslim microsociety within the society at large, which is no longer in, or has not yet attained, such a state." Olivier Roy, *The Failure of Political Islam*, Carol Volk, trans. (New York: I.B. Tauris, 1994), p. 3. This entails the redefinition of modern values in Islamic terms, the replacement of modern institutions with Islamic alternatives, the reorganization of

Gülen reconfigures modern understandings of science and faith to undermine the very premise of the reason-revelation divide. Reason is modified to cohere with Islamic metaphysical principles, while revelation is reinterpreted from the perspective of natural theology. Gülen's redefinition yields two complementary, interdependent categories of knowledge. Citing the fundamental misunderstandings inherent in the positions of both religious scholars and scientists, Gülen dismisses a clash whose momentum was propelled by the weight of centuries of intellectual dispute.

Methodological Framework

A proper constructivist⁸ analysis of Gülen's treatment of natural science requires an appraisal of the unique intellectual dialectic in which he plays a part. Tracing the dissemination of secular philosophies and scientific materialism in the late Ottoman Empire and early Turkish republican era is important in establishing the ideas Gülen and his most influential predecessor, the Kurdish religious modernist Said Nursi (1876-1960), were reacting against and helping to shape. As will be shown, Gülen and Nursi were as much a product of contemporary intellectual trends as they were unique and innovative contributors to the Islamic tradition. That is, were it not for the entrance of materialism and positivism into Ottoman intellectual circles in the mid- to late-nineteenth century, and the crystallisation of those ideologies into the political and cultural fabric of Turkey, it is unlikely that either Gülen or Nursi would have been compelled to respond in ways that ultimately altered the relationship between modernity, science, philosophy, and Islam.

economic relations along *sharī* '*a* principles, and the incorporation of Islamic teachings in modern systems of knowledge.

⁸ In this thesis, constructivism will be understood as a methodology that considers theological views as 'constructed' by particular intellectual trends and influences. Identifying these ideological and theological influences will determine, to a large extent, the characteristics of the subject's thought. Consideration is also given to the contributions of the thinker himself. Thus, an account of Gülen's own innovative contributions will complete the analysis.

It is instructive that Nursi and Gülen borrow the language and conceptual framework of medieval Sufi scholars and orthodox clerics in explicating their modernist theologies. By relying on the vocabulary and rhetoric of traditional Islamic exegesis, Nursi and Gülen attempt to locate themselves within a *mujaddid*⁹ tradition. As self-professed renewers of Islam,¹⁰ Nursi and Gülen position themselves as the newest in a series of Islamic reformers who both defended the faith against ritual and doctrinal accretions, and asserted the proofs of Islam in the face of heresy and doubt. Establishing themselves within the *mujaddid* lineage also boosts their claims to religious authority and legitimacy.

Our analysis follows the methodology of Albert Hourani's intellectual history *Arabic Thought in the Liberal Age 1798-1939*, wherein an emphasis is placed on the importance of locating ideas within their unique intellectual context. When analyzing an intellectual, it is important to "explain as fully as possible the influences, circumstances, and the traits of personality which may have led them to think about certain matters in a certain way."¹¹This way, a boundary can be demarcated between those elements of Gülen's theology that are external to his thought and ultimately appropriated, and those aspects that he himself has introduced to the debate. Doing so allows us to determine the extent to which Gülen is a derivative thinker, merely describing or repeating the arguments of his antecedents, and the extent that his contributions represent a dramatic break from tradition. Christian Troll, in his intellectual biography of the Indian Muslim modernist Sayyid Ahmad Khan (1817-1898), explains the necessity of viewing thought in a process of interaction and engagement between the individual thinker and his intellectual context:

⁹ In Islamic tradition, a *mujaddid* is a scholar who updates and renews the faith in times of historical change. Ahmad Sirhindī is widely recognized as a *mujaddid* of the second Islamic millennium.

¹⁰ Gülen locates himself amongst a large number of *mujaddid* of Islam in *The Statue of Our Souls*. Fethullah Gülen, *The Statue of Our Souls: Revival in Islamic Thought and Activism* (New Jersey: The Light, 2005), pp. 25-29.

¹¹ Albert Hourani, *Arabic Thought in the Liberal Age, 1798-1939* (Cambridge: Cambridge University Press, 1983), p. v.

"It therefore seemed imperative to try to specify in which form and at what time in Sir Sayyid's life the challenges to his theological thought from outside and from within appeared and how he himself then viewed them in detail, rejecting, modifying and accommodating them."¹² Similarly, we will see how Gülen's intellectual project is fluid and polymorphous, critically engaged with Islamic and secular sources of knowledge in a process of continuous feedback and renewal.

This fluidity in thought seems to undermine the suggestion that there exists such a thing as Gülen's 'theological thought,' or an internally coherent body of his 'intellectual work.' By emphasizing certain influences over others depending on the recipients of the message, there are times when Gülen's thought seems to be driven more by the exigencies of expanding his movement than maintaining the sincerity or integrity of his belief system. *AUTHENTICITY VS. ACCOMMODATION IN GÜLEN'S RELIGIOUS THOUGHT*

Some scholars have alluded to this conclusion, arguing that Gülen's religious thought is presently undergoing a process of 'internal secularization.' The 'internal secularization' thesis is argued most forcefully by M. Hakan Yavuz in *Islamic Political Identity in Turkey*. According to Yavuz, there is a general trend towards the internal secularization of Islamic thought, which can be observed in the writings of a large number of modern Islamic intellectuals in Turkey.¹³ Islamic tradition is 'secularized' both by the modern processes of creating authoritative religious knowledge, and by the broad confrontation with modernity – its values, institutions, and epistemological assumptions.

According to Yavuz, the production of religious knowledge in modern Turkey has been 'secularized' due to the rise of Islamic intellectuals possessing no formal institutional

¹² Christian W. Troll, *Sayyid Ahmad Khan: A Reinterpretation of Muslim Theology* (New Delhi: Vikas, 1978), p. xix.

¹³ Yavuz, Islamic Political Identity, p. 5.

training in Islam.¹⁴ These intellectuals lay claim to religious authority despite having no traditionally recognizable credentials, such as education by a Sufi master, or training in a madrasa. Furthermore, the sources used by these new intellectuals are eclectic and not uniformly 'Islamic.'¹⁵ New Islamic intellectuals make use of religious and secular sources of knowledge and do not rely solely on religious vocabulary or Qur'anic references to prove their points. Religious material is presented instead through metaphor or analogy, linking Qur'anic teachings to demonstrable sources of information, such as scientific discoveries, current events, modern historical examples, philosophical concepts, and literature. As a result, argues Yavuz, "The processes of producing and disseminating knowledge, once firmly based in tradition, have been exhaustively secularized.'¹⁶ The transformation in the methodology, vocabulary, and conceptual framework of Islamic intellectual discourse has also, according to Yavuz, had an influence on the content and, more importantly, the meaning of the message itself.

Further, Yavuz argues that modern Islamic intellectuals and organisations – in grappling with modernity, reconciling traditional values with contemporary needs, and situating Islam in a particular political, social, and cultural context – necessarily abandon elements of Islam's spiritual foundations. Modern Islamic intellectuals deemphasize the divine, Qur'anic proofs of the Islamic message and God's existence. Instead, they rely on instances when the teachings of the Qur'an or the Sunna coincide with rational thought, natural phenomena, or discoveries of science.¹⁷ Natural science and the Qur'an, reason and revelation, are thereby synthesized in order to soothe the salvational anxieties of modern Muslims, a reconciliation more faithful to the worldly interests of man than the divine truths of the Qur'an. As Yavuz notes: "This is a clear indication of the rationalization of

¹⁴ Ibid., p. 107.

¹⁵ Ibid., p. 106.

¹⁶ Ibid., p. 105.

¹⁷ Ibid., p. 119.

religious dogma. In other words, religious is explained through a positivist epistemology and rationality."¹⁸

The resultant shift in epistemology from one largely based on the divine truth of revelation to one founded on reason and demonstrable proof is not without precedent in Islamic history – the Islamic Neo-Platonist¹⁹ philosophers of the medieval period constitute one such trend. But for the first time, the intellectual transformation has coincided with structural changes in how knowledge is produced and validated in society, and by the rise of rival systems of knowledge, like secular values and scientific materialism, that strike at the heart of Islam's legitimacy as a discourse.²⁰ The pluralisation of systems of knowledge, the uniquely modern assault on Islam as a source of truth, and the undermining of official centres of religious authority has produced a dynamic class of Islamic intellectuals committed to rationalist, modernist interpretations of the faith that respond to, and are shaped by, the contingencies of their audience and contemporary circumstances. Attempts to reconcile Islam and modernity in twentieth century Turkey have not, argues Yavuz, "produced a simple, stable, and coherent Islamic discourse."²¹ On the contrary, they have "led to further destabilization and intellectual hybridism."²²

While Yavuz may be right to level such charges of 'secularization' at the activities of Islamic movements, such as Islamist television and radio stations driven more by

¹⁸ Ibid., p. 269.

¹⁹ Neo-Platonism was the dominant school of Greek-influenced Islamic *falsafa*. Islamic philosophers used Neo-Platonic Aristotelian assumptions and principles to make rational speculations about cosmology and the nature of being. The Islamic Neo-Platonists argued that God, or the 'Prime Mover,' has a Necessary Existence and that being (*al-wujūd*) is derived and maintained by this source. Major Islamic Neo-Platonists include Ibn Sīnā (980 – 1037), Ibn Rushd (1126-1198), and al-Fārābī (870-950). Neo-Platonism was most influential from the 9th-12th centuries.

²⁰ Yavuz, Islamic Political Identity, pp. 104-105.

²¹ Ibid., p. 270.

²² Ibid.

ratings and advertising revenues than the dissemination of Islamic doctrine,²³ it is misleading to suggest that individual theologians like Fethullah Gülen have unwittingly stripped their religious thought of spiritual meaning as a result of deterministic structural forces. While some of the activities of Gülen's followers are secular – the network of modern, secular schools; the television and radio stations that downplay their religious motivations and broadcast an inclusive, universalistic viewpoint devoid of overt Islamic messages²⁴ – the movement is founded on his theology and religious commentaries. Yavuz ignores the important disjunction between theory and praxis within the Gülen community.

As will be made clear in chapter 4, Gülen's religious outlook and theology is deeply faithful to the foundational sources of Islam – the Qur'an and Sunna. While his theology is embellished with scientific facts and historical examples, he is careful never to use reason or natural science as the standard to judge revelation. Instead, rational proofs and scientific evidence are marshalled to convince modern readers of the continued validity of Islam in the light of modernity. Gülen's religious worldview is internally consistent and does not utilize scientific facts or historical examples as crutches. It derives its authenticity from the proclaimed divine authority and absolute truth of the Qur'an. The encounter with modernity does not compel Gülen to compromise the pillars of faith. Yavuz's thesis seems more appropriately levelled at the destabilisation of the integrity of the religious message at the associational level of the Gülen movement, not the theological level.

²³ For more on the secularization of Islamic messages in modern media, see Dale Eickelman and Jon Anderson, 'Redefining Muslim Publics,' in: Dale Eickelman and Jon Anderson, eds., *New Media in the Muslim World: The Emerging Public Sphere* (Bloomington, IN: Indiana University Press), p. 12.

²⁴ Yavuz, Islamic Political Identity, p. 191.

It is important to understand why Gülen's Islamic discourse transforms into a rationalized, disenchanted,²⁵ secularized ethic of worldly activity amongst his followers, but this question is beyond the scope of the thesis. Instead, the intellectual influences, religious context, and historical factors influencing Gülen's view of the relationship between science and Islam will be scrutinized. The extent to which these forces determine his particular theological viewpoint, and the degree to which he diverges from them, will be examined.

We have established the fallacy of the 'internal secularization' thesis when applied to Gülen's religious discourse. That is, Gülen's religious thought is not a mere 'reaction' or 'epiphenomenon' of structural or contextual forces, or a 'religious superstructure' enveloping the secular activities of his followers in the modern world. Gülen's thought is deliberately religious and sincerely based in Islamic tradition. Its features are derived from this tradition, and not determined by its immediate social-structural environment. Having established this, it is necessary to determine the extent of Gülen's commitment to Islamic tradition and to those schools of law, theology, and Sufi doctrine he simultaneously relies upon, reinterprets, and deviates from in his intellectual career.

²⁵ In the context of this thesis, disenchantment is used in the sociological sense introduced by Max Weber, whereby historical processes of modernization and secularization lead to rationalized societies free from the deterministic influence of religion, superstition, and non-rational modes of thinking. See *The Protestant Ethic and the Spirit of Capitalism* (Los Angeles: Roxbury, 2002).

Chapter One MEDIEVAL SUFI AND ORTHODOX INFLUENCES

In this chapter, we explore the religious context in which Fethullah Gülen became socialized. The broad features of the theological trends and mystical traditions that Gülen appropriates in his philosophy of science are explicated. In particular, we look at how medieval scholars contributed to the debate over 'wisdom' and 'philosophy,' reason and revelation, and the natural and religious sciences. Assessing the foundations of his religious outlook is necessary in understanding Gülen's intellectual orientation. His early education, in the Naqshbandī Sufi milieu of his hometown near Erzurum, and later at the state preacher (Imam-Hatip) school, produced in him a preference for a particular theological outlook and tradition of Islamic practice and learning. Understanding his unique introduction to Islamic tradition aids in our analysis of his intellectual perspective.

The result of Gülen's eclectic educational background is his fluency in the vocabularies and idioms of many different 'Islams': the rationalist, orthodox Islam of the Imam-Hatip schools; the natural theology forged from his education in the positive and religious sciences; the emotionalist appeal of Anatolian mystics such as Nursi and Jalāl al-Dīn al-Rūmī (1207-1273),¹ and the austere spiritual path of the Naqshbandīs.² Together, the Naqshbandī commitment to *sharī'a*, the Islamic modernism and natural theology of Said Nursi, and the nationalistic Islam of the eastern Anatolian frontier³ each plays a

¹ Gülen speaks of al-Rūmī's influence in *Statue of Our Souls*, p. 28.

² Gülen cites Bahā' al-Dīn Naqshband (1318-1389), the eponymous founder of the Naqshbandī Sufi order, as one of the "heroes" of Islamic thought. Gülen, *Statue of Our Souls*, p. 26.

³ For a good summary of eastern Anatolia's religious nationalism, see Yasin Aktay, 'Diaspora and Stability: Constitutive Elements in a Body of Knowledge,' in: Hakan Yavuz and John Esposito, eds., *Turkish Islam and the Secular State: The Gülen Movement* (Syracuse: Syracuse University Press, 2003), pp. 140-142.

formative role in the construction of Gülen's thought. Gülen is able to combine elements of each in his writings.

SHARI'A, NOT SCIENCE – AHMAD SIRHINDI AND THE CRITIQUE OF REASON

Gülen's initial religious education took place in the Anatolian east. Here, the Naqshbandī Sufi order had for centuries established a loose network that adapted to the unique religious environment of the Anatolian frontier. Naqshbandī missionaries from India were carriers of the teachings of Ahmad Sirhindī, recognized as a *mujaddid* of Islam. Sirhindī was born in 1564 in the Punjab region of India.⁴ His doctrine of *sharī'a*-inspired Sufism lent the Naqshbandīyya an austere, orthopraxic reputation.

It is instructive to examine Sirhindī's attitude towards the question of science and its place within Islamic tradition given his explicit influence on Gülen.⁵ Sirhindī militates against the natural sciences of the Islamic philosophers, deeming them superfluous to religious responsibilities.⁶ Man's intellectual resources should be devoted to the study of *sharī'a* and the Qur'an, and the natural sciences should only be pursued if they can bolster the religious sciences.⁷ Human reason is fundamentally unable to comprehend the divine nature of the universe without the aid of revelation.

Sirhindī also expresses disapproval over the use of reason to prove the articles of faith and interpret revelation. Sirhindī opposes the demonstrative reasoning method advanced by the Ash'arī theological school, on the grounds that reason must never be used to judge the claims of the Qur'an, due to its impotence compared to the light of

⁴ Muhammad Abdul Haq Ansari, *Sufism and Shariah: A Study of Shaykh Ahmad Sirhindī* (Leicester: Islamic Foundation, 1986), p. 11.

⁵ Gülen names Sirhindī, or "Imam Rabbani," as one of the "great men" of the past who will serve as a "guide" for the modern renewal of Islam. Gülen, *Statue of Our Souls*, p. 29.
⁶ Yohanan Friedmann, *Shaykh Ahmad Sirhindī: An Outline of His Thought and a Study of His Image in the Eyes of Posterity* (London: McGill-Queen's University Press, 1971), p. 54.
⁷ N : 1

⁷ Ibid.

revelation.⁸ By rejecting the notion that reason can arbitrate matters of revelation, Sirhindī provided Nursi and Gülen with a powerful argument against the need to subject the Qur'an to the claims of natural philosophy and scientific materialism.

Sirhindī's metaphysical thought proved more influential than his stark demarcation of the boundaries between reason and revelation. As will be shown, Sirhindī's moderation of the excesses of Sufi cosmological theories would inform the metaphysics underpinning Gülen's 'Islamised' science. Like many theologians before and since, Sirhindī attempted to reconcile the thorny metaphysical question of the concomitance of Unity and Multiplicity⁹ in the universe. To solve this paradox, followers of the influential thirteenth century mystic Ibn al-'Arabī popularized the creed 'Everything is Him,' asserting that the multiplicity is in fact an ephemera, a fantastical representation of Divine Unity.¹⁰ According to Sirhindī's understanding of Ibn al-'Arabī's doctrine, Creation is imaginary and illusory (*mawhūm*) because the essences of all created things exist as archetypes in God's knowledge. All that 'exists' is in fact unreal; their essences are inscrutable, subsisting in God's Essence and not independent of it.¹¹

Sirhindī agrees with Ibn al-'Arabī about the imaginary essence of Creation, but attempts to invest it with a degree of corporeality.¹² Because God's knowledge affords Creation tangibility, stability, and artistry, and because His many attributes are reflected in the contingent world, it can be construed as 'apparently' real. Sirhindī is adamant about lending 'realness' to Creation in order to salvage the significance of *sharī'a* obligations.¹³

⁸ Ibid., p. 56.

⁹ This cosmological and theological quandary arises from the attempt to reconcile the existence of diversity of forms and bodies in the world (Multiplicity) with the belief that it was all brought into being by one Creator (Unity).

¹⁰ J.G.J. ter Haar, *Follower and Heir of the Prophet: Shaykh Ahmad Sirhindī as Mystic* (Leiden: Het Oosters Institut, 1997), p. 130.

¹¹ Friedmann, *Ahmad Sirhindī*, p. 63.

¹² Ibid., p. 64.

¹³ Ibid., p. 67.

If the world were imaginary, Sirhindī reasons, then it would be logical to forgo doctrinal commitments and adopt a solipsistic attitude towards life.¹⁴

Sirhindī settles on the more orthodox doctrine of 'Everything is by Him,' which reconciles Unity and Multiplicity by attributing to God the origin of Creation and all that subsists within it, while at the same time recognizing the existence of things independent from His Essence.¹⁵ Sirhindī acknowledges that God's Essence is the source and eternal provider of Creation, but insists the relationship between His Essence and the essences of the Multiplicity is neither direct nor overwhelming. Instead, God creates, sustains, and constantly regenerates Creation. His Essence is not identical to His names and attributes and their manifestation in Creation, but is supportive of them.

GHAZĀLĪ'S DEFENCE OF REVELATION USING REASON

Abū Hāmid Muhammad Ibn Muhammad al-Tūsī al-Ghazālī was a towering medieval religious figure whose influence stretches across the Middle Ages and into the modern day. He was born in the city of Tus, Persia in 1058 and died in 1111.¹⁶ His treatments of Islamic philosophy, the legacy of rationalism in *kalām*,¹⁷ and his attempted reconciliation of orthodoxy and mysticism have influenced Gülen and his most influential predecessors.¹⁸

Ghazālī took on the Neo-Platonists for according a maximal role to reason and logic in uncovering the laws of human nature and the physical world, to the detriment of the Qur'an. He attacked the methodology of the philosophers by exposing the fallibility of sensory experience, which cast doubt on all subsequent claims of reason. Unlike Sirhindī after him, Ghazālī did not contest the effectiveness or usefulness of logical reasoning in

¹⁴ ter Haar, *Heir of the Prophet*, p. 130.

¹⁵ Ibid., p. 131.

¹⁶ D.B. MacDonald, 'al-Ghazālī,' in: *Encyclopaedia of Islam*, Vol. 2 (Leiden: Brill, 1960), p. 146.

¹⁷ The tradition of Islamic theological commentary.

¹⁸ Gülen, Statue of Our Souls, p. 29.

comprehending the truths of revelation. He used the rationalist arguments and methods of the philosophers to expose the invalidity of their teachings and the veracity of Islamic revelation.¹⁹

He targets two philosophical propositions for being particularly egregious affronts to Islamic principles: the eternity of the world, and God's ignorance of particulars.²⁰ The eternity of the world doctrine is derived from the emanationist view, whereby God is the original point in an eternally progressive chain of events that encompasses the creation of all things. God relies on intermediaries to carry out the creation of things not directly emanating from Him. This doctrine is irreconcilable with the Qur'anic conception of creation *ex nihilo*, and the idea of God as All-Encompassing Creator.²¹ The philosophers contend that God's existence is 'necessary' because of the need of a 'First Cause' in the chain of creation. But if the relationship between God and the Creation is a 'necessary' one, then He is robbed of agency and power. A genuine 'Creator' must be free and His link with Creation does not need to exist in a logical relationship, or one that can be induced by pure reason.

The philosopher's proposition that God is ignorant of particulars receives another orthodox rebuttal from Ghazālī. The philosophers limit God's knowledge to the first entity He creates, the 'first intellect'. He only possesses knowledge of that entity from which all else is indirectly produced – thus he has knowledge of the 'universal', the archetypes from which all discrete, unique entities are formed.²² For example, He has knowledge of man as a category of existent being, but not of each individual human.

¹⁹ Majid Fakhry, *A History of Islamic Philosophy* (New York: Columbia University, 1970), p. 249.

²⁰ Ibid., p. 250.

²¹ Ibid., p. 250.

²² Ibid., p. 254.

