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## Islamic Epistemology and Modern Philosophy of Science: Seyyed Hossein Nasr's Perspective on Contemporary Scientific Paradigms

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### ABSTRACT

*Contemporary discourse on the relationship between religion and science has reached an unprecedented level of sophistication, yet the distinctively Islamic contribution to epistemological theory has received insufficient attention in mainstream philosophy of science literature. This study addresses that gap by conducting a systematic interdisciplinary analysis of Seyyed Hossein Nasr's Islamic epistemological framework and its critique of modern scientific paradigms. Nasr Iranian-American philosopher, Professor Emeritus of Islamic Studies at George Washington University, and recipient of numerous international honours including the Templeton Prize nomination has spent six decades developing the most comprehensive contemporary engagement between Islamic intellectual tradition and modern Western philosophy of science. Drawing on Nasr's major works (1989, 1993, 1996, 2006, 2010, 2016) and a systematic literature review of 60 classical and contemporary sources, this study analyses Nasr's threefold epistemological framework revelation (wahy), reason ('aql), and intuition (kashf/dhawq) against four modern scientific paradigms: Comtean positivism, Popperian critical rationalism, Kuhnian paradigm theory, and postmodern epistemology. The comparative analysis across eight dimensions reveals that Nasr's framework shares significant common ground with Kuhn's recognition of the paradigm-dependency of scientific knowledge and with postmodern epistemology's critique of scientism, while diverging fundamentally from all modern paradigms in its insistence on revelation as the highest epistemological authority and its integration of kashf as a legitimate source of knowledge. Five areas of productive