In defending the doctrine of God's knowledge of particulars, Ghazālī cites Ash'arī theology, which contends God has knowledge of the universal (archetypes) and the particulars (discrete, created forms) of Creation because He willed the world into being. The act of willing implies intimate knowledge of all that emanates from His Will.²³ Later, this becomes a uniquely important metaphysical matter for Gülen, because God's knowledge of, and subsequent power over all things, represents a rival ontology to the materialists' model of the universe, whereby all things possess a discrete, self-governing being that interacts randomly with other things to produce accidents and phenomena. The Qur'an, argues Ghazālī and most orthodox theologians, is quite clear on the matter:

Those who disbelieve say: The Hour will never come unto us. Say: Nay, by my Lord, but it is coming unto you surely. (He is) the Knower of the Unseen. Not an atom's weight, or less than that or greater, escapeth Him in the heavens or in the earth but is in a clear Record.²⁴

Ibn Sīnā²⁵ and other Neo-Platonist Islamic philosophers counter that God, existing as an immaterial entity outside the realm of Creation, does not possess the traits necessary to apprehend 'particulars' in time and space.²⁶ He cannot observe things and events requiring sensory perception, given His absolute transcendence of the sensory realm. Ghazālī responds by denying that the spatio-temporal realm poses any barrier to God's knowledge of particulars, given His absolute power.²⁷

Ghazālī also attempts to refute the doctrine of natural causation, a central tenet of Islamic philosophy and modern-day scientific rationalism. Natural causation – that an effect is produced by a necessary cause, or that an effect necessarily implies the existence of a cause – is the principle upon which the emanationist view is founded. According to

²³ Ibid.

²⁴ Qur'an 34:3.

²⁵ Ibn Sīnā (980 – 1037) was an archetypal expounder of Islamic Neo-Platonism and Aristotelianism born near Bukhara.

²⁶ Fakhry, *Islamic Philosophy*, p. 254.

²⁷ Ibid., p. 255.

the Islamic philosophers, intermediate entities like the 'first intelligence' possess the power to create effects.²⁸

Ghazālī counters that the relationship between cause and effect is not necessary.²⁹ What appears to be a consecutive correlation between one cause and one effect is in fact the result of God's Will and Power. For example, when cotton comes into contact with fire, it is not fire as a discrete entity that 'causes' the cotton to burn. Rather, God, in that instance, produces the burning in cotton. God does so every time these two events coincide. Agency lies not with fire, which is impotent, lifeless, and irrational, but with God. Fire does not possess the faculties of 'creation,' 'will,' or 'power,' attributes necessary to produce effects in contingent bodies. The philosophers' insistence that cause and effect exist in a causal relationship is incoherent; the relationship between cause and effect is in fact temporal or circumstantial, not determinative.

It is not possible to *prove* that what follows from one event is the *cause* of subsequent events. Correlation, according to Ghazālī, does not necessarily imply causation.³⁰ God does not act through the medium of causal necessity, which would limit His agency and will. Ghazālī thereby reserves God's power to undo the relationship between cause and effect, and produce effects without their expected causes. He writes:

The connection between cause and effect is due to the prior decree of God, who creates them side by side, not to its being necessary in itself, incapable of separation. On the contrary, it is within [divine] power to create satiety without eating, to create death without decapitation, to continue life after decapitation, and so on to all connected things.³¹

²⁸ Ibid., p. 321.

²⁹ Ibid., p. 257.

³⁰ Ibid., p. 257.

³¹ Al-Ghazālī, *The Incoherence of the Philosophers*, Michael Marmura, trans. (Provo, Utah: BYU Press, 1997), p. 170.

God's will is inscrutable; reliance on causation as an explanatory proof of the mechanical nature of the universe is illegitimate.³² The fact that certain causes constantly produce certain effects does not prove that this relationship will exist into the future.³³ Theologians have repeated the main structure of Ghazālī's logical, rationalist refutation of causation into the modern day. Both Gülen and Nursi, nearly a millennium after its initial explication, would resuscitate the pattern of his argument.

Having refuted the methodological foundation of secular knowledge – sensory experience, human reason, and causation – Ghazālī establishes the superiority of doctrinal truths. The assertions and conclusions of philosophy and the natural sciences cannot approach the truths of revelation.³⁴ The Islamic philosophers are unable to prove the central tenets of Islam, and unable to independently explain Creation and the nature of God. Only the illumination of revelation yields certainty and true knowledge.³⁵

Importantly, however, Ghazālī did not reject the methodological tools of the philosophers, and instead advocated their use to defend religion against the arguments of the irreligious. Ghazālī championed the deployment of reason, logic, and demonstrative proofs to strengthen understanding of the Qur'an. Ghazālī "strove to render this logic relevant to Islamic religious scholars by informing it with examples of legal and theological reasoning."³⁶ Unlike Sirhindī, Ghazālī did not summarily reject scientific

³² Michael Marmura, 'Ghazālī's Attitude to the Secular Science and Logic,' in: George Hourani, ed., *Essays on Islamic Philosophy and Science* (Albany: SUNY Press, 1975), p. 100.

³³ Ibid., p. 107.

³⁴ Ibid., p. 101.

³⁵ Bilal Kuşpinar, 'The Concept of Man: Mevlana Jalal al-Din and Said Nursi,' in: Ibrahim Abu-Rabi, ed., *Islam at the Crossroads: On the Life and Thought of Bediüzzaman Said Nursi* (Albany: SUNY Press, 2003), p. 161.

³⁶ Marmura, 'Ghazālī's Attitude to the Secular Science and Logic,' p. 102.

inquiry as a useless activity, but insisted that its continued practice was useful, if supererogatory to the pursuit of knowledge of God.³⁷

IBN AL- 'ARABĪ'S METAPHYSICAL UNIVERSE

As we have witnessed, the confrontation between scientific rationality and Islamic tradition is not of recent mintage, but instead a centuries-long conflict. In medieval Andalusia, Muhyī 'l-Dīn Ibn al-'Arabī (1165-1240) attempted a systematic construction of Sufi philosophy and metaphysics by internalizing the vocabulary and conceptual framework of the Neo-Platonists while retaining the essential principles of Islamic mysticism.³⁸ Ibn al-'Arabī's contentions were rooted in Islamic tradition, but embellished with the experiences of his mystical intuition. In the process, Ibn al-'Arabī repudiated the cosmological worldview of the Islamic philosophers, and overturned the idea that the human sciences were capable of approaching the truths of the universe and knowledge of God.

Ibn al-'Arabī was able to reconcile the theological dilemma of the Unity and Multiplicity in a manner that summarily refutes the philosophers' emanation doctrine. Ibn al-'Arabī rejects the notion that God has a delimited role to play in Creation. God is not only the Creator of the universe, but the world is a constant shadow of His attributes.³⁹ This corresponds to God's two separate but equal natures: His essential reality (*haqq*) – the site of His knowledge and the universal archetypes – and the reflection of this essence in the contingent world (*khalq*). The reality of the world is thus imaginary; it possesses no materiality or necessary existence. Contingent reality exists by decree of God, an act of will that can be withdrawn at any moment.

³⁷ Fethullah Gülen, *Advocate of Dialogue: Fethullah Gülen*, Ali Ünal, trans. (Fairfax, Va.: The Fountain, 2000), p. 324.

³⁸ A. Ateş, 'Ibn al-'Arabī,' in: *Encyclopaedia of Islam*, Vol. 3 (Leiden: Brill, 1960), p. 709.

³⁹ Fakhry, *Islamic Philosophy*, pp. 281-282.

Creation originally existed in God's knowledge, as a series of 'fixed entities' (*a'yān thābita*).⁴⁰ God then willed these mental archetypes into being through divine command (*al-amr*) so that He could reveal Himself, and so created entities could behold Him and His Creation.⁴¹ The created universe exists as a shadow of God's immaterial reality, a mirror to the divine attributes. Everything in the universe indicates its Maker. The 'indicative' nature of the universe propounded by Ibn al-'Arabī is a concept that would underwrite the modern Islamic metaphysics of Nursi and Gülen.⁴²

While men cannot apprehend the motives behind God's wilful act of creation, it can be deduced that He brought the world into being out of His All-Encompassing Love – love for Himself and, by extension, Creation.⁴³ Love as the primary justification for the creation of the universe is a concept resuscitated later by Gülen.⁴⁴

The concept of man in Ibn al-'Arabī's cosmology and metaphysics is central. Man is the highest manifestation of the divine, the being that most completely reflects the divine attributes. He is a microcosm of the universe, which itself is a manifestation of the shadow of God.⁴⁵ There is unity, not irreconcilable division, between the natures of the divine and humanity.⁴⁶ The humanistic vision of the universe plays an important role in the development of Nursi's and Gülen's metaphysical thought.

This humanistic construct is essential to the construction of the Sufi cosmological model, which attempts to chart a mystico-intellectual path from the believer to God. It is only through the Sufi path that true knowledge can be attained. Sufi intuition and experientialism is superior to reason as tools for deciphering the hidden reality of the

⁴⁰ Ibid., p. 282.

⁴¹ Ibid.

⁴² Şerif Mardin, *Religion and Social Change in Modern Turkey: The Case of Bediüzzaman Said Nursi* (Albany: SUNY Press, 1989), p. 209.

⁴³ Fakhry, *Islamic Philosophy*, p. 282.

⁴⁴ Gülen speaks of the unique influence of Ibn al-'Arabī in *Statue of Our Souls*, p. 29.

⁴⁵ Ibid., p. 283.

⁴⁶ Ibid., p. 282.

universe.⁴⁷ Importantly, however, Ibn al-'Arabī does not completely reject reason, and maintains its importance in comprehending scripture and external reality.

Two manifestations of the same reality, the seeming gap between humanity and God can be overcome through knowledge of the universe and its 'inward', or esoteric and hidden ($b\bar{a}tin$) aspects.⁴⁸ Man must recognize the reality of the physical world as an external artifice ($z\bar{a}hir$) and transcend it. Transcendence of what is merely apparent is necessary to comprehend the underlying divine machinations governing all things. Overcoming corporeality provides the 'universality' necessary to comprehend the universe in its physical and metaphysical dimensions. We will return to the notion of 'universality' as the concept underpinning an Islamic understanding of the physical world in our analysis of Gülen's philosophy of science in chapter 4.

Ibn al-'Arabī's doctrine of *wahdat al-wujūd* (Unity of Being)⁴⁹ is important to analyze for its influence on the thought of Nursi and Gülen. Ibn al-'Arabī's depiction of God's relationship with the cosmos is significant not merely for its contribution to the debate between natural science and Islam, but because its conceptual framework and technical vocabulary came to dominate the works of later religious intellectuals.⁵⁰ This linguistic and cognitive influence played a formative role in how ideas about God, man, and Creation were articulated in the minds and works of his disciples. By inventing the terms of the debate, and by creating a systematic conceptual universe that required either approval or rebuttal from centuries of mystics and theologians, Ibn al-'Arabī's discursive

⁴⁷ William Chittick, 'Ibn Arabi,' in: Seyyed Hossain Nasr and Oliver Leaman, eds., *History of Islamic Philosophy Part I* (London: Routledge, 1996), p. 503.
 ⁴⁸ Ibid., p. 502.

⁴⁹ It is important to note at the outset that Ibn al-'Arabī never used the term *wahdat al-wujūd* in his writings. His disciples coined it to summarize the "dialectic between *tanzīh* and *tashbīh*." Chittick, 'Ibn Arabi,' p. 504.

⁵⁰ Mardin, *Religion and Social Change*, p. 209.

influence on how religious intellectuals navigated the controversy over the different worldviews presented by science and Islam is considerable.

The Unity of Being doctrine addresses the notion that God possesses two basic natures. Ibn al-'Arabī adds a further nuance by refining, or redefining, the concepts of *haqq* (essential reality) and *khalq* (manifested reality).⁵¹ Attendant to the former concept is the idea that He is '*incomparable*' and absolutely transcendent in relation to Creation (*tanzīh*).⁵² *Khalq*, meanwhile, is restated as His possessing '*similarity*' with Creation (*tashbīh*).⁵³ Orthodox theologians have long upheld the former doctrine, and neglected or suppressed the latter doctrine. Ibn al-'Arabī, on the other hand, synthesized both principles as expressions of God's divine nature. God is neither *tashbīh* nor *tanzīh*; he is a balance of the two.

Ibn al-'Arabī regards *tashbīh* as fundamental to existence because God sustains, supports, and provides for all existent things in the world.⁵⁴ Only through *tashbīh* can Creation be understood – an understanding that God is immanent in Creation and crucial to the birth, sustenance, corruption, and regeneration of all things. Ascribing pure transcendence to God without accounting for His similarity inevitably leads to philosophical excesses, like the concepts of secondary causation, natural laws, and attributing agency to intermediate entities.

The doctrine of *wahdat al-wujūd* does not repudiate the existence of contingent reality, or reduce Creation to a one-dimensional reflection of God's Essence. Instead, God's dual natures exist in dialectical relationship. Identifying wujūd – 'that which is found', or being and Creation – with God is the concept of *tashbīh*. But this understanding is constantly challenged by God's concomitant distance from Creation, *tanzīh*. Ibn al-

⁵¹ Fakhry, *Islamic Philosophy*, p. 282.

⁵² Chittick, 'Ibn Arabi,' p. 502.

⁵³ Ibid.

⁵⁴ Ibid.

'Arabī's doctrine of Unity of Being also reconciles the simultaneous existence of Unity and Multiplicity in *wujūd*. Ibn al-'Arabī conceives of a 'self-conscious' *wujūd* that is at once a unified reality and capable of multiple manifestations and entities. The archetypes of 'things' (*ashyā*') are located in God's Knowledge. Because God is self-aware and knowing, He comes to know all things in *wujūd*. God becomes the One/Many in Ibn al-'Arabī's conception (*al-Wāhid al-Kathīr*) – possessing both Oneness in Being, and multiplicity in Knowledge.

This conception of God and Creation has important implications for the Islamic view of natural science, and the place of scientific observation in Islamic knowledge. Ibn al-'Arabī emphasizes the importance of reason in ascertaining $wuj\bar{u}d$, which contains the divine attributes and mirrors the archetypes fixed in God's knowledge. Coming to know the universe is thereby akin to observing and knowing God.⁵⁵ Viewing the universe as a material manifestation of an immaterial entity – God reconstructed as contingent being – allows for fallible, temporal humans to apprehend the inscrutable essence and being of God.

Viewing God as immanent within Creation, and not remote and distant, reemphasizes God's role in the universe. Whereas the philosophical view of the transcendent God led to dangerous rhetorical excesses concerning the existence of intermediate entities, Ibn al-'Arabī's concept of the world as being a direct manifestation of God's attributes reaffirms the universe's nearness and similarity to God. The things of this world are in constant communication with God's traits of creation, knowledge, power, mercy, and will. It is by acknowledging the indicative nature of the created world that man can approach a more profound understanding of the universe's significance.

⁵⁵ Fakhry, *Islamic Philosophy*, p. 282.

Chapter Two Science and Materialism in the Turkish Context

Before we can approach a critical analysis of Fethullah Gülen's theological viewpoint on scientific materialism, it is necessary to first reconstruct what he would have understood and identified as science. We must be wary of essentialising 'science' as a monolithic discourse possessing the same values and meanings throughout the centuries. The intellectual foundations of science have transformed through time. The object of scientific inquiry has expanded with the rise in technological innovations and the eroding influence of the religious sciences. Popular conceptions of science have also changed. Gülen's understanding of what science is must be articulated before describing his attempt to 'Islamise' it.

In order to understand Gülen's comprehension of science, we must rediscover the intellectual atmosphere of the Ottoman Empire in the late nineteenth and early twentieth century. It was in this milieu that Nursi, Gülen's most influential progenitor, was introduced to 'science' as a category of knowledge. Recalling Nursi's understanding means reconstructing science as a discourse, a particular set of assumptions, values, and conclusions about the world. Science will be depicted in the way Nursi came to view it, as an 'interpretation' of the world that rivalled the Islamic viewpoint.

Scientific materialism rests on objective inquiry, observation, experimentation, and deduction, and is geared towards the production of 'empirical' knowledge. The scientific ideal is inquiry without presuppositions, observation without biases, and conclusions based solely on the results of one's research and use of deductive logic. Only what is observable with sensory faculties and scientific instruments is considered valid data in reaching empirical conclusions. The supernatural, the immaterial, and the extrasensory are neither

assumed, nor considered, when rendering scientific judgments. The focus is on the observable, material world.¹

There is nothing necessarily antagonistic about the scientific method vis-à-vis religion. It views revelation with agnosticism and indifference rather than hostility. Philosophical and theological issues like the 'meaning' and 'metaphysical origins' of Creation are deemed outside the scope of scientific inquiry. Questions about the ultimate significance of different features of the phenomenal world are not observable, or material, categories of knowledge, and so no empirical conclusions can be reached about them.

But this general description does not adequately recreate the perception of materialist science held either by ideological materialists or their religious opponents in the late Ottoman period. The particular strand of materialist ideology that entered the Ottoman realm was resolutely hostile to both the theological foundations of religion, and its role in society.

The 'ideology' of scientific rationalism and materialism began to creep into the Empire in the late nineteenth century.² The particular interpretation of scientific materialism most current in the Ottoman realm during this period came from German 'popular materialists' like Ludwig Büchner.³ Popular materialists upheld scientism and materialist ideologies as the sole claimants to truth and knowledge, and attacked religion as 'backward' and 'irrational.' The main thrust of popular materialism was its emphasis on social reconstruction and expanding science's object of inquiry and knowledge to society and the individual. Society and men were to become the new sites of rational inquiry, in

¹ Orhan Okay, 'An Exploration into Intellectual Life During the Period of Westernization,' in: Ekmeleddin Ihsanoğlu, ed., *History of the Ottoman State, Society, and Civilization*, Vol. 2 (Istanbul: Yıldız, 2002), p. 148.

² M. Şukru Hanioğlu, 'Blueprints for a Future Society: Late Ottoman Materialists on Science, Religion, and Art,' in: Elisabeth Özdalga, ed., *Late Ottoman Society: The Intellectual Legacy* (Abingdon: RoutledgeCurzon, 2005), p. 28.

³ Okay, 'Intellectual Life,' p. 150.

advance of a golden age of progress triumphing over the irrational beliefs of the age of religion.

The tenets of this new ideology spread rapidly in the late Ottoman era, providing an intellectual foundation for the ambitious Tanzimat⁴ modernisation programme. As M. Şükrü Hanioğlu argues, "The salient characteristic of late Ottoman materialism is the belief in science as the exclusive foundation of a new Ottoman society."⁵ Doctrinaire materialism was seen as the ideology underpinning the material wealth, cultural advancement, and military superiority of the West.⁶ The secular Ottoman elite decided that only a wholesale adoption of materialism as the normative and ideological charter of the empire could salvage the dying Ottoman state.

Ottoman materialists embraced scientific explanations for natural phenomena and man's relationship with nature.⁷ The ulema and other religious intellectuals began to contest the claims of the materialists beginning in the late 1880s.⁸ As Hanioğlu writes, "Shortly after the emergence of the Ottoman press, the conflict between religion and science became one of the most frequently discussed subjects in print."⁹ Religious critiques of materialism were often as vulgar and unsophisticated as the materialists' broadsides against Islam. An apologist literature emerged amongst religious intellectuals, defending the spiritual foundation of Islam and characterizing reason as an inadequate tool in deciphering the phenomenal world. Recalling the critiques levelled by Sirhindī, Ghazālī, and Ibn al-'Arabī against the rationalist philosophies of the Islamic Neo-Platonists, late

⁴ The Tanzimat era (1839-1908) saw a number of Western-inspired reforms introduced into the Ottoman legal code in an attempt to modernize and secularize the aging empire. ⁵ Hanioğlu, 'Blueprints for a Future Society,' p. 28.

⁶ Şerif Mardin, *The Genesis of Young Ottoman Thought* (Syracuse: Syracuse University Press, 2000), p. 406.

⁷ Ibid. p. 4.

⁸ Hanioğlu, 'Blueprints for a Future Society,' p. 33.

⁹ Ibid.

Ottoman religious intellectuals resuscitated the vocabulary and conceptual grammar of their medieval predecessors in their denunciations of materialism.¹⁰

One influential Ottoman positivist was Beşir Fuad (1852-1887), who translated hundreds of popular science articles, technical manuals, textbooks, and pamphlets into Turkish.¹¹ As will be described in chapter 3, Nursi came across a series of Fuad's translated pamphlets on various scientific disciplines – including astronomy, biology, chemistry, psychology, and physics. Fuad suffused his writings with praise for the newly emergent scientific disciplines, implicitly criticising the rival Islamic explanation of the world.¹²

Abdullah Cevdet (1869-1931), another Ottoman materialist, moved beyond the vulgar refutations of Islam popular amongst his ideological allies and attempted reconciliation.¹³ While his efforts were rejected both by the religious establishment and his fellow materialists, his innovative methodology and intellectual arguments would influence Islamic modernists like Nursi and Gülen. In grounding Islamic teachings in the language and suppositions of scientific rationalism, Cevdet opportunistically used verses from the Qur'an and Hadith in his popular science pamphlets to vernacularise modern ideas in a shared Islamic idiom and vocabulary.¹⁴

Cevdet's thesis regarding the utility of Islam in a world rapidly rejecting the unverifiable truth claims of religion was naïve, if ambitious. Cevdet, as a confirmed materialist, saw no space for Islam as an organized religion in a modernising Ottoman Empire, but did reserve hope that Islam could be reconstituted as a secular philosophy

¹⁰ Ibid., p. 84.

¹¹ Ibid., p. 38.

¹² Okay, 'Intellectual Life,' p. 150.

¹³ Hanioğlu, 'Blueprints for a Future Society,' p. 43.

¹⁴ Ibid., p. 50.

founded upon its most 'enlightened' teachings.¹⁵ As Hanioğlu puts it, "He was convinced that the new philosophy must be adorned with the beneficial principles of Islam in order to invest it with the power of faith."¹⁶ Interestingly, Cevdet's strategy represents the opposite of the tactics used by modernist religious intellectuals like Nursi and Gülen, who adorn Islam with the 'beneficial principles' and discoveries of science to invest it with certainty and relevance. Just as Cevdet deployed an instrumentalist logic towards the Islamic tradition, viewing it as a reservoir of normative principles that could be mined in order to construct a vernacularised materialism more palatable to the masses, Nursi and Gülen are equally opportunistic in extracting those facts and discoveries that coincide cleanly with Qur'anic verses, using scientific language and methods to attract an audience familiar with the claims of materialism.

Cevdet was strident in asserting the superiority of the new sciences over the claims of religion. This represented a general attitude amongst Ottoman materialists, a position that would later compel Nursi and Gülen to defend the truths of the Qur'an, resituate the proofs of Islam on demonstrable, objective grounds, and resurrect sincere 'faith' (*iman*) in Islam, instead of mere intellectual curiosity or complacent attachment. Rather than abandon that pillar of Islam least defensible against the demonstrable proofs of science, Nursi and Gülen held *iman* to be indispensable for the proper functioning of the individual and society.

Cevdet saw faith as an obstacle, both to the progress of society and to the reinterpretation of Islam needed to extract those elements most conducive to the construction of a secular normative charter. He wrote "religion was the science of the masses whereas science is the religion of the elite." However, "religion, which is the science of the masses, has not progressed and risen to a level similar to that of science,"

¹⁵ Ibid.

¹⁶ Ibid.

the cure for which was "to obtain scientific value for religion, and religious power for science."¹⁷ The only way in which to infuse scientific validity and veracity into the Islamic tradition was a radical reinterpretation of Islam. Cevdet set out to do exactly this, returning to the original sources of the faith in order to find those areas most compatible with the coming modernity.¹⁸

The fruit of Cevdet's efforts was his seminal *Fünun ve Felsefe ve Felsefe Sanihalari* (Sciences and Philosophy and Philosophical Inspirations), published in Istanbul in 1912.¹⁹ Through an innovative interpretative paradigm combining the modernist teachings of Muhammad 'Abduh (1849-1905) and the mystical views of medieval Sufis, Cevdet produced an internally consistent ideology fusing Islam and materialism.²⁰ Many of Cevdet's methods anticipated the interpretative methodologies used by Nursi and Gülen, despite being oriented towards a different end.

Firstly, Cevdet's historical revisionism highlights the important and enduring role of the natural sciences in Islam.²¹ Cevdet then cites numerous hadiths and Qur'anic verses exhorting Muslims to study nature and reach a better understanding of the universe and Creator.²² Cevdet extols the sacred role accorded to human reason, rational inquiry, and critical thinking in the Islamic tradition – here mostly citing Islamic philosophers of the Neo-Platonist persuasion – and militates against the persistence of *taqlīd*, the dogmatic scholasticism of the madrasa. Through this perspective, Western scientists are rehabilitated as 'Muslims' more true to the principles of Islam than actual Muslim believers, because

¹⁷ Ibid., p. 44, quoting from: Abdullah Cevdet, 'Şehzade Mecid Efendi Hazretleri'yle Mülakat,' *İctihad*, 147 (1922), p. 3072 .

¹⁸ Hanioğlu, 'Blueprints for a Future Society,' p. 51.

¹⁹ Ibid., pp. 51-52.

²⁰ Ibid., p. 53.

²¹ Ibid.

²² Ibid., p. 54.

their use of reason and critical thought adheres to the Islamic ideal.²³ Finally, Cevdet finds Qur'anic hints and allusions to a number of modern scientific theories and facts – from reproductive science to Darwinism.²⁴ Even Newton's mechanical conception of the universe is reflected in Islamic metaphysics – God created and installed the natural laws, which are eternally fixed and govern the entities found in the universe.

The discoveries of Muslim scientists and scholars, news of which filtered into Europe throughout the medieval era, are identified as the source of Western science. By appropriating science, modern Muslims are only reclaiming an intellectual heritage that was once theirs, during a time when natural science was highly valued and legitimised through Qur'anic injunctions.²⁵ By embracing scientific materialism, they are not importing or imitating an alien ideology. As Nursi and Gülen would later submit, the Qur'an is the repository of all knowledge, truth, and science; the return of science to the lands of Islam is in no way hostile to revelation, but instead a vindication of its original teachings.²⁶

The accommodating stance taken by Cevdet towards Islam was rejected by the next generation of Ottoman and Turkish materialists.²⁷ The Young Turk revolution of 1908, driven by an ideology of unbridled positivism, faith in scientism, and wariness towards institutional and popular manifestations of Islam, signalled a hardening of the materialist trend.²⁸ Turkish materialists largely "abandoned the quest for reconciliation with Islam, and fell back upon a thoroughly secular and more purely German notion of scientific materialism."²⁹

²³ Ibid., pp. 56-57.

²⁴ Ibid., p. 59.

²⁵ Ibid., p. 57.

²⁶ Ibid., pp. 58-59.

²⁷ Okay, 'Intellectual Life,' p. 153.

²⁸ Erik Zürcher, *Turkey: A Modern History* (London: I.B. Tauris, 2004), p. 122.

²⁹ Hanioğlu, 'Blueprints for a Future Society,' p. 68.

Typical of this new trend was Baha Tevfik (1881-1916), who bristled at Cevdet's attempt to reconcile Islam and secular philosophy.³⁰ Tevfik developed a philosophical foundation for modern science that stood in sharp contrast to the basic principles of Islamic cosmology and metaphysics.³¹ He conceived of a mechanical universe composed of regularly occurring phenomena governed by natural laws. Nothing that could be described as immaterial, supernatural, or transcendent figured in Tevfik's vision. Not only were such elements absent from Tevfik's conception, they were also rendered unnecessary given his concomitant emphasis on the immortality of matter, the law of evolution, the self-regeneration and self-governance of Nature, and the inherent properties of organic and inorganic entities.³²

Matter possesses all the characteristics necessary for it to effect changes, support itself, adapt and evolve according to changing environmental pressures, and govern the complex processes underwriting natural phenomena.³³ Tevfik posited the eternal existence of 'matter,' denying the need for a First Cause to create the universe. Unlike Cevdet, then, Tevfik assailed the claims of Islam rather than seek reconciliation with them. In all, Tevfik's new philosophy of science amounted to a comprehensive rejection of the assertions of Islamic metaphysics, unleashing a new front in materialism's confrontation with Islam.

By the completion of Mustafa Kemal Atatürk's reforms, faith in scientific rationalism had replaced Islam as the ruling ideology of the state.³⁴ Indeed, one of Atatürk's famous aphorisms was, "The most truthful guide in life is science" (*Hayatda en hakiki mürşid ilimdir*). Scientism – the ideological faith in science as the harbinger of

³⁰ Ibid.

³¹ Ibid.

³² Ibid., p. 75.

³³ Ibid.

³⁴ A.L. MacFie, *Atatürk* (London: Longman, 1994), p. 137.

economic development, cultural sophistication, and 'civilisation' – was so hostile to the basic tenets of Islam that it necessitated a systematic response.

Like Ghazālī and Ibn al-'Arabī before them, Nursi and Gülen learned to internalise the language and methodology of the new rationalist philosophy in defending Islam and attacking the ascendant ideological challenge on its own terms. Their aim was to construct a new philosophy of science derived from the Qur'an, consistent with *sharī'a* and the Islamic worldview, and compatible with the requirements of modern society.

Chapter Three SAID NURSI AND THE MODERN PHILOSOPHY OF ISLAMISED SCIENCE

O ur analysis of the theological output of Said Nursi, Gülen's most immediate and influential religious predecessor, will emphasise its broad conceptual features rather than its relationship with the particular historical context it emerged from. While contextual analyses are fruitful in understanding the unique circumstances producing, and being shaped by, the thinker in question, these considerations are peripheral to this thesis. More succinctly, the particular political and economic conditions of the late Ottoman and early republican periods are not useful rubrics though which to conceive Nursi's understanding and response to positivism and materialism.

The similarities between Nursi and Gülen must instead be understood in the larger context of Turkey's intellectual engagement with secular ideologies and Islamic reformism. The constructivist paradigm used to illuminate the dialectic between secularist and Islamist thought in Turkish history will be centred on the intellectual context, not on the larger social-structural forces at play. There are determinants influencing Nursi's thought that are purely intellectual, or spiritual, and are not responses to, or products of, the particular political and cultural arrangements of the time. Rather than devalue the spiritual significance of Nursi's writings by mediating them through the prism of modernity's structural and political impact, his ideas will be reconceived at face value, taking full account of the intellectual foundations and spiritual origins of his religious message.

The chapter begins with a brief biographical sketch of Nursi's intellectual life. It then examines his interpretative paradigm, in particular the means by which he reorients the Qur'an towards the scientific view of the world. We then analyze Nursi's metaphysical
theory, the foundation of his Islamisation of science. Nursi's critique of scientific materialism is also examined, leading to the normative and methodological considerations underpinning his own view of the properly Islamic science. Throughout, we will discern the traditional and modern influences informing Nursi's thought, and highlight those areas that represent unique contributions to the long-standing theological dispute over reason and revelation.

The primary source materials consulted for this thesis include two volumes, *Mektubat* (Letters) and *Sözler* (The Words), from Said Nursi's seminal *tafsīr*,¹ the *Risale-i Nur*, written between 1925 and 1932. The English translations of these works were used, while the original Turkish materials were approached as references to identify key phrases and terminology. In addition, the large and growing English-language secondary source literature on Nursi was used extensively, in particular Şerif Mardin's excellent *Religion and Social Change in Modern Turkey: The Case of Bediüzzaman Said Nursi* and Ibrahim Abu-Rabi comprehensive edited volume *Islam at the Crossroads: On the Life and Thought of Bediüzzaman Said Nursi*. The bulk of Turkish-language secondary source material is either hagiographic or polemical, written by followers of Nursi in the former case, and his secularist detractors in the latter, and is therefore not useful for any serious, objective approach to Nursi's body of work.

BIOGRAPHICAL BACKGROUND

Said Nursi was born in 1876 in the village of Nurs, situated in the south-eastern Anatolian province of Bitlis.² Nursi's father was a *molla*,³ or village preacher.⁴ Bitlis was home to a diverse population of Kurdish tribes, Armenian Christian merchants, garrisoned

¹ A religious literary genre defined by commentary and interpretation of the Qur'anic text.

² Mardin, *Religion and Social Change*, p. 42.

³ The title *molla* is bestowed upon a Muslim scholar who has achieved a certain level of religious education, usually enough to serve in some judicial capacity.

⁴ Mardin, *Religion and Social Change*, p. 65.

Ottoman soldiers, and an array of Sufi brotherhoods.⁵ Nursi attended a madrasa starting in 1891, receiving instruction from Naqshbandī sheikhs.⁶ In just six months Nursi completed a course intended to last fifteen to twenty years. He received the title *molla* by age 14 and began attending audiences with the leading Sufi masters of the region, engaging in theological debates with sheikhs many years his elder in both age and received wisdom.⁷

While Nursi was began formal training in the Sunni orthodox tradition and the Naqshbandī Sufi path, he neither pursed a career as a member of the ulema, nor gained membership into a *tarīqa*.⁸ He strained under the volume and weight of tradition in both Sufi and orthodox learning, and came to resent the influence of *taqlīd* in Islamic education. Nursi arrived at the belief that certainty in the truth of the Qur'an could only be received outside the realm of the madrasa's scholasticism and the disciplined path of the brotherhoods.⁹ He would later insist his knowledge was inspired and not acquired, lending his project an air of divine sanction that he lacked otherwise as a mere *molla*. Nursi's inspirational wisdom was used to convince believers of his experiential knowledge of God's existence and the truth of Qur'anic principles.¹⁰

⁵ Ibid., p. 4.

⁶ Şükran Vahide, 'Toward an Intellectual Biography of Said Nursi,' in: *Islam at the Crossroads*, p. 4.

⁷ Mardin, *Religion and Social Change*, p. 71.

⁸ Ibid., p. 68; *Tarīqa* refers to Sufi 'path', brotherhood, or order. The Naqshbandīyya represent one such brotherhood. All *tarīqa* have unique chains of spiritual legitimacy, initiation rites, and mystical paths to knowledge. See J. Spencer Trimingham, *The Sufi Orders in Islam* (Oxford: Oxford University Press, 1971), p. 312. *Tarīqa*s became institutionalized in the 12th and 13th centuries. Gülen cites the institutionalization of Sufism as a precursor for the decline of Islamic mysticism: "Sufism is Islam's inner life; dervish orders are institutions established in later centuries to represent and live this life. The orders can be criticized." Gülen, *Advocate of Dialogue*, p. 358. This is one reason why he uses pre- *tarīqa* thinkers such as Ghazālī and Ibn al-'Arabī in constructing his spiritual interpretation of nature; their cosmologies are not tainted by association with the bureaucratized Sufi brotherhoods.

⁹ Mardin, *Religion and Social Change*, p. 70.

¹⁰ Imtiyaz Yusuf, 'Bediüzzaman Said Nursi's Discourse on Belief in Allah: A Study of Texts from Risale-i Nur Collection,' *The Muslim World*, 89 (1999), p. 347.

The certainty derived from Nursi's direct experience of God's unity and existence was compared with the partial, misleading 'truths' culled from scientific materialism, which relied on fallible sensory faculties and disregard for the divine. In *Sözler*, Nursi promises that his theological project "will bring to belief those without belief, strengthen the belief of those whose belief is weak, make certain the belief of those whose belief is strong but imitative, give greater breadth to the belief of those whose belief is certain."¹¹ As Imtiyaz Yusuf adds, "Said Nursi's goal was to make Muslims into convinced believers whose faith is based on certainty through knowledge rather than mere imitation."¹² From early on, Nursi charted a third way between Sufism and the dry formalism of the orthodox ulema to challenge the threat of scientific materialism.

Nursi also familiarised himself with the new ideas and sciences of his time in an effort to extract evidence that could be used to bolster the truths of Islam. From 1892 to 1893, Nursi joined the court of Omer Paşa, the governor of Bitlis.¹³ Here he consumed newspapers, pamphlets, and journals printed in Istanbul, including the popular science manuals of Beşir Fuad and Abdullah Cevdet. He memorized books summarizing the methods and findings of modern history, geography, mathematics, astronomy, and physics.¹⁴ He underwent a crisis of faith, unsure whether *kalām* and the madrasas were prepared to defend Islam against the rival claims made by scientists and secular philosophers, whose researches and conclusions could be perceived as vastly undermining the basic teachings and worldview of the Qur'an. Nursi, according to his biographer Şükran Vahide, "realized that the traditional form of Islamic theology was inadequate for

¹¹ Said Nursi, *The Words [Sözler]*, Şükran Vahide, trans. (Istanbul: Sözler Neşriyat, 1992), p. 723.

¹² Imtiyaz Yusuf, 'Bediüzzaman Said Nursi's Discourse on Belief in Allah,' pp. 342-343.

¹³ Mardin, *Religion and Social Change*, p. 75.

¹⁴ Ibid.

answering the doubts that had been raised concerning Islam and that study of modern science was also necessary."¹⁵

NURSI'S RECONSTRUCTION OF KALĀM METHODOLOGY

A new methodology of *kalām*, and a new philosophical foundation for science had to be devised in order to confront the challenge posed by the new sciences and convince secularists and unbelievers of the persisting truth and relevance of revelation.¹⁶ Declaring a 'scholarly jihad,' Nursi came to the conclusion that the new *kalām* had to be tailored to the language and understanding of modern audiences, and had to incorporate the discoveries of scientists rather than summarily dismiss them.¹⁷

Nursi developed a rationalist approach that differed from the *taqlīdi* method of *kalām*. He did not just reject the bulk of medieval commentaries, but also recognized new fields of knowledge and sources of truth to take their place in order to demonstrate the truths of Islam to modern audiences.¹⁸ Like Ghazālī before him,¹⁹ Nursi internalized the discourse of his intellectual opponents in order to bolster and revivify Islamic fundamentals, and respond more effectively to his critics.

Nursi remained faithful to Islamic fundamentals as well, deploying his mastery of the Qur'anic and mystical rhetorical styles in service of *kalām*'s modernisation and the Islamisation of contemporary scientific understandings of the world.²⁰ In Nursi's view, science and Islam were locked in a false conflict.²¹ Science under the guidance of an

¹⁵ Şükran Vahide, *The Author of the Risale-i Nur: Bediüzzaman Said Nursi* (Istanbul: Sözler Neşriyat, 1992), p. 23.

¹⁶ Mardin, *Religion and Social Change*, p. 77.

¹⁷ Ibrahim Abu-Rabi, 'Editor's Introduction,' in: Islam at the Crossroads, p. x.

¹⁸ Mardin, *Religion and Social Change*, p. 81; and Dale Eickelman, 'Qur'anic

Commentary, Public Space, and Religious Intellectuals in the Writings of Said Nursi,' in: *Islam at the Crossroads*, p. 54.

¹⁹ See above, pp. 13-14.

²⁰ Said Nursi, *Risale-i Nur Collection 2. Letters [Mektubat]: 1928-1932*, Şükran Vahide, trans. (Istanbul: Sözler Neşriyat, 1994), p. 389.

²¹ Ibid., p. 277.

Islamic view of the universe was legitimate. But the introduction of materialism into the scientific method – the presumption that only material things observable by the fallible human senses can enter into the theories and conclusions of scientists – could not be reconciled with Islam. A philosophy of science that took account of the divine nature of the universe had to be constructed to properly situate studies of the physical realm in the larger metaphysical reality.

Nursi, like Sirhindī²² and Ghazālī²³ before him, and Gülen after him, was careful not to use science as a standard to judge the veracity of the Qur'an. The sacredness and miraculous nature of the Qur'an itself is what accounts for Islam's validity, not its coherence with an external body of materialist knowledge. While materialism had a "profound effect on the shaping of Nursi's discourse", as Vahide puts it, it would remain the perennial conceptual 'Other' in Nursi's writings, the secular epistemology that could never be accommodated with Islam.²⁴

The influence of late-Ottoman and early-republican era debates on positivism and materialism on Nursi's thought was profound. Nursi was one of a number of Islamic scholars who strove to update the science of *kalām* in the face of the materialist onslaught.²⁵ While Nursi remained a confirmed opponent of materialism and the rationalisation of Islam, he also remained outside the fold of the traditional orthodox Sunni establishment.²⁶ Pursuing his religious education only so far as the honorific *molla*, Nursi was not a member of the upper ulema and remained marginal to debates taking place in the imperial capital between secular intellectuals and religious clerics. Nursi militated against

²² See above, p. 11.

²³ See above, p. 13.

²⁴ Vahide, 'Intellectual Biography,' p. 3.

²⁵ Mardin, *Religion and Social Change*, p. 80.

²⁶ Ibid.

the *taqlīdi* thinking of the orthodox ulema.²⁷ In contrast, Nursi articulated his views in a colloquial style understandable by provincial subjects; his commentaries were addressed to the ordinary believer, not the educated elite.²⁸ He borrowed from eclectic fields of knowledge, from the human sciences, to Western philosophy, to medieval Sufis.

Nursi's approach to Islamic knowledge was thoroughly modern, distinct from the classical exegetical method of focusing on the philological aspects of the text. According to Dale Eickelman's definition of this modern approach, "various bodies of knowledge are combined and recombined according to occasion by each seeker after truth, rather than transmitted intact as a complete corpus from generation to generation."²⁹ Nursi used the idioms, popular imagery, and vernacular of the provincial masses, distinguishing himself from the distant, scholastic upper ulema of imperial Istanbul.

The Old Said

It would be misleading to present Nursi's thought as a consistent and internally logical corpus of writing. Nursi went through a number of stages in his intellectual life, mostly as a result of his own private transformations, but also partially in response to major social and political events. The first stage in his intellectual development is called the "Old Said" phase by Nursi himself as well as his biographers. The Old Said was active from 1890 until the end of the First World War. His defining characteristic was a willingness to accommodate the new materialist philosophy with Islamic tradition.³⁰ There are times when the Old Said mirrors the views of Cevdet in this regard,³¹ willing to cede the realm of scientific knowledge and discovery to the materialists, while reformulating Islam as a spiritual reserve to sate the souls of believers. Nursi writes, "The Old Said…in

²⁷ Dale Eickelman, 'Qur'anic Commentary, Public Space, and Religious Intellectuals in the Writings of Said Nursi,' *The Muslim World*, 89 (1999), p. 263.

²⁸ Ibid., p. 266.

²⁹ Ibid., p. 263.

³⁰ Nursi, *Letters*, p. 516.

³¹ For Cevdet's fusion of materialism and Islam, see above, pp. 27-28.

part accepted the principles of human and European philosophy, and contested them with their own weapons; then accepted them to a degree."³² Islam was to provide sustenance to the soul and conscience, while modern science would illuminate human reason. Without a proper balance struck between the two discourses, religion would develop into fanaticism, and materialism would lead to heedlessness and uncertainty.³³

THE NEW SAID AND THE RISALE-I NUR

The "New Said" emerged following the traumatic conclusion of the First World War, which ended in defeat and dissolution for the Ottoman Empire. Nursi's native Anatolia was devastated by the fighting, suffering mass death and destruction. The results of Western science and technology so thoroughly championed and sanctified by Young Turk intellectuals and Nursi himself were laid bare for humanity to witness. Years of carnage, chaos, and aimless violence at the behest of advanced, mechanized weaponry produced a crisis of conscience within Nursi, who became preoccupied with the atrocities and wide-scale ruin seemingly wrought by modernity's faith in reason and man.

Having consulted Ahmad Sirhindī's *Maktūbāt*, he decided to take the Qur'an as his only guide to overcome his spiritual crisis.³⁴ After years of internal exile and contemplation, the New Said emerged to articulate a vision of Islam unwilling to cooperate with the values of scientism, and thoroughly able to defend itself against the claims and criticisms submitted by the materialists. Furthermore, he concluded that the methods of the rationalists were not effective in buttressing the truths of the Qur'an. Nursi explains: "In the former way, philosophy was supposed to be profound and the matters of Islam, external; it was supposed that by binding it with the branches of philosophy, Islam would be preserved and made to endure. As if the principles of philosophy had the ability

³² Nursi, Letters, p. 516.

³³ M. Sait Ozervarli, 'Said Nursi's Project of Revitalizing Contemporary Islamic Thought,' in: *Islam at the Crossroads*, p. 324.

³⁴ Mardin, *Religion and Social Change*, p. 94.

to reach them!"³⁵ The result of Old Said's "grafting Islam with the branches of philosophy [was Islam's] reduced...worth."³⁶ The New Said made a crucial distinction between the methodology and values of scientific materialism, and the findings discovered by scientists. The former could not be reconciled with Islam, whereas the latter were expressions of God's universe that did not always conflict with the Qur'an.

It was during the New Said period – especially between 1925-1933 – that Nursi penned his seminal *Risale-i Nur* collection. Unlike most *tafsīrs*, the *Risale* does not follow the chronological order of the Qur'an, but instead gives it a thematic treatment. He does not dwell on the philological features of the text, or provide a literalist interpretation.³⁷ Instead, Nursi emphasizes the plethora of meanings intrinsic to each verse, expanding the field of knowledge contained in the Qur'an to the point that it becomes a 'written universe,' within which is contained everything knowable and observable. The Qur'an, in his words, possesses "all the summaries of the sciences relating to the universe, all the indexes of Divine knowledge, all the beneficial rules for individual and human social life, and all the luminous laws of the exalted physical sciences."³⁸

Broadly defined, the goal of the *Risale* was to mobilize 'certain belief' (*iman-i tahkiki*) amongst ordinary Muslims.³⁹ Certainty in Islam's veracity was under assault by the spirit of scepticism and doubt ushered in by scientific materialism. Defences of religion could no longer be presented in a self-assured, declarative manner, but had to assume a pedantic tone supported by convincing arguments that reassured believers of the unimpeachable truths of Islam.

The Qur'an as Index of Creation

³⁵ Nursi, *Letters*, p. 516.

³⁶ Ibid.

³⁷ Eickelman, 'Qur'anic Commentary,' The Muslim World, p. 263.

³⁸ Nursi, *The Words*, p. 415.

³⁹ Ibid., p. 545.

According to Nursi's metaphysical conception of the universe, the Qur'an exists as the universe in written form, while the universe is inscribed with the letters, words, and verses of the Qur'an writ large across space and time.⁴⁰ Vahide adds:

The Qur'an instructs man on how to read the words of beings "inscribed by the pen of power" on its pages. The reading and comprehension of its words in turn expound or lead to deeper understanding of the Qur'an's verses, demonstrating the complementary relationship between them.⁴¹

Scientific observation of nature does not conflict with belief, but instead broadens and solidifies it, clarifying verses whose true meaning was previously hidden by man's ignorance of the universe. If the Qur'an contains 'everything,' as Nursi argues, then scientific discoveries can only deepen our belief in the Qur'an. As M. Sait Ozervarli writes, Nursi believed that "The passage of time is the best interpreter throughout the ages, and many other meanings of the Qur'an are being discovered by new scientific inventions in successive centuries."⁴²

Nursi adopts the novel interpretative strategy of attaching Qur'anic verses to a corresponding truth claim about the universe.⁴³ He constructs an interdependent, reflexive relationship between the Qur'an and the phenomenal world. Verses that appear invalid according to scientific facts, or inscrutable to human reason, are actually waiting to be reinterpreted in the light of a greater understanding of the universe.⁴⁴ Religious truths are thus made impregnable against science by Nursi's method of imbuing many layers of meaning into each Qur'anic verse, and creating an infinite horizon of time within which the Qur'an will receive its proper interpretation.

The *underlying* truth of the Qur'an, as it exists as a fixed entity in God's knowledge, remains unchanging. What fluctuates and leads to error and doubt is man's

⁴⁰ Nursi, *Letters*, p. 245.

⁴¹ Vahide, 'Intellectual Biography,' p. 14.

⁴² Ozervarli, 'Said Nursi's Project,' p. 327.

⁴³ Nursi, *Letters*, pp. 272-273.

⁴⁴ Ibid., p. 273.

fallible interpretation of different verses resulting from an incomplete knowledge of the universe. The materialistic method of obtaining knowledge and reaching conclusions about nature without accounting for its metaphysical foundation is the source of such confusion and uncertainty. Materialism's inherent disregard for the divine leads to the perceived incompatibility between scientific conclusions and the assertions of the Qur'an.⁴⁵ *Reconciling Science AND THE QUR'AN*

The presence of God's Names and Attributes in nature, and the inscription of the teachings of the Qur'an in the phenomenal world, lends the universe, and man's study of it, a sacred air.⁴⁶ Nursi reinterprets the Qur'an to establish an Islamic methodology for studying the universe, and to discover ways to incorporate scientific knowledge into the existing Islamic tradition. Nursi develops two interpretative strategies to reconcile scientific knowledge and the Qur'anic text: (1) revisiting the stories of the Prophets' miracles to assert that their otherworldly powers existed as a teleological example for successive generations of believers to imitate and attain; and (2) locating the ninety-nine Names and Attributes of God in nature, reconciling the position that God created the world to manifest his Essence with demonstrable Creation.

Nursi examined the Prophetic miracles to establish a Qur'anic basis for later technological and scientific endeavours.⁴⁷ By doing so, he removed doubts about Islam's compatibility with material advancement, proving instead that the Qur'an heralded advances in technology and science. Nursi showed that Islam prefigured scientific advancements many centuries before their emergence, establishing the prior and continued indispensability of the Qur'an as a normative charter underwriting human progress. As Kelton Cobb asserts, Nursi believed that the miracles reported in the Qur'an served no

⁴⁵ Ibid., p. 299.

⁴⁶ Mardin, *Religion and Social Change*, p. 216.

⁴⁷ Nursi, *The Words*, p. 262.

other purpose than "enticing the imagination of human beings to aim at certain elusive ideals of craftsmanship. In this way, the sacred scripture becomes a quiet catalyst for gradual progress in the sciences."⁴⁸

Using the second strategy, Nursi asserts that at least one Divine name is inscribed on all existents in the universe.⁴⁹ The Divine Names create, order, and govern the forms and substances of the Earth, combining in unique permutations to render each thing unique. The created world, in this imagination, is recapitulated as the 'Book of the Universe' by Nursi, a manifest counterpart to the Qur'an.⁵⁰ He imbues the natural world with spiritual significance, Islamising what was hitherto understood by materialists as selfexistent and corporeal. Spiritualising the profane corrects centuries of misguided deviation by scientists unwilling to restrict their use of reason within the boundaries of revelation.

The Qur'an and the Book of the Universe exist in a reflexive, intertextual relationship, where each refers and corresponds to the other. Cobb observes: "[H]e has made use of a hermeneutic that shuttles between the Qur'anic text and the observable world in both directions."⁵¹ Nursi argues that the correspondence between the universe and the Qur'an is natural and intended.

NURSI'S QUR'ANIC METAPHYSICS

Nursi's updated Islamic metaphysics is produced without an undue reliance on either modern scientific knowledge or the classical cosmologies of the medieval theologians and Sufis. Nursi reconstructs an organic philosophy of science using the religious symbols and idioms of his native Anatolia, as well as a broad knowledge of the basic features of the new sciences. Nursi argues that the Muslim world has been beset by a

⁴⁸ Kelton Cobb, 'Revelation, the Disciplines of Reason, and Truth in the Works of Said Nursi and Paul Tillich,' in: *Islam at the Crossroads*, p. 135.

⁴⁹ Nursi, *The Words*, p. 271.

⁵⁰ Nursi, *Letters*, p. 341.

⁵¹ Cobb, 'Revelation,' p. 147.

clash of intellectual epistemologies for centuries – the rationalist, objective method of the philosophers and theologians, and the subjective, esoteric method of the mystics.⁵² Mystics pursue knowledge with the 'heart,' through experiential approaches to knowledge that cannot be rationalised. Philosophers approach the world through inductive logic and sensory observation, which can lead to misleading conclusions privileging the material at the expense of the metaphysical dimension of the world. Nursi professes: "If knowledge lacks the insight of the heart, it is ignorance."⁵³

Reconciling the two intellectual approaches, uniting the heart and reason, requires an approach to knowledge guided by the Qur'an. Determining the points of correspondence between revelation and the observable world, and regulating reason with the spirit and principles of the Qur'an ensures that intellectual activity remains robust while remaining within the fold of Islamic orthodoxy, according to Nursi.

Nursi's metaphysics emanates from his understanding of the Qur'an and its pronouncements on the origins and nature of Creation. Nursi uses deductive logic, contemplative observation, and analogical reasoning guided by the Qur'an to reach conclusions about natural phenomena. Nursi's natural theology relies not on the inductive logical method of the philosophers, whose conclusions were based on rational calculations based on mental speculations, but the deductive logic founded upon demonstrable evidence and careful observation. Nursi convinces the reader that his presentation of Creation coheres with the Qur'anic viewpoint, which itself is merely a scriptural reflection of physical reality.⁵⁴ The believer who witnesses Creation with an open mind and soul will see that "someone is changing the order with regularity and renewing the balance with measuredness…and when we study it even more closely, a wisdom and justice appear

⁵² Mardin, *Religion and Social Change*, p. 80.

⁵³ Nursi, *Letters*, p. 545.

⁵⁴ See above, p. 43.

behind the ordering and balancing. A purpose and benefit are considered, a truth, a usefulness are followed in the motion of everything, even the minutest particles."⁵⁵

A critical analysis of Said Nursi's cosmology is necessary in order to establish the ontological and metaphysical foundations informing his views on science. Nursi's metaphysical thought draws upon eclectic sources, and also possesses a character of its own. Nursi borrows elements from Ibn al-'Arabī's cosmology, strands from Sirhindī's thought, and also from Sunni orthodoxy in his meditations on the nature of the Godhead and its relationship with Creation.⁵⁶

Nursi's metaphysics begins with the assumption that God created the universe *ex nihilo* and had a purpose in doing so.⁵⁷ Like Ibn al-'Arabī,⁵⁸ Nursi believes that God is both distinct from the universe, and continuously present in it.⁵⁹ He is both Other than His Creation, and absolutely knowledgeable about its particulars: "The Maker of the universe is not of the same kind as the universe. His Essence resembles no other essence at all...the obstacles and restraints within the sphere of the universe cannot hinder Him, they cannot restrict His actions."⁶⁰ The meaning of life and Creation derives from God's Essence, which is All-Perfect, All-Powerful, and All-Beautiful. Nursi argues that a possessor of beauty and perfection must display and witness that artfulness so that it may receive due consideration. God created the universe to manifest His own beauty and perfection, inscribing all things and phenomena with His attributes.⁶¹ "He displays His wisdom, His signs, and He invites conscious creatures to read them."⁶²

⁵⁵ Nursi, *Letters*, p. 273.

⁵⁶ Mardin, *Religion and Social Change*, p. 209.

⁵⁷ Nursi, *Letters*, p. 276.

⁵⁸ See above, p. 21.

⁵⁹ M. Hakan Yavuz, '*Nur* Study Circles (*Dershanes*) and the Formation of New Religious Consciousness in Turkey,' in: *Islam at the Crossroads*, p. 300.

⁶⁰ Nursi, *Letters*, p. 297.

⁶¹ Ibid., p. 56.

⁶² Ibid., p. 276.

Creation is not a 'world of imagination,' as in the thought of Ibn al-'Arabī,⁶³ but instead a material reflection of God's attributes and names. God's Creation is corporeal, temporal, and contingent: "The Glorious Lord of All Dominion creates all things, great and small, universal and particular, as a model, and clothes them in hundreds of ways in the weavings of His art, which are embroidered with continuously renewed inscriptions."⁶⁴ Nursi rescues the world from immateriality in order to revive the relevance of the Qur'an and *sharī*'a.⁶⁵

The Indicative Nature of the Cosmos

Nursi constructs a crucial methodological distinction between the *nominal* meaning and existence of things as material existents, *mana-yı ismi*, and the *indicative* meaning of things as signs and manifestations of God, *mana-yı harfi*.⁶⁶ This distinction forms the crux of his philosophy of science, and is maintained as a formative dichotomy in Gülen's metaphysics as well. Nursi writes that materialism and natural philosophy wrongly dwell on the nominal, *ismi* meaning of things, becoming lost in the superficial attributes of the phenomenal world and attributing causes, effects, powers, and intelligence to things that are in fact shadows of God's attributes and names.⁶⁷

Islamic scientists wielding the Qur'anic viewpoint observe reality as possessing an indicative, *harfi* status. The things of the world, their existence and attributes, directly point to the Creator. Their apparent powers of creation and regulation are in fact ordered by an immaterial entity before time and space, and their very being and existence is a powerful reminder of an all-powerful deity. Things signify a meaning extrinsic to themselves: "they are to be seen as the manifestations of eternal Names. It [the things of

⁶³ See above, p. 18.

⁶⁴ Nursi, Letters, p. 276.

⁶⁵ In a manner reminiscent of Sirhindī; see above, p. 12

⁶⁶ Ozervarli, 'Said Nursi's Project,' p. 325. The 'indicative' nature of the cosmos was first expounded by Ibn al-'Arabī; see above, p. 19.

⁶⁷ Nursi, *The Words*, p. 188.

the world] is not doomed for non-existence, for it bears the shadow of an external existent...it is a sort of constant shadow of the eternal Name which it manifests."⁶⁸ Things have no meaning or existence save what is inhered in them of the divine.

Nursi emphasises Islamised science's different approach to observing the object of knowledge. The supernatural origin and sustenance of contingent entities is assumed, a presupposition inscribed into the very methodology of Islamised science.⁶⁹ Materialism, on the other hand, does not presuppose the indicative meaning of things, and instead recognises their nominal meaning – that their mundane existence is a legitimate starting point for observation and theorizing. Materialism contends that conclusions can be drawn about natural phenomena based on their corporeal states as observed by the human senses. All powers and faculties exhibited by things are possessed by them, and not by some 'superior' entity.

CRITIQUE OF MATERIALIST METHODOLOGY AND EPISTEMOLOGY

But not all men are willing to read the 'Book of the Universe' with an open mind, and are distracted by the veils God has put up to conceal the true nature and meaning of Creation. God has veiled His names so as not to make His Existence and Unity obvious. That way, the world as an arena of trial and examination of human souls can be preserved; men can either misread the Book and receive divine punishment for their disbelief, or interpret the signs correctly and receive divine blessing. According to Nursi's conception, the veiled nature of the signs of God challenges the faith of men: "[A]n arena of trial and examination and striving and competition has opened so that coal-like base spirits may be differentiated and separated out from diamond-like elevated spirits."⁷⁰

⁶⁸ Nursi, *Letters*, p. 82.

⁶⁹ Ibid., p. 261.

⁷⁰ Ibid., p. 63.

For the materialists and natural philosophers, veils are self-containing, selfgoverning existents requiring no divine sustenance. Nursi avers:

If all beings, all particles, are attributed to multiplicity, causes, Nature, themselves, or to anything other than God, then each particle, each being, must either possess an all-embracing knowledge and absolute power, or innumerable immaterial machines and printing-presses must be formed within it.⁷¹

For those whose intellectual pursuits are governed by reason alone and not combined with revelation, "veils are encountered as self-originating principles, and are extrapolated into small systems within a fragmented and shallow science."⁷² Entire disciplines of knowledge are founded upon the assumption that veils are the only existent reality in the universe, from which grand theories of origination and interdependence are contrived.

Nursi's critique of scientific materialism is fundamental and ontological: the methodological assumptions of scientific discourse are invalid and unsupportable. Nursi does not view science as a field of knowledge in full possession of objectivity, empiricism, and truth, but as a human discourse, a fallible interpretation of the world subject to criticism.

CRITIQUE OF MATERIALIST 'OBJECTIVITY'

The starting assumption of scientific materialism is that the subject can come to know the object of knowledge through observation.⁷³ Nursi criticizes this by pointing to the contradictory claim within materialist discourse that Nature and man exist in a state of alienation; neither is capable of mutually intelligible communication.⁷⁴ Nursi infers from this discrepancy that man cannot know Nature if both subject and object stand in ignorance of the other. As Yamine Mermer summarizes, Nursi asks the materialists, "How is it possible to understand alien phenomena without imposing blind and distortive

⁷¹ Ibid., p. 303.

⁷² Cobb, 'Revelation,' p. 137.

 ⁷³ Yamine Mermer, 'The Hermeneutical Dimension of Science: A Critical Analysis Based on Said Nursi's *Risale-i Nur*,' *The Muslim World*, 89 (1999), p. 272.
 ⁷⁴ Ibid.

prejudices upon them?"⁷⁵ Materialist science cannot establish the mutual, universal language of understanding between the objective and subjective worlds. For example, man cannot arrive at knowledge about a tree existing in and of itself; tree and man are unable to establish a mutually recognisable channel of negotiation. The materialist comes to "know" the tree only by imposing his morality, assumptions and conceptual grammar on it, so as to make it knowable by terminology recognisable by the subjective mind. Ultimately, Mermer submits, "We will understand not their reality but our own understanding of them."⁷⁶

The translation of objective reality into subjective truth does not necessarily correspond to what actually exists. While materialist science holds that the cognitive map of the subjective mind corresponds exactly with the 'truth' of the objective world, Nursi insists that this relationship is false.⁷⁷ Only God possesses knowledge of the true reality of the world. By recognizing God's sovereignty over all things and attaining knowledge of Him, man can come to know the true nature of being in the world. Reason alone cannot apprehend truth; it requires the assistance and orientation provided by the Qur'an to fully comprehend the ontological and metaphysical nature of Creation.

The projection of the subjective viewpoint onto the objective world is the result of a flawed perception of self. Nursi argues: "It considers the 'I's' duty to be perfection of self, which originates from love of self."⁷⁸ Just as the contingent world is divided into an indicative and nominal state of being, so too is the ego $(ana)^{79}$ comprehensible as existing

⁷⁵ Ibid., pp. 272-273.

⁷⁶ Ibid., p. 291.

⁷⁷ Ibid., p. 285.

⁷⁸ Nursi, *The Words*, p. 563.

⁷⁹ For Nursi, the *ana* was a nuanced concept meaning a number of things, among them: "conscious thought," "self" or "reason," "intellect," or "spirit," or most probably as "the unity of all these together with all other inner faculties." Kuşpinar, 'The Concept of Man,' p. 154.

either in a nominal relationship in and of itself, or as indicative of its Creator.⁸⁰ Nursi asserts that the correct nature of the *ana* is indicative (*harfi*) – that the true owner and provider of the self is God. The true *ana*, he writes, "believes that its existence is due only to the existence of another, and that the continuance of its existence is due solely to the creativity of that other."⁸¹ A proper self-perception leads to the more correct understanding of the objective world as indicative of God's existence and sovereignty.

Islamised science places all things in a direct relationship with the Creator. The starting supposition of Nursi's *harfi* scientific epistemology is the recognition that all beings in the universe are signs testifying to their maker's unity and existence.⁸² That all things derive their existence and sustenance from God's Will provides a metaphysical constant, a language of universality, which allows for interdependence and common understanding between existent beings.⁸³ All things possess a common origin in God's Knowledge and Essence. This cosmic homology allows man to know and understand other contingent beings and processes of nature, towards a more comprehensive knowledge of self and God.⁸⁴ Equipped with the *harfi* vision, man can understand the object of knowledge through the language of divine universality. If God creates all things, then all things can be understood in their relation to God, and secondarily in their relation to each other as created beings.⁸⁵

Furthermore, all created things speak the language of praise for their Creator. The animate beings of the world bear witness to their prayers:

We demonstrated to mankind innumerable proofs, we made them hear with these innumerable tongues of ours; But their accursed unseeing, unbelieving eyes did not see our faces, they did not hear our words; and we are signs that speak the truth;

⁸⁰ Kuşpinar, p. 154.

⁸¹ Nursi, *The Words*, p. 562.

⁸² Ibid., p. 276.

⁸³ Mardin, *Religion and Social Change*, p. 213.

⁸⁴ Ibid.

⁸⁵ Mermer, 'The Hermeneutical Dimension,' p. 275.

Our stamp is one; our seal is one; we are mastered by our Sustainer; We glorify Him through our subjugation; We recite His Names; we are each of us in ecstasy, a member of the mighty circle of the Milky Way.⁸⁶

Even though scientists claim to 'observe' and 'see,' their misguided assumptions and methods make them blind to the ultimate meaning of the world, and deaf to the multiplicity's supplications and prayers to God.

CRITIQUE OF CAUSATION

Nursi uses this Islamic reconstruction of relations between the multiplicity and God to undermine the foundations of natural causation, one of the methodological pillars of scientific materialism. The *ismi* interpretation of objective reality contends that things are horizontally related to one another and exist in causal relationship.⁸⁷ The causes of natural effects can be found within contingent reality itself; things possess the power to influence and produce effects. Nursi challenges this view, arguing that causation, like scientific materialism itself, is a misguided interpretation of the objective world.

In natural causation, scientists have invented a universal law based on partial observations conducted over a relatively short time span.⁸⁸ While man has always observed the application of fire to precede burning in cotton, this observation cannot be generalized into a universal statement about fire existing in causal relationship with cotton in all circumstances. The temporal concomitance of fire and burning in cotton is not grounds for establishing a causal relation between the two events.

Furthermore, the agency of things observed as causes cannot be empirically demonstrated.⁸⁹ Scientists cannot reproduce a controlled experiment showing fire to actually cause burning. Instead, the two events are observed to occur simultaneously. The relationship between the events is temporal, spatial, and circumstantial, not causal.

⁸⁶ Nursi, *The Words*, p. 238.

⁸⁷ Nursi, *Letters*, p. 103.

⁸⁸ Mermer, 'The Hermeneutical Dimension,' p. 275.

⁸⁹ Nursi, The Words, p. 175.

"Causes are purely apparent and in reality have no true effect."⁹⁰ In this regard, Nursi's argument recalls the tenor of Ghazālī's critique of causation.⁹¹

Islamised science rejects the doctrine of natural causation. Nursi observes that fire does not possess any of the properties necessary to produce burning in cotton. Causes, in other words, are never worthy of their effects: "We look at things which appear to be causes and effects in the universe and we see that the most elevated cause possesses insufficient power for the most ordinary effect. This means that causes are a veil, and something else makes the effects."⁹² If a natural cause cannot be empirically established, one can deduce that the agent is immaterial and beyond observation.⁹³ Nursi uses deductive logic to arrive at the actual agent responsible for the burning – God.⁹⁴ The apparent causal relation between things is a veil installed by God to motivate believers to search and strive for knowledge of Him. Further, Nursi argues, "Causes have been placed so that the dignity of [God's] power may be preserved in the superficial view of the mind."⁹⁵

The Islamic alternative to natural causation is 'divine causality.' Causal relations exist in Nursi's metaphysical universe, but their direction is vertical, linking with God's causative power, not horizontal. Nursi distinguishes between causation, the creation of an effect by its cause, and 'causality,' the idea that no event or accident can occur without an originating cause.⁹⁶ Causality is a universal principle applicable to all cases, whereas causation is conjecture, a theory based on particular events that is wrongly said to exist as

⁹⁰ Ibid., p. 301.

⁹¹ See above, pp. 15-17.

⁹² Nursi, *The Words*, p. 711.

⁹³ Mermer, 'The Hermeneutical Dimension,' p. 287

⁹⁴ Ibid.

⁹⁵ Nursi, *The Words*, p. 300.

⁹⁶ Nursi, *Letters*, p. 306.

a logical necessity. Causality can be reconciled with the concept of an omnipotent God, whereas causation ascribes power and intelligence to causes independent of God.⁹⁷

In Nursi's concept of 'divine causality,' God is the cause of all effects. Those properties and characteristics of Creation called laws by materialists are in fact the patterns of His creative acts: "Through whichever law He impels particles like Mevlevi dervishes, He makes the earth spin through the same law...And through that law, He causes worlds to revolve, and the solar system to travel through space."⁹⁸ There is an underlying unity and harmony to these laws that indicates God's Unity.

CRITIQUE OF REASON AND PHILOSOPHY

Nursi advances a general argument against the philosophical foundations of scientific materialism, namely European natural philosophy. By 'European philosophy' Nursi would mean 'materialism'; he was largely ignorant of the nuances of Western thought, and unaware of philosophical trends critical of positivism and the scientific method.⁹⁹ To him, materialism was the ideology of Dajjal, the Islamic anti-Christ figure. He "brings a false paradise for the dissolute and the worldly, while for the people of religion and Islam like the angels of Hell it brings dangers in the hand of civilisation, and casts them into captivity and indigence."¹⁰⁰

Reason under the authority of divine wisdom, faithful to its guidance and principles, can lead the believer on the correct path towards God. Reason, because of its divine authorship and ownership, must submit to revelation. The Qur'anic story of God instructing Adam in the Divine Names at the beginning of life on Earth attests to the

⁹⁷ Ibid.

⁹⁸ Ibid., p. 344.

⁹⁹ Ibid., pp. 78-80.

¹⁰⁰ Ibid., p. 80.

divine origin of reason.¹⁰¹ God installed reason in the mind so that men would reflect on the signs in nature recalling His Names and Unity.¹⁰²

In Nursi's worldview, man has been endowed with all ninety-nine Names and Attributes of God, and thereby exists as a microcosm (*misali musaggar*) of Creation and the most obvious proof of God's Unity and Existence.¹⁰³ Man possesses "an index of all being...the keys to all the treasuries of mercy, and...the mirrors of all the Divine Names."¹⁰⁴ Man has the faculties to decipher the mysteries of the universe and, given a proper intellectual and spiritual orientation, can employ them in service of society and God.

Having internalized the language of the age of reason, Nursi declares that by the same standards used by materialists to condemn religion – rationality, social utility, human progress, enlightenment, truth – materialism itself comes across as a logically inferior and irrational ideology that only leads to human misery and disbelief in absolute truths. Materialists, Nursi contends, believe that:

things form themselves, which is utterly impossible, and thus became the cause of confusion. That is to say, because they see that some ordinary things come into existence very easily, they imagine the formation of them to be self-formation. That is, they are not being created, but rather come into existence of their own accord.¹⁰⁵

Nursi argues that because materialism does not submit its claims to the judgment of revelation, it is prone to hyperbole and irresponsible excess. Only by surrendering the scientific method to the principles and viewpoint of the Qur'an – starting with the assumption that Creation is the result of God's Will and Power, that God is immanent in the world and the sole possessor of intelligence and intention, and that contingent reality is

¹⁰¹ Nursi, *The Words*, p. 270.

¹⁰² Cobb, 'Revelation,' pp. 131-132.

¹⁰³ Ozervarli, 'Said Nursi's Project,' p. 323.

¹⁰⁴ Nursi, *The Words*, p. 78.

¹⁰⁵ Nursi, *Letters*, p. 299.

a reflection of God's Names and Attributes – can science be salvaged as a worthy endeavour capable of rendering our understanding of the universe more compatible with its corresponding description in the Qur'an.

The Deployment of Nursi's Islamised Science

Nursi did not intend to merely systematize a rival scientific interpretation of the world; he also wanted to induce scientists to begin utilizing his alternative presuppositions about the universe. Muslim scientists must deploy the *harfi* vision in their experiments and observations, following the Qur'anic viewpoint to its logical conclusions about the world.¹⁰⁶ Scientific activity performed in the spirit of the Qur'an produces not just empirical observations and truths about the objective world, but also knowledge of God. This transforms science into a field of spiritual knowledge, and makes scientific study a means of worship.¹⁰⁷ The Muslim scientist, in turn, becomes "preoccupied with something that was a million times higher, more elevated, more subtle, more noble."¹⁰⁸

¹⁰⁶ Nursi, *The Words*, p. 144.

¹⁰⁷ Ibid., p. 270.

¹⁰⁸ Ibid., p. 144.

Chapter Four Fethullah Gülen's Synthesis of Natural Science and Islamic Metaphysics

Fethullah Gülen, spiritual mentor to millions of Muslims throughout the world, was born on the eastern margins of Anatolia on 27 April 1941 in the village of Korucuk, near Erzurum.¹ As in Nursi's hometown, the Naqshbandī *tarīqa*, and the influence of medieval Sufi sheikhs like al-Rūmī, Ibn al-'Arabī, and al-Ghazālī, played a large role in the religious milieu of Erzurum.² Gülen began to receive religious and Arabic instruction at an early age from his father, the village *molla*.³ His experience in formal elementary school was difficult, and he left soon after enrolling to receive an informal education from his mother, the village's Qur'an teacher.⁴

After years of home schooling, he graduated to a mentorship with a prominent regional sheikh, Alvarli Hoca, with whom he committed the Qur'an to memory and mastered the Arabic language.⁵ When Gülen was in his early adolescence he received lessons in mysticism and the religious sciences from Muhammad Lutfi Efendi, an important sheikh of the period in the same spiritual lineage as al-Rūmī.⁶ His education under Lutfi stressed not only the esoteric way of the Qādirī Sufi order,⁷ but also the value

¹ Bulent Aras and Omer Caha, 'Fethullah Gülen and His Liberal "Turkish Islam" Movement,' in: Barry Rubin, ed., *Revolutionaries and Reformers: Contemporary Islamist Movements in the Middle East* (Albany: SUNY Press, 2003), p. 142.

² Dina Le Gall, *A Culture of Sufism: Naqshbandis in the Ottoman World, 1450-1700* (Albany: SUNY Press, 2005), p. 126.

³ Aras and Caha, 'Fethullah Gülen,' p. 142.

⁴ Aktay, 'Diaspora and Stability,' p. 141.

⁵ Ibid.

⁶ Fethullah Gülen, *M.F. Gülen: Essays, Perspectives, Opinions* (Rutherford, NJ: The Light, 2002), p. 3.

⁷ The Qādiriyya order is known for its ecstatic practices, such as the recitation of *dhikr* accompanied by ceremonial music. They emphasize the veneration of saints and mystical communion with God, as opposed to the strict orthodoxy of the Naqshbandīyya. D.S. Margoliouth, 'Kādiriyya,' in: *Encyclopaedia of Islam*, Vol. 4 (Leiden: Brill, 1960), pp. 381-383. Gülen was thus familiar with a diversity of mystical practices, from the ecstatic heterodoxy of the Qādiriyya to the austere orthopraxy of the Naqshbandīyya.

of orthopraxic commitment to the pillars of faith.⁸ He was taught the importance of studying secular fields of knowledge, namely the natural sciences, literature, poetry, history, and philosophy.⁹ Gülen soon familiarized himself with European history and modern philosophy, reading Immanuel Kant, David Hume, Albert Camus, and Jean Paul Sartre.¹⁰

Gülen transferred to a state-run Imam-Hatip school, where he underwent rigorous training in the Sunni orthodox tradition and secular disciplines of knowledge.¹¹ He learned *fiqh*,¹² specifically the Hanafī school of law, as well as exegesis and the religious sciences. By the time Gülen received his state preacher's licence in 1959, he was fluent in both the orthodox and Sufi traditions of Turkish Islam, and familiar with the main currents of European philosophical, literary, and scientific thought.¹³

Gülen's first assignment was as a preacher in Edirne, in Turkish Thrace.¹⁴ Edirne, where a relaxed, liberal form of Islam took hold, was far more cosmopolitan and 'modern' than Gülen's native Erzurum.¹⁵ It was home to a diverse population, including a large number of Slavic Muslims who had taken root after fleeing the wars that brought Turkey's empire in the Balkans to an end.¹⁶

⁸ Zeki Saritoprak and Sidney Griffith, 'Fethullah Gülen and the "People of the Book,"' *The Muslim World*, 95 (2005), p. 330.

⁹ M. Hakan Yavuz, 'The Gülen Movement: The Turkish Puritans,' in: *Turkish Islam and the Secular State*, p. 20.

¹⁰ Gülen, Statue of Our Souls, p. 35.

¹¹ Eric Zürcher, *Turkey: A Modern History* (London: I.B. Tauris, 1998), p. 259.

¹² The body of Islamic jurisprudential thought. In the Sunni tradition, there are four major schools of fiqh – Shāfi'ī, Malikī, Hanafī, and Hanbalī.

¹³ Gülen, *M.F. Gülen*, p. 3.

¹⁴ Aras and Caha, 'Fethullah Gülen,' p. 142.

¹⁵ Aktay, 'Diaspora and Stability,' p. 142.

¹⁶ For more on the migration of Slavic Muslims to Thrace and Anatolia, see Youssef Courbage, 'Demographic Transition among Muslims in Eastern Europe,' *Population: An English Selection*, 4 (1992), p. 163. Edirne's large Slavic Muslim population is referenced in Yavuz, 'The Gülen Movement,' p. 24.

It was around this time that Gülen first came across Nursi's *Risale*. The *Risale*'s natural theology and modernism had a profound influence on Gülen's religious thought. In tandem with the location change, this had "facilitated his shift from a particular localized Islamic identity and community to a more cosmopolitan and discursive understanding of Islam."¹⁷

In 1966, the state Directorate of Religious Affairs reassigned him to a preacher position in İzmir, another Westernised, liberal city.¹⁸ More confident in his thought, preaching style, and mission, Gülen began to organise his devoted following around the principles of his modernist message. He embarked on a campaign to set up summer camps for the children of his newfound community of believers. Gülen instructed the young in both secular and religious education, on subjects ranging from history and biology to Qur'anic instruction. The summer camps were an attempt to raise 'perfect individuals' (*insan-i kâmil*)¹⁹ from an early age, fusing mind and heart in an Islamised approach to modern knowledge.²⁰

Gülen was arrested for his religious activities amidst the general military crackdown on politically motivated Islamists and leftists following the coup of 12 March 1971.²¹ He was accused of indoctrinating his students in Islamist propaganda, antithetical

¹⁷ Ibid., p. 22.

¹⁸ Aras and Caha, 'Fethullah Gülen,' p. 143.

¹⁹ Insan-i kâmil, a 'perfect human,' is a concept borrowed from medieval Sufism, namely the writings of Ibn al-'Arabī, which denotes the most excellent type of man. In Gülen's theology, the perfect human follows the example of the Prophet Muhammad, considered to be the ideal person. Muhammad was a "man of action," who "stressed learning, trading, agriculture, action, and thought. Moreover, he encouraged his people to do perfectly whatever they did, and condemned inaction and begging." Gulay, 'The Gülen Phenomenon,' p. 48; originally from Fethullah Gülen, *Prophet Muhammad: Aspects of his Life*, Vol. 2, Ali Ünal, trans. (Fairfax, Va.: The Fountain, 1996), p. 15 and p. 105.
²⁰ Elisabeth Özdalga, 'Worldly Asceticism in Islamic Casting: Fethullah Gülen's Inspired Piety and Activism,' *Critique*, 17 (2000), p. 92.

²¹ Aras and Caha, 'Fethullah Gülen,' p. 143.

to the interests and security of the state.²² He was acquitted and released six months later, regaining his preacher post in İzmir, where he remained until 1980.²³

During the 1970s, Gülen was careful not to provoke the ire of a state newly vigilant of Islamist activity. He quietly oriented his thought and movement towards values and activities more palatable to the contemporary political context. He began to focus his attention on print media, education, and the free market, exhorting his followers to obtain conventional success as businessmen, journalists, teachers, and scientists, and to spread their faith by example (*temsil*) rather than indoctrination, propaganda, or evangelizing.²⁴

In the 1980s, Gülen and his followers benefited from the installation of a new regime more willing to cooperate with – or co-opt – existing Islamist elements. The new government had an interest in combating lingering leftist influences in the country, as well as incorporating religious themes into the ruling Kemalist ideology to placate the growing Islamist trend.²⁵ The reign of Prime Minister Turgut Özal, a devout Muslim himself, signalled a new, expansive era for the Gülen community, and for the intellectual career of Gülen himself.²⁶

It was during the 1980s that an identifiably systematic corpus of religious intellectual thought emerged from Gülen. His arrival as one of Turkey's most prominent religious figures was accompanied by publications and televised sermons presenting his general Islamic viewpoint, theological positions, orientation towards modernity, and unique contributions to Turkish Islam. Gülen has since written over 40 books, and contributed to numerous periodicals published by his community of followers, including

²² Ibid.

²³ Ibid.

²⁴ Yavuz, Islamic Political Identity, p. 180.

²⁵ Zürcher, *Turkey* (2004), p. 288.

²⁶ Yavuz, Islamic Political Identity, p. 89.

The Fountain, a journal dedicated to Islamised scientific thought, and *Zaman*, a Turkish daily that enjoys wide circulation.²⁷

METHODOLOGICAL CONSIDERATIONS

In preparing this chapter, a number of Gülen's religious commentaries were consulted, including *The Statue of Our Souls, Key Concepts in the Practice of Sufism Vols. 1 and 2, Prophet Muhammad: Aspects of His Life, The Essentials of the Islamic Faith*, and *Questions and Answers about Faith*, among others, all translated from the Turkish. A series of compilation volumes containing Gülen's writings on specific religious topics were also included in the analysis, including *Knowledge and Responsibility: Islamic Perspectives on Science, Advocate of Dialogue: Fethullah Gülen*, and *M.F. Gülen: Essays, Perspectives, Opinions*. Gülen's contributions to *The Fountain* were analysed, in addition to his Turkish-language videotaped sermons, magazine articles, newspaper interviews, and columns. Most of the primary-source material is accessible on his English-language website, <u>http://en.fgulen.com</u>, which includes links to his writings in the original Turkish. The Turkish-language materials were consulted as a reference to identify important conceptual vocabulary.

The present chapter will highlight the main features of Gülen's philosophy of science – his Islamic cosmology, critique of reason and materialism, Islamisation of scientific discourse and methods, and revisionist historiography. This critical intellectual survey will be coupled with an appraisal of the traditional and modern influences informing his ideas. Emphasis will be placed on areas of his thought that depart from the classical Islamic critiques of reason and secular science explored in chapter 1, and from Nursi's project of Islamising science examined in chapter 3. The chapter culminates in a presentation and analysis of Gülen's own views on Islamised knowledge.

²⁷ Fethullah Gülen, 'A Comparative Approach to Islam and Democracy,' *SAIS Review*, 21 (2001), p. 133.

GÜLEN AS 'NEW ISLAMIC INTELLECTUAL'

As noted in the brief biography above, Gülen was raised in a Naqshbandī milieu, trained by Sufi sheikhs, and introduced to the principles of the mystical path. He became socialised in a tradition of Sufism that emphasised the love of God, and the adherence to religious law. From an early age he learned the importance of practicing the esoteric and exoteric dimensions of faith, and the need to balance the spiritual and orthodox requirements of Islam. Recalling the teachings of Ghazālī and Sirhindī,²⁸ Gülen stressed the need to reconcile Sufism and *sharī'a*, and reject spiritual intoxication and otherworldliness for the worldly sobriety and pietism of the Naqshbandī order.²⁹

Gülen is a new kind of religious scholar, fluent in modern intellectual trends and the Islamic tradition. He draws upon knowledge from various disciplines – Sunni orthodoxy, the esoteric teachings of his Anatolian Sufi sheikhs, and the secular ideas of Europe. Unlike the main body of orthodox clerics in Turkey, Gülen deploys an eclectic array of sources of information. Militating against *taqlīd*, which he views as having introduced intellectual laziness to Islamic thought, he does not consider the corpus of learning closed and well-defined. As Olivier Roy summarizes, the new Islamic intellectual is often self-taught, capable of combining diverse strands of knowledge into a defence of Islam uniquely suited for modern readers:

Fragmentary modern knowledge, acquired autodidactically, is integrated within a Quranic intellectual framework, developing, on the one hand, the image of a transcendent totality, the tawhid...in which all knowledge comes together, and, on the other hand, a terminology drawn from the Tradition, supported by the citation of verses, but often positioned as the equivalent of concepts issued from modern ideologies.³⁰

²⁸ See above, p. 11.

²⁹ Mustafa Gokcek, 'Gülen and Sufism,' working paper, *Fethullah Gülen Movement in Thought and Practice Conference*, Houston, Texas, 2005.

³⁰ Roy, *Political Islam*, p. 98.

As a graduate of the Imam-Hatip school, Gülen, unlike most 'new intellectuals,' possesses the institutional knowledge and credentials of the ulema. But similar to Roy's description, he presents his ideas in a 'new intellectual' discourse and style – populist, accommodating, and eclectic. By combining traditional and modern forms of intellectual legitimacy and authenticity, he emerges as a hybrid religious scholar uniquely suited to the task of synthesising revelation and reason.

Gülen renounces the orthodox ulema's emphasis on *taqlīd*, and urges a spirited reinterpretation of Islamic precepts in the light of modern circumstances and intellectual trends. New sciences and philosophies are not to be repudiated for their departure from revelation, but rather exploited for those elements that resonate closest with Islam. They are to be Islamised rather than abandoned, invested with spiritual meaning and Islamic significance.

The example of the Prophet Muhammad, combined with the essential principles of the Qur'an, is the ideal guide for the modern world, capable of providing spiritual sustenance and intellectual nourishment to individuals of diverse backgrounds and circumstances.³¹ As Mustafa Gokcek argues, Gülen "aims to revive and combine the activism of Prophet Muhammad and his companions, the asceticism of the first generation Sufis, and the Sufi terminological knowledge and consciousness of the later Sufi scholars."³² Though not a novel project by any means, recalling similar efforts by Ghazālī,³³ Sirhindī,³⁴ and Nursi,³⁵ Gülen's contributions do represent a contemporary attempt to unite Islamic orthodoxy with mysticism, and reason with revelation.

³¹ Fethullah Gülen, *Questions and Answers about Faith* (Fairfax, Va.: The Fountain, 2000), p. 187.

³² Gokcek, 'Gulen and Sufism.'

³³ See above, p. 13.

³⁴ Ibid., p. 12.

³⁵ Ibid., p. 36.

Gülen liberates the holy texts from the learned confines of the madrasa and *tekke*,³⁶ and thereby unravels the credentialed legitimacy and authority of the traditional ulema and Sufi sheikhs. Gülen and other 'new intellectuals' bypass the turgid *kalām* style of the ulema to present Islamic knowledge in a more accessible framework.³⁷ Theirs is a revolution founded upon an assault on the traditional institutions of Islamic learning, challenging the basis of spiritual mediation in religious affairs, and modernising the style and methodology of religious commentary.

GÜLEN'S HISTORY OF ISLAM AND SCIENCE

Gülen argues that there was a time in Islamic history, before the institutionalisation of the Sufi brotherhoods, when mysticism and orthodoxy existed in harmony. The natural and religious sciences were also studied together without undue difficulty or dissonance.³⁸ He reinterprets the works of Ghazālī in this regard, asserting that Ghazālī was not criticizing the spirit of scientific inquiry or the findings of Islamic philosophers and scientists.³⁹ Instead, Gülen writes, Ghazālī attacked them only when they ran afoul of revelation, attributing partners to God and developing the doctrine of the eternity of matter, thereby refuting the temporal status of Creation and the Qur'anic account of God's nature.⁴⁰ Insofar as science and philosophy do not contradict the teachings of the Qur'an, their contributions can be embraced.

The misunderstanding of $Ghaz\bar{a}l\bar{i}$'s line of argument led to catastrophe for Islamic knowledge – the schism between the natural and religious sciences, and the removal of the

³⁶ The Sufi 'lodge', the site of mystical ritual practice and learning.

³⁷ Roy, *Political Islam*, p. 103.

³⁸ Fethullah Gülen, 'Science and Religion,' in: *Knowledge and Responsibility: Islamic Perspectives on Science* (Izmir: Kaynak, 1998), p. 47.

³⁹ Gülen, Advocate of Dialogue, p. 324.

⁴⁰ Ibid.

former from madrasa curriculum after the eleventh century.⁴¹ Prior to this, Muslim scientists and philosophers pursued their studies as acts of worship, enlightening revelation by unveiling the mysteries of God's Creation. Gülen explains: "In the first five centuries of Islam, Muslims succeeded in uniting sciences with religion, the intellect with the heart, the material with the spiritual."⁴² It was not in spite of Islam but because of it that the scientific spirit flourished. After the eleventh century, however, the Islamic world suffered intellectual degradations as a result of invasions and political infighting, which contributed to the decline in Islamised science.⁴³ Gülen identifies these historical and political forces as the primary factors in the removal of natural science from the madrasa.

GÜLEN'S MODERN AND MEDIEVAL INFLUENCES

Much of Gülen's conceptual vocabulary and metaphysical structure is borrowed from Ghazālī and Ibn al-'Arabī.⁴⁴ Gülen's spiritual interpretation of nature, or, conversely, his naturalist interpretation of the Islamic tradition, was inspired by Nursi's *Risale-i Nur*, and informed by the principles, imagery, and vocabulary of Ibn al-'Arabī's theosophy of the universe. For example, the idea that the universe is the site of God's Names and Attributes,⁴⁵ that all things in the universe point to and supplicate before Him,⁴⁶ and that the universe represents a manifest 'book' that corresponds with the text of the Qur'an, are consonant with Ibn al-'Arabī's metaphysical notions.

He does not, however, subscribe to the doctrine of *wahdat al-wujūd*.⁴⁷ The Unity of Being cannot be accepted as a theological position because of its damaging implications

⁴¹ Ahmet Kuru, 'Fethullah Gülen's Search for a Middle Way Between Modernity and Muslim Tradition,' in: *Turkish Islam and the Secular State*, p. 120.

⁴² Gülen, 'Science and Religion,' p. 47.

⁴³ Ibid., p. 43.

⁴⁴ Osman Bakar, 'Gülen on Religion and Science: A Theological Perspective,' *The Muslim World*, 95 (2005), p. 360.

⁴⁵ See above, p. 18.

⁴⁶ Ibid., p. 19.

⁴⁷ Gülen, *Questions and Answers*, p. 9.

for the relevance of sharī'a and Gülen's own doctrine of this-worldly activism and asceticism. Gülen argues that Ibn al-'Arabī's position is logically inconsistent and incompatible with the Qur'an. If 'Everything is He,' that would mean all particles of Creation are parts of God. But if we accept that God is immaterial and eternal, and observe that all particles in Creation are temporal and material, then we can either argue that God is contingent like His Creation, or that matter is eternal and immaterial like its Creator. Both conclusions are untenable given the precise Qur'anic pronouncements on the matter.⁴⁸ Gülen's position on Unity of Being, which condemns its theological implications and departure from Qur'anic principles, is similar to the view held by Sirhindī.⁴⁹

The most obvious influence on Gülen's theological thinking is Said Nursi. Gülen believes that because Nursi's viewpoint on nature and matters of faith was derived from the Qur'an and the example of the Prophet, his theological position possesses sincerity and authenticity. Gülen writes that Nursi "led his life in the shade of the Book and the Prophet's tradition, and under the wings of experience and logic."⁵⁰ Nursi is exalted for confronting the ideological upheavals that shook Turkey during the late-nineteenth and early-twentieth centuries, standing firm against the spread of positivism and materialism, and the attendant view that religion represented the most significant obstacle to material progress.⁵¹ Nursi is also extolled for preserving and disseminating Islamic knowledge at a time when such activity was illegal and viewed with suspicion and contempt.⁵²

Gülen differs from Nursi in his emphasis on action and service (hizmet) as opposed to faith alone. For Nursi, sincere and resilient belief in the fundamentals of Islam was the

⁴⁸ Qur'an 6:103-104 – "Such is Allah, your Lord. There is no God save Him, the Creator of all things, so worship Him. And He taketh care of all things. Vision comprehendeth Him not, but He comprehendeth (all) vision. He is the Subtle, the Aware." M.M. Pickthall, trans., The Meaning of the Glorious Koran (New York: New American Library, 1953). ⁴⁹ See above, p. 13.

⁵⁰ Gülen, Statue of Our Souls, p. 74.

⁵¹ Ibid., p. 82.

⁵² Gülen, Advocate of Dialogue, p. 319.

most important priority for Muslims, because of the anti-religious political atmosphere enveloping Turkey at the time. Nursi faced severe constraints from the aggressively secular republic of the 1920s and 1930s, which assaulted all expressions of Islamic piety outside the boundaries of the official state religion. The imposition of laicism, which disinterred Islam from the politics of state, would force Nursi to assume an apolitical stance in his writings. Nursi declares in *Mektubat*: "Service of the All-Wise Qur'an is superior to all politics so that it does not allow one to lower oneself to world politics, which consists mostly of falsehood."⁵³ Addressing the individual believer, Nursi stressed the cultivation of the inner life of the soul due to the impossibility of reforming the outer world.

Gülen faced different, more liberal, contextual restraints. He emphasizes the need to act and transform the outer world.⁵⁴ Rather than devalue the believer's efficacy in reforming the world, Gülen exhorts his followers to translate their 'certain belief' into the Islamic reconstruction of society. As Elisabeth Özdalga argues, Nursi and Gülen held differing views regarding the opportunities available to their followers: "Whereas Nursi regarded the pious believer as a vessel for God's will, for Gülen the believer serves as an instrument for doing good works."⁵⁵ Confident in their faith, Gülen's followers have taken advantage of Turkey's liberalized public sphere and civil society to create schools, television and radio stations, and financial institutions, constituting an 'Islamic sector' to rival the secular establishment.⁵⁶

In the mould of 'new intellectuals,' Gülen combines the ideas of classical and modernist Islamic thought with references to secular thinkers like Albert Einstein, David

⁵³ Nursi, *Letters*, p. 68.

⁵⁴ Gülen, Statue of Our Souls, p. 99.

⁵⁵ Özdalga, 'Worldly Asceticism,' p. 94.

⁵⁶ Yavuz, Islamic Political Identity, p. 91.

Hume, and Immanuel Kant.⁵⁷ He is careful to choose sources and cite evidence in agreement with the Islamic interpretation of nature. But the inclusion of modern references culled from eclectic bodies of knowledge does not alter the original premises or assumptions of Gülen's Islamic interpretation of nature, which are rooted in a specific Islamic tradition faithful to the Qur'an.

Gülen cites Western intellectuals whose arguments strengthen the claims of Islam and weaken the validity of scientific materialism. Kant, for example, is widely discussed in Imam-Hatip schools for his assertion that theoretical intelligence, or inductive logic, could not approximate knowledge of God, whereas practical intelligence, observation, and deductive logic could.⁵⁸ This argument is used to repudiate the doctrines of the Islamic Neo-Platonists, who relied on philosophical speculation and induction to construct a metaphysical worldview at odds with the Qur'an. Kant restores certainty in the validity of demonstrable proof and observation in understanding God and Creation.

GÜLEN'S CONCEPTION OF SCIENTIFIC MATERIALISM

Gülen's treatment of Turkey's embrace of materialist ideology⁵⁹ is significant because it provides a necessary backdrop to his project of reconstructing Islamic metaphysical thought. While Gülen's conception of materialism is not as reductive as Nursi's, and is informed by a nuanced understanding of Western philosophical thought, he remains staunchly opposed to its methodological and epistemological implications for Islamic knowledge. According to Gülen, Turkish positivism represents only the last of a number of different ideologies that fickle Tanzimat and Kemalist intellectuals embraced after becoming unmoored from their moral and intellectual foundation in Islam.⁶⁰ The positivists eagerly experimented with the philosophies and ideologies of foreign lands,

⁵⁷ Gülen, Advocate of Dialogue, p. 45.

⁵⁸ Ibid., p. 29.

⁵⁹ See above, pp. 24-25.

⁶⁰ Gülen, Statue of Our Souls, p. 146.

unable to understand the unique – and alien – social and historical contexts from which they emerged.⁶¹ Rather than attempt to reconcile materialism with Turkey's organic religion and culture, the positivists laid siege to Islam, attacking the beliefs and moral charter of their own society. An ideology ripped from its foundations and ignorant of its destination was zealously imported by Kemalists and introduced into the curriculum of state schools. Within just a few decades, Turkey had raised a generation hostile to its traditional values and culture. As Gülen writes:

While we have been making chaos out of nothing for ourselves, so many generations without any base, support, course, targets, ideals, or of course, spiritual knowledge have been raised as the children of whims, ambitions, fancies, and fantastic day-dreams.⁶²

Reversing the effects of this cultural transformation is incumbent upon all Muslims and Turkish nationalists, writes Gülen. Returning Turkey's normative charter to its Islamic origins, and reviving the nation's faith and pride in its own customs, philosophies, and ideologies, is the task for Gülen's *insan-i kâmil*.

The need for authentic, nationalist philosophies culled from the wisdom and spirit of Anatolia is the impetus for Gülen's project of constructing a modern Islamic metaphysics. An Islamic philosophy of science in line with Qur'anic teachings, faithful to Anatolian customs and traditions, and resonant with modernity, is necessary to drive out the foreign ideologies that have, from their inception, divided and laid ruin to Turkey. As Gülen declares, "Now it falls to us, to everybody who loves this country and this people, to eliminate all this disorderliness and to reawaken our stagnant activity in accordance with the horizon of our own philosophy."⁶³

Gülen's project is motivated by the intellectual schism between natural science and Islam in the Muslim world generally, and Turkey specifically. This divergence was not

⁶¹ Ibid.

⁶² Ibid., p. 160.

⁶³ Ibid., p. 163.
inevitable. It was the result of a historical failure to develop a proper philosophy of science that could underwrite the practice of natural science within the requirements of the Islamic worldview.

This was not the fault of religious intellectuals alone, however. Gülen accuses Turkish positivists of neglecting the embrace of pure science and instead becoming intoxicated with vulgar forms of materialism, an ideological outgrowth of science that represents a corruption of genuine scientific inquiry. Ideology and politics trumped the exercise of ethically bounded science. During the republican period, the advancement and popular embrace of science was sabotaged by its subsequent politicisation: "Western culture and values were given priority over science and scientific thought."⁶⁴

A METAPHYSICAL FOUNDATION FOR SCIENCE

Gülen's project can be defined as an attempt to construct a metaphysical framework to support an Islamic scientific viewpoint that rivals the truth claims of materialism. Gülen writes: "Muslims have not yet developed a concept of science in its true meaning, namely, one derived from the Qur'an and Islamic traditions molded mainly by the Qur'an and the Prophet's practice."⁶⁵ Gülen considers the reason-revelation divide to be founded on a false assumption – the supposed inherent antagonism between the secular and religious viewpoints. Gülen holds that the secular viewpoint can be incorporated into the religious worldview if it admits to its failure in deciphering essential facts about the universe, including the nature of pre-existence, the afterlife, and the supramundane realm. The materialist worldview can be vindicated and strengthened if it is subsumed in a larger framework that accounts for the metaphysical properties of the universe.

⁶⁴ Fethullah Gülen, *Towards the Lost Paradise* (London: Truestar, 1996), p. 7.

⁶⁵ Gülen, Advocate of Dialogue, p. 356.

Gülen summarizes the difference between the Islamic and materialist methodological viewpoints: "Seeing existence as discrete elements and trying to reach the whole from them ends up in drowning amid multiplicity. By contrast, embracing the whole and then studying its parts in the light of the whole allows us to reach sound conclusions about the reality of existence."⁶⁶ The most prominent distinction Gülen draws is at the site of observation – the materialist begins his inquiry from the level of corporeality and remains there, while the Islamic scientist perceives the physical and metaphysical realms and determines how Unity produces and regulates the Multiplicity.

The methodological tool used to decipher existence and its relationship with Unity is 'Islamic reasoning' – human reason conditioned by the guidance of the Qur'an and the example of the Prophet Muhammad.⁶⁷ Similar to Nursi's concept of the '*harfi*' self⁶⁸ – that human understanding of nature must begin with a self-perception constantly aware of its contingency and dependence on God – Islamic reasoning denotes the employment of a highly circumscribed, mediated rationality in scientific observation and logic.⁶⁹ The application of Islamic reasoning presupposes the created nature of existence, the unity of God, the immanence and eternally regenerative will and power of God, the *harfi* ontological foundation of Creation, and the harmonious interrelatedness of particulars.

Embedding scientific reasoning in these metaphysical propositions is, according to Gülen, necessary to guard against the ignorant, illogical claims made by materialists: "Metaphysical thought is the effort of the intellect to embrace creation as a whole and perceive it with all its dimensions, visible and invisible. Without this effort of the intellect or spirit, everything breaks up into lifeless fragments."⁷⁰ Gülen adds: "[T]hose who see

⁶⁶ Ibid., p. 357.

⁶⁷ Gülen, Statue of Our Souls, p. 12.

⁶⁸ See above, p. 50.

⁶⁹ Gülen, *Statue of Our Souls*, p. 12.

⁷⁰ Gülen, Lost Paradise, p. 30.

metaphysics and physics (and other sciences) as conflicting disciplines are not aware that they are seeing a river and the source where it originates as contradictory."⁷¹ Islamic reasoning is the methodological tool mediating between Gülen's *harfi* Islamic metaphysics and the observable world; the conduit through which Qur'anic principles can enter into the conclusions and arguments of scientific discourse.

Gülen's Islamic reasoning represents a uniquely reflexive combination of reason and revelation. Unlike the syntheses of reason and revelation struck in the past by reformers like Sirhindī and Nursi, Gülen's reconciliation redefines the philosophical foundations of both concepts. Hakan Yavuz and John Esposito note: "Gülen tries to reveal a dynamic interpretation of Islam that is compatible with and at the same time critical of modernity and Muslim tradition, rather than creating an eclectic or hybrid synthesis of modernity and Islam."⁷² Gülen's notion of reason contains an implicit critique of Enlightenment reason and rescues it from the monopolistic grip of materialists. Enlightenment reason is flawed for neglecting moral and ethical principles. As Thomas Michel argues, Gülen's metaphysics "provides a firm basis for purifying modern scientific study from its ethical inadequacies and positivist limitations."⁷³ The reason of the Enlightenment remains agnostic about significant issues like the nature of being, the origin of existence, and the attributes of the supernatural realm. Gülen insists that the faculty of reason cannot remain aloof from such questions; it was endowed so that man could come to know Creation and its Creator.

Rather than attempt an accommodation for reason within revelation, Gülen transforms their very definition. Reason is reconstructed along Islamic, *harfi* lines.

⁷¹ Ibid., pp. 30-31.

⁷² Hakan Yavuz and John Esposito, 'Introduction – Islam in Turkey: Retreat from the Secular Path?' in: *Turkish Islam and the Secular State*, p. xxx.

⁷³ Thomas Michel, 'Sufism and Modernity in the Thought of Fethullah Gülen' *The Muslim World*, 95 (2005), p. 354.

Revelation is reinterpreted according to natural theological and rationalist principles and obtains more resonance and coherence with modern historical circumstances and intellectual standards. Gülen insists the Qur'an is inherently rational; its teachings are confirmed by contemplation and reason, which is unsurprising given its conception in God's All-Encompassing Knowledge, the fount of human reason itself.⁷⁴

Gülen insists that his theology does not attempt to accommodate and apologize for modern scientific concepts, but instead promotes a properly Islamic perspective on the world. The true Islam, in Gülen's view, is capable of balancing reason and revelation, mysticism and orthodoxy, this-worldly activity and other-worldly reward, and doctrine and practice, for so long as these notions are understood within a properly Islamic framework. There is no inherent clash between reason and revelation, or science and Islam, if these categories are recognised within a *harfi* context.⁷⁵

Instead, modern science and Islam can exist in an interdependent, complementary relationship. The findings of science can deepen our understanding of the Qur'an and God's laws of the universe, which allows Muslims to order their lives in agreement with a more precise and informed interpretation of *sharī'a*.⁷⁶ The Qur'anic viewpoint, on the other hand, enriches science's ability to comprehend the true nature of the universe and its inhabitants. While natural science cannot explore metaphysical subjects such as the nature of miracles, the mysteries of creation and pre-eternity, or the reason for being and existence, revelation can be referred to for guidance in approaching these matters. Conversely, some Qur'anic verses and teachings require prior knowledge of natural phenomena and universal constants. Scientific knowledge enables Muslims to have a more

⁷⁴ Gülen, Advocate of Dialogue, p. 104.

⁷⁵ Fethullah Gülen, *Key Concepts in the Practice of Sufism*, Vol. 1 (Rutherford, NJ: The Fountain, 2004), p. 11.

⁷⁶ Ibid., p. 10.

complete understanding of the Qur'an and its corresponding text, the 'Book of the Universe.'

ISLAMIC COSMOLOGY AND THEOSOPHY

Gülen's cosmology begins before the origin of Creation. Before time and space, in the pre-eternal realm, there was only God and His Knowledge, within which subsisted all things in potentiality. At this moment there was unity amongst the multiplicity, when all things existed within the same realm as unclothed archetypes. This homology of circumstance and origin, from which the multiplicity emerged, represents Gülen's theological reconciliation of the unity of God and the multiplicity of creation.⁷⁷ As Gülen puts it, "[A]lthough there is an absolute, essential truth, its manifestations as sensible existence are numerous."⁷⁸ God then actualized these potentialities, clothing them in form and attributes, so that He could expose His artistry to Himself and His created beings.

As noted before, Gülen departs from *wahdat al-wujūd* by affirming the materiality of temporal entities. Gülen agrees with Sirhindī's concept that 'Everything is from Him.'⁷⁹ He writes: "All existence (creation) comes from Him and continuously flows like a river with uninterrupted manifestations."⁸⁰ Owing to the indicative nature of material entities, all things are contingent and dependent on Him, their existence being nominal and relative compared to God's absolute, necessary existence.⁸¹

Therefore, unlike Ibn al-'Arabī, who specified one, or potentially two,⁸² common states of existence for both the universe and Godhead, Gülen specifies five: (1) a thing's essential existence in God's knowledge, (2) its existence in the Divine Will as a

⁷⁷ Fethullah Gülen, *Key Concepts in the Practice of Sufism*, Vol. 2 (Somerset, NJ: The Light, 2004), p. 178.

⁷⁸ Ibid., p. 179.

⁷⁹ See above, p. 12.

⁸⁰ Gülen, *Sufism* 2:175.

⁸¹ Fethullah Gülen, *Questions this Modern Age puts to Islam* (London: Truestar, 1993), p.7.

⁸² See above, p. 21.

preconceived form, (3) its material existence in the temporal realm, (4) its existence in the memories of contingent beings, and amongst its biological offspring, and (5) its eternal existence in the afterlife.

Nature is to be examined and comprehended with an appeal to Islamic theosophy – deriving meaning and understanding about nature through knowledge of its divine origin and being. The artistry of God's Creation arouses the wonder and contemplation of created beings, who then reflect upon Him and submit before His Will and Power.⁸³ Beings return to God's Knowledge upon their death, allowing other existents to emerge in the world and please their Creator. The world is constantly replenished and made anew through God's Will and Power, which regenerate the temporal world by the processes of death and birth.⁸⁴ Gülen continues: "He has subjected the creation to constant flux and renewal through the cycle of death and life, to an incessant motion towards its final perfection."⁸⁵ The plenitude and diversity of the multiplicity is ensured by the activation, death, and return of the potentialities to God's Knowledge. This constant regeneration and turnover enables the full exposure of God's Knowledge in manifest reality, so that creation is constantly provided with sustenance for its reflection, astonishment, and contemplation.

Islam's relevance to both spiritual and material realms extends from its comprehensive expression of God's laws, which govern all aspects of Creation. God's laws are immanent in all creatures, particles, natural phenomena, and celestial bodies. Only through an understanding of these laws can scientists truly understand the nature of the universe. As Gülen writes, "Islam is the religion of the whole universe. That is, the entire universe obeys the laws laid down by God, so everything in the universe is

⁸³ Gülen, Lost Paradise, p. 15.

⁸⁴ Ibid.

⁸⁵ Fethullah Gülen, 'Question for Today,' *The Fountain*, 8 (1994).

'Muslim' and obeys God by submitting to his laws."⁸⁶ Because the absolute meaning of things exists solely within God's Knowledge, from which sprang the Qur'an, only the guidance and wisdom of revelation can aid science in its effort to ascertain knowledge of the objective world.

Another feature present in Gülen's Islamic metaphysics is the concept of 'love' as the organizing principle of Creation.⁸⁷ The emphasis on 'love' and 'compassion' signals a departure point in Gülen's theological perspective compared to that of Nursi. Gülen places 'love' – the love of God for man, and vice versa – at the centre of his metaphysics.⁸⁸ This is perhaps due to the influence of Muhammad Lutfi Efendi, himself deeply inspired by al-Rūmī, whose poetry is suffused with meditations on love. The ontological role of love in Creation is also present in Ibn al-'Arabī's mystical theology.⁸⁹

Nursi argued that God's reason for creating the universe was self-interested – God, Absolutely Beautiful and Perfect, wanted to create a reflection of Himself to appreciate His own Perfection and Beauty, and to create beings that would behold His Beauty.⁹⁰ Gülen discards this view, resuscitating the notion that God created the universe not out of self-regard, but because of His overwhelming Love and Compassion. Gülen writes:

Compassion is the beginning of being; without it everything is chaos. Everything has come into existence through compassion and by compassion it continues to exist in harmony. The earth was put in order by messages coming from the other side of the heavens. Everything from the macrocosm to the microcosm has achieved an extraordinary harmony thanks to compassion.⁹¹

Gülen sees love and compassion as the 'natural laws' governing the harmonious interrelatedness of the cosmos, providing sustenance to all creatures and particles in the universe, and compelling the supplication they return to their Creator.

⁸⁶ Gülen, 'Islam and Democracy,' p. 136.

⁸⁷ Gülen, *M.F. Gülen*, p. 97.

⁸⁸ Ibid.

⁸⁹ Fakhry, *Islamic Philosophy*, p. 282.

⁹⁰ See above, p. 45.

⁹¹ Gülen, *Lost Paradise*, p. 40.

Having established a rival metaphysical foundation for a new Islamised science, Gülen proceeds to undermine key methodological features of scientific materialism. Gülen first criticizes the ability of natural science to produce 'truth.' Science is unable to yield certainty in its propositions because of its flawed assumptions about the world. Its truth claims are merely hypotheses and theories, unable to reach the validity present in the proofs of the Qur'an.⁹² The Prophet Muhammad, by contrast, "made decisive predictions, most of which have already proven true, the rest waiting for their time to come true."⁹³

Scientists relying on their sensory faculties and reason cannot begin to approximate the profound truths attested to in the Qur'an, because the latter "originated in the Knowledge of the All-Knowing One."⁹⁴ The tools used by scientists to decipher the mysteries of the universe are subjective and relative, differing between individuals. Collectively, the scientific community cannot produce knowledge corresponding to objective reality; the collection of subjective impressions of the truth is not an accurate reflection of Creation. Therefore, "it is impossible to arrive at one certain conclusion by deductive or inductive or analytical reasoning from the data received from the senses."⁹⁵

Gülen uses familiar arguments to highlight the illogic of natural causation.⁹⁶ However, in addition to the classical Islamic argument militating against this view – that God can undo the harmonious, predictable forces of nature and create miraculous events by an act of will and power – Gülen borrows from Western philosophy to use the language and methods of natural science to undermine its claims. He cites Hume, who argues that an event recurring repeatedly in the past does not necessitate its repetition in the future given

⁹² Gülen, 'Science and Religion,' p. 32.

⁹³ Ibid.

⁹⁴ Ibid.

⁹⁵ Ibid., pp. 38-39.

⁹⁶ We have already seen in chapters 1 and 3 how natural causation comes into conflict with the notion of God's All-Encompassing Power and Will.

similar circumstances.⁹⁷ Gülen expands upon Hume's argument to say that the forces of nature cannot be understood by reason alone, and must be understood within a larger metaphysical context.

Gülen also seizes upon the existence of two competing interpretations of the universe – Isaac Newton's and Einstein's – to propose the general lack of validity and reliability in the scientific method. Gülen cites Karl Popper, who argues that if Newton's and Einstein's viewpoints contradict each other and cannot both be simultaneously true, then they can also both be incorrect. If this is the case, then science can produce only doubt and uncertainty, rather than empirical truth.⁹⁸

Gülen adds that 'scientific truth' is produced in the mind, deduced from sensory observation, or induced from speculative hypotheses. The extent to which this interpretation of the 'truth' corresponds to objective reality cannot be determined. Natural laws, causation, and the mechanical nature of the universe are cognitive representations of observable phenomena, while the immaterial, metaphysical realm is beheld with agnosticism or wilful hostility.

Gülen is effective in seizing upon the statements of philosophers critical of science, and the developments in modern science that contradict earlier discoveries or find agreement with the Islamic viewpoint. He is far more effective in this regard than was Nursi, who betrayed an unsophisticated, reductive understanding of natural science and materialism that was readily associated with Western imperialism and atheism. Gülen seems more willing to embrace the diversity of opinion in European thought, if only to exploit those elements in agreement with his worldview.

Surveying modern science, Gülen discovers that the bold confidence of early exponents of positivism and materialism, who predicted the progressive accumulation of

⁹⁷ Gülen, 'Science and Religion,' p. 39.

⁹⁸ Ibid.

objective truth by science, was premature. Materialists were once confident in their ability to apprehend the truths of the universe through the discovery of 'natural laws,' faith in the law of causation, and the tools of reason and logic. But recent developments in modern science have led to the conclusion that the universe is too complicated to be understood through simple equations and laws. Modern physics pioneered in the twentieth century, including quantum mechanics and string theory, has unravelled the methodological and theoretical foundations of Newtonian physics and repudiated the mechanical interpretation of the universe. Gülen relates the findings of modern physicists, and reveals its coherence with the Islamic scientific worldview:

Experts in atomic physics say that no one can be sure that the universe will be in the same state as it is now a moment from now. Although the universe functions according to certain laws, these laws are not absolute and, more interestingly, have no real or material existence.⁹⁹

Modern physics repudiates the notion that observable natural laws govern interactions between particles at the macro- and micro-level, and invalidates the predictability of the law of causation by exposing the inherently unpredictable nature of subatomic particles. *REPUDIATION OF EVOLUTIONARY THEORY*

One of the novel critiques Gülen levels against modern science is a systematic refutation of evolution. Darwinism has emerged as one of the mainstays of materialist ideology, according to Gülen, because of its dual capacity to directly challenge the stories of origination propounded by revelation, and reduce all living organisms to their material natures, denying any role for divine agency.

Darwinism has come to represent scientific materialism's clearest attempt to pronounce a coherent, systematic theory of origination. Darwinism provides a comprehensive explanation for the features and attributes of living organisms, from their

⁹⁹ Fethullah Gülen, 'The Relationship of Islam and Science and the Concept of Science,' *The Fountain*, 28 (1999).

emergence on Earth to their corruption and eventual death. Evolutionary theory promotes the roles of 'chance,' 'coincidence,' random genetic mutation, and 'natural selection' instead of divine power and will to describe the functioning of the created world.

Gülen's critique of Darwinism is scientific and methodological, rather than ethical or religious. He rejects it on the grounds that it is bad science, unable to meet the standards of its intellectual discipline. Gülen first points out that evolutionary theory is not supported by demonstrable evidence, and is thus based on conjecture and speculation. The fossil record is incomplete and does not show evidence of evolution between species. The existence of 'transitional organisms' – living beings whose genetic mutations heralded evolutionary transformation – has never been convincingly established. Even assuming such organisms are possible, it is unlikely they could have ever survived long enough to procreate and spark a general evolutionary shift within a species. Gülen cites "recent work in genetics and biochemistry" which "prove that mutations are predominantly harmful, even lethal, and the cause of many physiological disorders."¹⁰⁰

Gülen also criticises the scope of evolutionary theory, which proposes not just evolution within species, but also evolution from one species to entirely new ones. Instead, Gülen remains faithful to the Qur'anic viewpoint on the possibility of inter-species adaptive evolution and rejects it completely. He does, however, consider the possibility of intra-species variation, which can be reconciled with revelation. Modifications within species over time are consonant with the notion of an immanent, constantly creative, regenerating God, who "intervenes in the world to make it so wonderfully abundant, prolific, diverse and, within stable forms, so marvellously adaptive and versatile in response to local environmental possibilities."¹⁰¹ Species, as exhibits of an endlessly creative Maker, may change their attributes due to God-willed changes in environmental

 ¹⁰⁰ Fethullah Gülen, 'Why Darwinism Remains Popular,' *The Fountain*, 35 (2001).
 ¹⁰¹ Ibid.

circumstances, but they cannot migrate to entirely new biological classifications, with completely new forms.

Gülen demonstrates his claim by pointing to numerous organisms, like bacteria, cockroaches, fruit flies, arthropoda, sponges, sea crabs, snakes, lizards, mice, bees, and humans, all of which he claims have remained nearly unchanged for millions of years.¹⁰² The fossil record, for instance, shows that bees have remained the same for millions of years. Prehistoric bees "produced honey and built honeycombs just as they do today, and used the same geometrical measures. So, for that whole expanse of time neither the bee's brain and physiological structure nor the way it produces honey have changed."¹⁰³

Despite these scientific shortcomings – the lack of demonstrable evidence, and the mounting evidence challenging the evolutionary theory – the edifice of Darwinism remains. Gülen contends that the reason for Darwinism's stubborn resistance to scientific challenges is the materialists' reluctance to accept the only viable alternative to evolutionary theory – that an intelligent Maker created and designed life on Earth. This, he suggests, would represent a devastating concession to the field of religious knowledge. But the materialists' intransigence places them in an uncomfortable and intellectually dishonest position:

The reason for Darwinism's continuing tyranny is the fear that acknowledging the Creator will collapse the edifice of autonomous science and autonomous human reason. Scientists might believe, but science must be atheistic. Ironically, Darwinists (and materialists generally) defy or ignore facts, and deny or belittle logic and reason to preserve the illusion of independent human reason."¹⁰⁴

Gülen's proposed alternative to Darwinism is intelligent design theory, which is a reformulation of the traditional Islamic theory of origination. According to Islamic intelligent design proponents, God created all life forms in His knowledge before Creation,

¹⁰² Ibid.

¹⁰³ Ibid.

¹⁰⁴ Ibid.

and then transcribed them into contingent reality at the beginning of time. They have persisted in this state until the present day, except for those times when God, according to His inscrutable will, has decided to change their attributes and forms to conform to divine modifications in nature.

AGAINST CAUSATION

Gülen advances a classical Islamic argument against the doctrine of natural causation, refuting its supposed autonomous functioning in the universe by promoting the notion of a sovereign, all-powerful deity to whom no partners or secondary causes can be attributed. Natural causation is inherently irreconcilable with Islamic orthodoxy because, if taken to its logical endpoint, it posits an eternal regression of causes that repudiates the notion of a First Cause and gives sustenance to the Islamic Neo-Platonist notion of the eternity of matter. The doctrine of the eternity of matter, and the notion that chance is the driving force behind origination and natural phenomena, rather than divine intelligence and will, is logically incoherent, according to Gülen. "When there is in the universe such abundant evidence of purposive arrangement, organization and harmony, it is irrational to speak of chance or coincidence as its cause."¹⁰⁵

It is instructive to note Gülen's choice of language. Like Ghazālī before him, Gülen borrows the conceptual vocabulary of the materialists to expose their logical fallacies and incoherent methods. Gülen submits the reasoning of materialists not only to the benchmark of revelation, but also to their own standards of logic, rationality, and demonstrable proof. He exposes the materialists' inability to substantiate their assumptions, like the law of causation, the role of chance in natural phenomena, and the correspondence between the comprehension of the knowing subject and objective reality.

¹⁰⁵ Fethullah Gülen, 'Question for Today,' *The Fountain*, 13 (1996).

Gülen proves further that there is an absurd imbalance in attributes between apparent causes and their effects. This necessarily points to a profound intelligence and intention underwriting the apparent causal link. His argument represents an innovative contribution to the classical Islamic critique of causation, a line of reasoning found lacking in the writings of the medieval mystics and theologians covered in this thesis. Gülen forcefully argues:

For a single effect to come into existence an infinite number of causes must come together and collaborate in a way so co-ordinated and reliable we call their collective operation 'natural laws'...So many deaf, blind, ignorant, unconscious causes and laws cannot come together by themselves into the subtle and complex arrangement we recognize as a living organism.¹⁰⁶

There is no logical correspondence or proportionality between causes and their effects. Effects are artful, useful, and efficient. Their existence would be considered miraculous if not for science's irrational faith in the law of causation and its attribution of powers, meaning, and intelligence to impotent, lifeless 'causes.' Gülen succinctly writes: "It is evident that something cannot impart to others what it does not possess."¹⁰⁷

Gülen's view of the Godhead includes His absolute Self-Subsistence and Unity, attributes necessarily at odds with the law of causation. Gülen does admit to the *apparent* existence of causes and effects, but ascribes contingent reality, or 'relative truth,' to these occurrences. Causes possess no objective reality; what is perceived by subjective beings as a causal chain is merely an interpretation of objective reality that does not correspond with the Qur'anic viewpoint. As Gülen writes, "Causality is a veil God Almighty has spread over the rapid flux of existence so that we could plan our lives to some degree."¹⁰⁸

¹⁰⁶ Ibid.

¹⁰⁷ Ibid.

¹⁰⁸ Gülen, 'Science and Religion,' p. 49.

Relative truths, or 'veils,' exist only in the created world and in our myopic cognitive processes.¹⁰⁹ The truths pronounced by materialist science belong to this category, because they only recognize the contingent attributes of things, and not their fixed, immovable reality as signs of God. Relative truths are eminently changeable, beholden to the whims of God and His powers. Absolute truths, on the other hand, are irrevocable and cannot be uncovered by the rationalist methods of observation and reasoning. Ultimately, then, Gülen will agree that fire '*appears*' to cause burning in cotton. The causal link is duly apparent, but this is a relative truth, not an absolute one.

The Islamo-Ethical Critique of Science

Despite his critique of scientific methodology, Gülen remains convinced that science has a valuable role to play in society. His quarrel is not with science per se but with a particular interpretation of science that undermines the role of religion. He criticises those individual scientists who manipulate their knowledge to produce technologies that bring ruin to society and the environment. He advances an ethical and utilitarian argument against science, challenging its historical record of accomplishments, and advocating the installation of proper moral boundaries and safeguards to check the authority of the scientific community.

Gülen advocates the development of a socially responsible science with organic links to the social, cultural, and normative environment from which it emerges, and the raising of scientists motivated by "higher human values."¹¹⁰ Gülen opposes the position of some Muslims who reject science and its technological fruits altogether, writing, "it is not right to condemn science and technology outright, and adopt an almost purely idealistic attitude."¹¹¹ Instead, it is proper to adopt the correctly Islamic perspective on science,

¹⁰⁹ For Nursi's similar description of 'veils' in Nature, see above, pp. 47-48.

¹¹⁰ Gülen, 'Islam and Science.'

¹¹¹ Gülen, 'Science and Religion,' p. 41.

which charts a middle way between an uncritical acceptance of science and a reflexive reaction against it. Islam, according to Gülen, "neither rejects nor condemns the modern scientific approach, nor does it 'deify' it."¹¹²

Instead, Islam insists that science be subservient to the interests of the community and the greater good: "Science and technology are desirable as long as they serve human values, bring peace and happiness, contribute to international harmony, and help solve humanity's material and spiritual problems. If they move away from these goals and serve the interests of a few people, the world is better off without them."¹¹³ Gülen distinguishes between science propelled by the narrow interests of irresponsible, amoral individuals, and science attuned to universal ethical teachings and the public interest.

ISLAMISED SCIENCE – SCIENCE IN THE SERVICE OF ISLAM

Gülen promotes the desirability of scientific inquiry in Muslim society, and prescribes a programme for an Islamised scientific viewpoint in harmony with revelation. Science, according to Gülen, is a field of inquiry that allows men to fulfil their roles as God's vice-regents (*khalīfa*) on Earth.¹¹⁴ The natural world is to be observed, studied, and understood so that man can exploit it for the benefit of society. Science is the means by which man relates to and utilizes nature. Islamised science has a practical, utilitarian component, then, providing the stewards of God with the instruments necessary to comprehend and regulate their natural environments.

There is also a spiritual component to Gülen's scientific vision. The true science "consists in directing the intelligence towards eternity without expecting any material gain and making tireless and detailed study of existence in order to discover the absolute truth

¹¹² Ibid., p. 40.

¹¹³ Fethullah Gülen, 'Humanity, Science, and Globalization,' *The Fountain*, 41 (2003).

¹¹⁴ Gülen, Lost Paradise, p. 75.

underlying it, and to follow the methods required to teach this aim."¹¹⁵ An understanding of Creation is necessary for the correct fulfilment of religious obligations, and to correctly interpret and enforce the statutes of *sharī'a*. Science is an important interpretative tool that deciphers the esoteric mysteries of the Book of the Universe – "the large, created Qur'an"¹¹⁶ – and yields knowledge of God's laws and Creation.

Science and revelation can exist in harmony if the former accepts the metaphysical principles pronounced by the latter. Science must recognize that both the object of knowledge and the knowing subject are derivative and contingent entities created by God. Acknowledging this *harfi* metaphysical constant enables science and Islam to be otherwise reconcilable. As Gülen summarizes, "The Qur'an and Hadith are true and absolute. Science and scientific facts are true as long as they are in agreement with the Qur'an and Hadith, and are false inasmuch as they differ or lead away from the truth of Qur'an and Hadith."¹¹⁷ In Gülen's Islamised science, coherence with revelation is the sole arbiter of truth claims advanced by scientific inquiry, not the strength of the scientist's methodology, or the integrity of his data and conclusions and its seeming correspondence to objective reality. The Qur'an, as the index of Creation and divine knowledge, is the store of objective reality – scientific findings must resonate with its verses.

The Qur'An As 'Mürşit' to Scientists

Gülen affirms the supremacy of religious truth to scientific truth.¹¹⁸ The Qur'an is the only source of valid, indubitable knowledge: "There is no other source of knowledge that is not mistaken or not entrusted to uncertainty or doubt other than this miraculous Speech from God, the All-Knowing of the Unseen."¹¹⁹ Science, which observes partial

¹¹⁵ Gülen, 'Science and Religion,' p. 43.

¹¹⁶ Gülen, Advocate of Dialogue, p. 317.

¹¹⁷ Gülen, 'Science and Religion,' p. 62.

¹¹⁸ We have already seen Sirhindī express this belief; see above, p. 11.

¹¹⁹ Fethullah Gülen, 'On the Holy Qur'an and Its Interpretation,' *The Fountain*, 55 (2006).

truths about the world and not its essential, divine nature, can never be used to judge the veracity of revelation. Scientific theories have been proven wrong in the past; relying upon them to judge revelation, which has never shown inconsistencies or fallacies, is illogical and unconvincing. Such a manoeuvre "implies that we ourselves have doubts about the truths of Islam and are, so to speak, in need of science."¹²⁰

Scientific facts can be used in religious commentaries to reinforce the logical reasoning and demonstrable proofs in the Qur'an. They should be used to reach those minds made numb to revelation, responsive only to the conceptual vocabulary and rhetoric of atheists and materialists – in Gülen's parlance, the "sleeping or confused minds."¹²¹ Gülen contends: "Muslims should be well-versed in scientific facts to refute the claims of materialists and atheists."¹²²

This is a departure from Nursi, for whom it was enough to recertify the truths of the Qur'an with reason and logic; this alone would guarantee a revival of faith amongst unbelievers. For Gülen, this is insufficient. Materialism and unbelief persist despite Nursi's attempt to rationally demonstrate the truths of the Qur'an. Muslims cannot merely retreat to the Qur'an and refortify its foundations and defences. Nor should Muslims cede scientific discourse to the materialists. Instead, believers should infiltrate and reform the scientific establishment from within, forcing scientific methodology and theories to cohere with revelation.¹²³

The Qur'an is to be used as a spiritual guide (*mürşit*) and store of wisdom for scientists. Mustafa Gokcek attests to Gülen's emphasis on the foundational text of Islam:

One characteristic of Gülen's Sufism is the emphasis on following the Quran and the Sunna. In each one of his articles he presents Quranic verses and Hadiths relevant to the topic to support his argument. He constantly stresses the

¹²⁰ Gülen, 'Science and Religion,' p. 61.

¹²¹ Gülen, *Questions and Answers*, p. 101.

¹²² Ibid., p. 100.

¹²³ Bakar, 'Gülen on Religion and Science,' p. 369.

significance of taking the Quran and Sunna as the only criterion in deciding the reliability of any argument.¹²⁴

The significance of the Qur'an derives in part because "all sciences or branches of knowledge are to be found in the Qur'an."¹²⁵ The Qur'an originates from God's knowledge, which has predetermined and prefigured all things knowable in the universe. As Gülen argues, "Above all, the Qur'an has come from an all-encompassing Knowledge; it contains and explains the meaning and content of human and non-human existence, of humankind, nature, and all the worlds; it is both their language and interpreter of their purpose of creation."¹²⁶

Though the number of verses in the Qur'an may be finite, its truths and meanings, embedded within multiple layers of esoteric obfuscation, are as infinite as the store of God's Knowledge. The actualities and potentialities of the world exist in the Qur'an, Gülen insists, but their presence is subtle, "in the form of seeds or nuclei or summaries or as principles or signs, and they are found either explicitly or implicitly, or allusively, or vaguely, or suggestively."¹²⁷

This is not to say the Qur'an is a scientific textbook. It does not present scientific information in an explicit fashion, and does not dwell on scientific matters disproportionate to their relevance to more significant truths of the universe, namely those regarding God's relationship with man.¹²⁸ Gülen is wary of the tendency of many twentieth century Islamic intellectuals to focus on Qur'anic references to science and transform revelation into a scientific tract. He lectures that "we must not show haste in

¹²⁴ Gokcek, 'Gülen and Sufism.'

¹²⁵ Gülen, 'Science and Religion,' p. 62.

¹²⁶ Gülen, 'Holy Qur'an and Its Interpretation.'

¹²⁷ Gülen, 'Science and Religion,' p. 35.

¹²⁸ Ibid., p. 51.

trying to find correspondence between some verses of the Qur'an and every new development in science and technology."¹²⁹

Limiting one's interpretation of the Qur'an to the scientific dimension can lead one astray from more fruitful or relevant textual analyses. Gülen stresses that the Qur'an is greater than a mere collection of prophesised scientific developments. He attempts to rescue the transcendent beauty and divine character of the Qur'an from those who would attempt to 'lower' it to the level of mundane, materialist science.

The Qur'an's references to the exact nature of the physical and metaphysical worlds are shrouded in esoteric language to compel man to use his God-given faculties of reason and intelligence, and to preserve the world as a trial that examines the faith of man.¹³⁰ Gülen writes: "Humanity is placed in creation to be tested, purified, and prepared for eternal bliss in Paradise."¹³¹ If the immaterial, absolute truths of the universe and its Creator had been revealed in the Qur'an, then 'faith' and the quest for salvation would lose its significance. The absolute truths of the universe are hidden behind veils to maintain the essence of religious life as "a test and trial offered by God so that in the arena of competition elevated spirits and base ones may be distinguished."¹³²

The Qur'an is not explicit about scientific developments and the exact nature of the universe because then "it would have been meaningless that man is created as the best pattern of creation endowed with many intellectual faculties."¹³³ Man is exhorted to contemplate the universe. The Qur'anic viewpoint should steer the believer in his examination of the universe, and produce within him a genuine desire to attain knowledge of God. Gülen adds: "Studying existence as if it were a book to be reflected upon can

¹²⁹ Ibid., p. 49.

¹³⁰ The world as an arena of trial and examination for human souls is discussed in the *Risale-i Nur*; see above, p. 47.

¹³¹ Gülen, *Modern Age*, p. 16.

¹³² Gülen, 'Science and Religion,' p. 36.

¹³³ Ibid., p. 38.

engender the desired results and provide ceaseless information and inspiration, but only if one admits that all things and their attributes are created by God."¹³⁴

Gülen asserts that the Qur'an contains demonstrable proof of its divine authorship by highlighting references to scientific developments discovered after its revelation. Gülen lists many examples of the Qur'an's foreknowledge of modern science, for instance its detailed description of the formation¹³⁵ and development¹³⁶ of human embryos,¹³⁷ and a theory of origination that posits the beginning of life from the primordial mineral-rich waters of the young Earth in a single miracle of creation.¹³⁸ Gülen adds: "Everything in the universe is an integral part of that miracle and bears signs that prove it so. Everything is interconnected."¹³⁹

The unified, interrelated fabric of creation is exhibited in sura 17:44: "The seven heavens, the earth, and all who dwell in them give glory to Him. All creatures celebrate His praises. Yet you cannot understand their praises. Benignant is He and forgiving."¹⁴⁰ Gülen derives his reconciliation of the multiplicity of particulars with God's Unity from this verse, relying upon Qur'anic reasoning and demonstration rather than Ibn al-'Arabī's speculative theologising.

¹³⁴ Gülen, *Sufism*, 1:11.

¹³⁵ Qur'an 22:5 – "We have created you from dust, then from a drop of seed, then from a clot, then from a little lump of flesh shapely and shapeless, that We may make (it) clear of you. And We cause what We will to remain in the wombs for an appointed time, and afterward We bring you forth as infants, then (give you growth) that ye attain your full strength..." Pickthall, Koran.

¹³⁶ Qur'an 39:6 – "He created you from one being, then from that (being) He made its mate; and He hath provided for you of cattle eight kinds. He created you in the wombs of your mothers, creation after creation, in a threefold gloom." Pickthall, Koran.
¹³⁷ Cited in Gülen, 'Islam and Democracy,' p. 136.

¹³⁸ Qur'an 21:30 – "Have not those who disbelieve known that the heavens and the earth were of one piece, then We parted them, and We made every living thing of water? Will they not then believe?" Pickthall, Koran. Cited in Gülen, 'Science and Religion,' p. 56. ¹³⁹ Gülen, 'Science and Religion,' p. 56.

¹⁴⁰ N.J. Dawood, trans., *The Koran* (London: Penguin, 1997). Cited in Gülen, 'Science and Religion, p. 56.

Hadith literature is another source of scientific prophecy. The Prophet Muhammad prefigured many technologies and sciences, motivating believers to fulfil his prophecy. As Gülen puts it, "God Almighty encourages mankind to strive in the development of sciences by presenting... the miracles of the earlier prophets to their attention and thereby showing the limits to which they should aspire."¹⁴¹ In one such instance, as related by the Hadith author Bukhārī, the Prophet declared: "God did not send down an illness for which He did not send a cure."¹⁴² By doing so, the Prophet provided a powerful inducement to scientists researching and developing medicines for diseases. In all, Gülen interprets the Prophetic miracles of the Qur'an and Hadith as stories motivating development in science and technology.

The Qur'an contains all sciences and branches of knowledge, in addition to the universal language that enables man to overcome his inability to wrest empirical truth from his subjective perspective on the objective world. As Gülen argues, Islam possesses the doctrine of universality¹⁴³ that transcends the objective alienation separating all beings: "In Islam, God, nature, and humanity are neither remote from each other nor are they alien to each other... This leads humankind to look upon everything as belonging to the same Lord, to whom it itself belongs, so that it regards nothing in the universe as alien."¹⁴⁴ Islam enables man to study and know the things created by God by revealing the language common to them all – that of supplication and constantly indicating their Creator. GÜLEN'S HIERARCHY OF KNOWLEDGE – FROM 'ILM TO MA'RIFA

Casting its gaze of inquiry beyond the natural world, Islamised science is ultimately interested in obtaining knowledge of God's nature. Gülen constructs a hierarchy

¹⁴¹ Fethullah Gülen, *Prophet Muhammad: The Infinite Light* (London: Truestar, 1995), p. 83.

¹⁴² Ibid., p. 82

¹⁴³ We first came across the doctrine of universality in the thought of Ibn al-'Arabī, see above p. 20. For Nursi's conception of universality, see p. 50. ¹⁴⁴ Gülen, 'Islam and Democracy,' p. 136.

of knowledge types that culminates in experiential awareness of God. The lowest rung on Gülen's ladder of knowledge is information about the profane world collected with the sensory faculties, designated as '*ilm*.¹⁴⁵

Information about the physical world is obtained with the senses and organized by the faculties of the mind. The senses must be guided by the 'eye of the heart'¹⁴⁶ in order to observe things in their *harfi* state. Incorporating the viewpoint of the 'eye of the heart' means "using insight to see in Divine acts the Divine Names that give existence to them, and to become aware, in the manifestation of the Names, of the All-Holy One Who is called by those Names."¹⁴⁷ To do so requires a mediated form of 'observation' – '*mushahada*' – compatible with Islamic principles.¹⁴⁸ With '*mushahada*,' Islamic scientists train their sensory and rational faculties to presume that things subsist in an Islamic metaphysical framework and possess an indicative ontology. These presuppositions ensure that the results of scientific observation do not conflict with revelation.

The knowledge obtained from revelation, and information inferred about the metaphysical realm, can only be discerned with 'the heart,' or the spiritual senses. While science privileges knowledge obtained through observation and rational inquiry, believers on the spiritual path to God must abandon these exterior forms of knowledge in order to gain mystical wisdom, or '*hikma*.'¹⁴⁹ Contemplation of the exterior world is not an end in itself, but must compel the believer to seek closeness with God. On the foundation of

¹⁴⁵ Gülen, *Sufism*, 2:2.

¹⁴⁶ Nursi advanced a similar view on the 'heart,' see above, p. 44. Ibn al-'Arabī also spoke of the need to temper reason and the senses with the heart's 'eye': "True knowledge depends upon seeing all things with both the eye of imagination and the eye of reason." It is essential to "see with both eyes, realize perfect knowledge through the heart (*qalb*), which 'fluctuates' (*qalb*) between reason and unveiling and sees God in terms of both *tashbīh* and *tanzīh*." Chittick, 'Ibn Arabi,' pp. 502-503.

¹⁴⁷ Gülen, *Sufism*, 2:112.

¹⁴⁸ Ibid.

¹⁴⁹ Ibid., p. 26.

'certain belief' (*iman-i tahkiki*),¹⁵⁰ Muslims must progress on the spiritual path to apprehend the more profound truths of the universe. *Hikma*, similar to Gülen's notion of Islamic reasoning, denotes the capacity to observe and comprehend existence for its indicative nature. In Gülen's world, wisdom is:

Seeing everything in the light of the Divine way, which is responsible for the perfect accord, order, and balance in the universe, where everything is in its exact place, the observation of this same order and the balance in our lives, and the development of sciences that study the earth and the sky to maintain the balance in them.¹⁵¹

Apprehending the world through the prism of *hikma* allows the observer to draw links between the physical and metaphysical dimensions. Ignorance of the latter realm, the fault of materialist science, yields partial truths stripped from their metaphysical context. A believer swayed by *hikma* possesses a thoroughly 'Muslim' mind – sensory and rational faculties that have appropriately submitted to the *harfi* reality of the world.

Further still up Gülen's hierarchy of knowledge is '*ma'rifa*,' or spiritual knowledge of God, the highest station in Gülen's epistemological ladder. It represents the full spiritual internalisation of the *harfi* interpretation of the universe. Unlike '*ilm*, which is acquired from outside the individual, *ma'rifa* is a state of awareness originating from within.¹⁵² *Ma'rifa* proceeds from the correct *harfi* perception of self, and develops into a proper understanding of one's heart in relation to its owner and provider, God. Inner contemplation ultimately leads to a state of nearness to God, to the extent that the profane world becomes eclipsed by His All-Encompassing Light.¹⁵³ Struck by the knowledge of God, the believer apprehends the complete meaning of *harfi* ontology in its spiritual and intellectual dimensions, unable to view corporeality as anything other than a shadow of God's Essence and being. Gülen attempts a description of this non-rational state: "Other

¹⁵⁰ Nursi's usage of *iman-i tahkiki* was described above; see p. 40.

¹⁵¹ Gülen, *Sufism*, 2:29.

¹⁵² Ibid., p. 135.

¹⁵³ Ibid., p. 136.

beings have a relative existence when compared with Him, and other acts are also relative. Whatever takes place in the cycle of causality is of a relative nature.¹⁵⁴ In other words, there is none other than what comes from Him, nothing other than what is reflected from His Essence and being.

ISLAMIC HUMANISM – HOMOCENTRISM AS ORGANIZING PRINCIPLE OF CREATION

Gülen applies this hierarchy of knowledge to his conception of Islamic humanism. He develops this doctrine from the humanistic thought of Nursi and Ibn al-'Arabī. For them, as for Gülen, man is the most exalted of created beings, the microcosm of the entire universe, and the store of all ninety-nine Names and Attributes of God.¹⁵⁵ The world was created for humans to rule over as *khalīfa*, and for them in turn to exalt God for His provenance and bounty. Indeed, as Gülen notes, "Such an intense relationship is felt between humanity and God that the purpose of all of creation can be nothing other than humankind and their servanthood to God."¹⁵⁶

Humans figure centrally in Gülen's cosmology and ontology of the universe. He argues that just as there can be no Creation without a Creator, there can be no meaning found in Creation without human striving in the name of God. As Gülen writes, "Human beings are at the center of creation; all other things, living or non-living, compose concentric circles around them. It could be said that the Exalted Creator has oriented every creature toward human beings."¹⁵⁷ Humans must be grateful to their Creator for providing them such a lofty position, alone amongst the multiplicity of Creation.

The faculty of reason inherent in humans enables them to read the 'Book of the Universe' and come to know God through His signs. This is not only a privilege bestowed upon men by God, but an intelligent decision intended to direct men's efforts towards their

¹⁵⁴ Ibid., p. 138.

¹⁵⁵ Gülen, Modern Age, p. 164.

¹⁵⁶ Fethullah Gülen, 'The Inner Profundity of Humankind,' *The Fountain*, 52 (2005).

¹⁵⁷ Ibid.

Creator, who then blesses and saves them, rewarding them with eternal life. Men's discovery of and submission to God represents the fulfilment of their obligations towards Him, and the vindication of the faculties of heart and reason inserted into men for this very purpose. Gülen observes:

Humans are the ones who have been granted the privilege to rule and make use of creation; and humans are the ones who reveal all the aspects of the truth behind natural phenomena, offering these to the Creator. Humans sense and discern the relationship between humanity, the universe, and the Creator—a relationship which leads them to knowledge.¹⁵⁸

The spiritual, rational, and sensory faculties do not exist in vain. They are intended to reveal the secrets of the universe and unveil the existence of God, elevating profane *'ilm* to divine *ma'rifa*. As the Qur'an enquires, "Does man think that he will be left aimless?"¹⁵⁹

But humans cannot approach higher truths using these faculties alone. The capacity to attain knowledge of God is not entirely self-existent within humans. The purpose of revelation and prophecy is to guide man to the truth, to provide signposts and wise paths to the attainment of salvation and divine knowledge. Gülen thus incorporates space for revelation and prophecy within his narrative of human development and ontology. The prophets and holy books have been sent to show humans how to properly serve and praise God. Independent of divine guidance, humans cannot conceive or comprehend Him, and cannot attempt to induce or infer, through observation or speculation, the appropriate manner in which to worship Him.¹⁶⁰

The New Man

The 'new man' (a term Gülen uses synonymously with *insan-i kâmil*) is the person who combines the unchanging values of Islam with the spirit of scientific inquiry, and the spiritual otherworldliness of faith with the worldly attention to natural phenomena:

¹⁵⁸ Ibid.

¹⁵⁹ Qur'an 75:36.

¹⁶⁰ Gülen, Prophet Muhammad, p. 34.

The new man will unite in his character profound spirituality, wide knowledge, sound thinking, a scientific temperament, and wise activism. Never content with what he already knows, he will continuously increase in knowledge – knowledge of the self, knowledge of nature, and knowledge of God.¹⁶¹

The 'new man' displays all ninety-nine Names of which he is a reflection, and effortlessly combines the metaphysical and material realms of existence.¹⁶² He joins "the knowledge of Divine Revelation, scientific and theological, or intellectual and spiritual proofs, and a knowledge of God in certain degrees."¹⁶³ The 'new man' follows the example of the Prophet Muhammad, the quintessential *insan-i kâmil*.

Together, prophecy, revelation, and the faculties of man converge in Gülen's humanism and metaphysical ontology to provide a cosmic pattern of behaviour for the 'perfect human'': "The Qur'an and Sunna (Revelation) are the foundation, reasoning and logic or intellectual activities are the means with which one approaches the goal, and a knowledge of God and wisdom are the fruit of walking straightforwardly on the way."¹⁶⁴ *CONCLUSION*

In tracing the genealogy of the intellectual influences on Gülen, the main guiding principles, starting assumptions and interpretative framework of his theology were identified and distilled. The historical and theological origins of his thought were then determined through a comparison of his ideas with the arguments of his medieval and modern religious predecessors. The extent to which Gülen's theological project relied on the principles and framework of earlier reformers was then established. By identifying Gülen's debt to the Islamic tradition and prior Muslim intellectuals, and his essential points of departure from them, Gülen's unique contributions to Islamic modernist thought were deduced.

¹⁶¹ Gülen, *Lost Paradise*, pp. 103-104.

¹⁶² Gülen, *Sufism*, 2:291.

¹⁶³ Ibid., p. 301.

¹⁶⁴ Ibid., p. 302.

Gülen's interpretative paradigm does not represent a 'middle way' between the exigencies of modernity and the pronouncements of revelation, as Ahmet Kuru argues.¹⁶⁵ Gülen critically redefines reason and revelation in order to create a balanced, Islamic alternative for each. Reason is reinterpreted in light of Islamic tradition, and revelation is revivified with rationalist principles and scientific evidence. After this process, the very terms of the initial debate can no longer be perceived as dichotomous. Science is rescued from its ethical and metaphysical agnosticism, and revelation is repositioned to resonate with the findings of science.

¹⁶⁵ Kuru, 'Middle Way,' p. 117.

Conclusion When the Qur'an Holds the Time Bomb

Fethullah Gülen does not 'reconcile' natural science and Islam, nor does he produce a synthesis of materialist values and Islamic tradition in the mould of Abdullah Cevdet¹ or the Old Said.² Instead, he re-evaluates reason and revelation and transforms them into interconnected, mutually constructive elements. Together they constitute a unified discourse on natural phenomena and metaphysics. Enlightenment reason becomes 'Islamic reasoning,' grafted with the presuppositions of the Qur'anic *harfi* metaphysical viewpoint. The Qur'an, on the other hand, becomes a corresponding text to the 'Book of the Universe,' an interpretative guide necessary for the proper study of nature. This re-conceptualizing of terms allows for reason and revelation to be understood as two complementary tools in Islamised science.

Gülen's foundational philosophy of science, incorporating the principles of Islamic metaphysics – notions of Godhead, immanence, Unity and Multiplicity, regeneration, creation *ex nihilo*, divine causality, indicative (*harfi*) ontology – plays a crucial role in transforming reason and revelation into reflexive, interpenetrative concepts. Islamised science proceeds from the organizing concept of indicative ontology, and the methodological tools of Islamic reasoning, *harfi* self-perception, divine causality, and the common language of Islamic universality. Properly oriented towards the divine origin and nature of the physical realm, and correctly situated within a metaphysical framework, Islamic scientists can decipher the profound truths and meanings hidden within corporeality. Islamised science promises to bridge the contrived intellectual schism between natural and religious sciences, vindicate the intended meaning of the Qur'an as a

¹ See above, pp. 26-29.

² Old Said's synthesis of modern science and Islam was described above, see pp. 38-39.

corresponding text to manifest reality, and exploit human cognitive and sensory faculties in the manner initially desired by the Creator.

The effort to transform scientific materialism into a discipline more amenable to revelation is not the responsibility of Muslims alone. Modern scientists themselves are inadvertently exposing the singularity in truth present in the Qur'an and the 'Book of the Universe.' Discoveries in quantum mechanics, string theory, relativity theory, and theoretical physics recall the cosmological models posited by Islamic philosophers and mystics in the medieval era, and in the Qur'an before them. Western scientists are approaching the realisation that there is a single, unified meaning to the universe, and something unaccountable and mysterious in its execution. As Gülen would have it, they are finally nearing the Islamic conception of science. That they are doing so from an initially materialist or agnostic position only proves further the unyielding, overwhelming truth of the Qur'an.

HOW SCIENTIFIC IS ISLAMISED SCIENCE?

Gülen does not say that natural science can be accepted into the fold of Islamic knowledge. Instead, he asserts that science must abandon its materialist pretences, accept the metaphysical principles of Islam, and ensure that its subsequent findings cohere with the Qur'an. Reason is not reconciled with revelation; it is colonized by Islamic values and metaphysical constraints. The insistence that science be performed in the name of God and His commandments represents an enormous limitation on empirical investigation. This precondition restricts free inquiry and forces scientists to make numerous untested assumptions about the universe and its nature. The restraint Islam places on science is debilitating, repudiating its spirit, effectiveness, and functionality.

Gülen's interpretation of Islamised science rejects the fundamental principles of empiricism and objectivity. Islamised science begins with presuppositions that overwhelm

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any further inquiry – that the world is created by God, that His hand is immanent in all events and phenomena, and that all things are signs indicating His existence. Inferences and facts are then arranged to fit into this worldview. Observations that do not yield information confirming the preternatural reality of the world are discarded. It is difficult to contend, then, that Gülen's scientific vision conforms to the spirit of rational, independent inquiry.

Presuming the necessary existence not just of any god, but a particular God who has revealed Himself through prophets and the Qur'an, and deploying this proposition as an organizing principle throughout one's empirical observations and subsequent conclusions, sabotages science's characteristic opposition to dogmatism. The attempts by Gülen and Nursi to deduce God's existence from contemplative observation of natural phenomena are unconvincing. Their failure to demonstrate God's existence independent of revelation undermines the demand to introduce this claim into every observation and inference made by experimental science.

One example of the failure of Gülen's logical proofs of God can be adduced here. Gülen posits that the existence of uniform laws of motion, and the universe's infinite complexity and multiplicity of events and bodies, necessitates a single All-Powerful, All-Knowledgeable Creator. The existence of multiple causes or creators, he argues, would introduce unsustainable confusion and chaos into the system. Things themselves do not possess the intelligence, power, or foresight to cause other things, requiring that one transcendent intelligence calculate and control the different forces, bodies, and accidents.

It is presumptuous to argue that the God of the Qur'an is the inevitable cause of the observable phenomena in the universe. Gülen's view betrays a wilful disregard for the alternative Islamic Neo-Platonic resolution of this quandary: that 'accidents' occur separately from God's will and are directed by chance and coincidence. The argument,

then, that observation of the world and its contingent events demonstrably proves the necessary existence of an active deity is unconvincing. Gülen's reasoning begins with the conclusion – that God exists – and works backwards to prove the inferences and premises of the initial hypothesis. He does not set out to reach a conclusion based on available evidence, but imports determinative presuppositions from revelation. He then shapes the evidence to agree with his assumed conclusion. The pattern of Gülen's argument follows what W.C. Smith once observed about Islamic apologist literature – that it often devolves into the practice of "deliberately choosing evidence with a view to substantiating an already held thesis, rather than following where the evidence itself may lead."³

Gülen makes the added assumption that there are no other explanations for the harmony of the universe. Unlike materialist scientists, he refuses to remain agnostic about questions that cannot be settled with experimentation and observation. Instead, he relies on revelation to make the deductive leap towards a conclusion harmonious with his initial set of assumptions.

Gülen's use of divine causality to conclusively prove God's existence is likewise logically flawed. In the classic example of burning cotton, Gülen refutes the observation that fire causes burning because it cannot be demonstrably proven. The inability to demonstrate that fire *per se* is the cause of burning invalidates the assumed causal relationship between fire and burning. Gülen concludes that the real cause is God, immaterial and transcendent.

But here, Gülen himself cannot 'demonstrate' that God creates burning in cotton whenever fire is applied to it. Instead, God's existence is arrived at by deductive logic. But it would also be logically consistent to suggest that fire is the agent. If the non-observable agency of God can be 'demonstrated' through logic, then a similarly ephemeral

³ W.C. Smith, *Islam in Modern History* (Princeton: Princeton University Press, 1957), p. 139.

'immaterial agency' inherent in fire can also be contrived to act as the real cause. The difference between the two equally valid conclusions is that the former resonates with revelation, and is therefore more legitimate according to the Islamised scientific viewpoint. *GÜLEN'S AHISTORICAL HISTORIOGRAPHY*

Flaws can also be found in Gülen's historiography of the Islamic intellectual tradition. Gülen's thesis – that the schism in the natural and religious sciences in Islam was the result of invasion and political instability,⁴ and the importation of Europe's secular modes of thinking – is spotty and self-serving. He downplays the devastating theological criticisms of reason, Islamic Neo-Platonism, and rational scientific inquiry levelled by orthodox clerics and mystics, including Ghazālī, Ash'arī (873-935), and Ibn Taymiyya (1263-1328). By choosing to ignore the religious reaction against philosophy and natural science, Gülen attempts to deny the clash between reason and revelation within the Islamic tradition. This ahistorical denial represents a central plank in his modernist theological platform. This recalls W.C. Smith's description of early twentieth century Arab-Muslim modernists who probed Islamic history for evidence establishing its coherence with modern ideas. He concluded that "The Arab writing of history has been functioning, then, less as a genuine inquiry than as a psychological defence."⁵

The disjunction between the natural and religious sciences in Islam was not artificial or incidental, but intentional and inevitable. The scripturalist assault on rationalism did more than any military invasion to undermine the parallel development of natural science and Islam. It was precisely because the methods and findings of science were incompatible with revelation that it was expelled from the madrasa curriculum. All of which suggests that the modern dichotomy between science and Islam is not a false one based on the uniquely Western science-faith divide, but one inherited from within the

⁴ See above, p. 64.

⁵ Smith, *Islam in Modern History*, p. 120.

Islamic tradition. As was shown in this thesis, the debate between science and faith was an organic, indigenous development within Islam.

THE 'MUSLIM' SCIENCE - THE SUBMISSION OF REASON BEFORE REVELATION

Gülen's project to redefine the clash between reason and revelation is guided by an interpretative strategy that denies science the capacity to stand in judgment of the claims of the Qur'an. This bold assertion safeguards revelation from future scientific findings that may render Islam false or illegitimate. Gülen is insistent that the Qur'an requires no added proofs borrowed from outside the realm of Islamic knowledge. One of Gülen's followers, Abasi Kiyimba, worries that those who seek to reconcile scientific discoveries with the Qur'an have set a "time bomb," which "could be detonated by the wilful search for scientific error in the Qur'an or something to prove the scientific accuracy of the Bible."⁶

To ward against the threat of the 'partial truths' of materialism rendering the absolute truths of the Islamic viewpoint obsolete, the Qur'an must sit in judgment of science. If science trespasses the knowledge of the Qur'an, or discovers something antagonistic to its teachings, it must be abandoned, condemned as a form of truth inherently marginal and subjective compared with revelation's absolutely valid index of Creation. Science's continued legitimacy is guaranteed only by its harmony with revelation. Thus, in a reversal of Kiyimba's logic, Gülen's proposes that revelation stand in judgement of science, such that the Qur'an holds the time bomb.

⁶ Abasi Kiyimba, 'Islam and Science: An Overview,' in: *Knowledge and Responsibility: Islamic Perspectives on Science* (Izmir: Kaynak, 1998), p. 16.

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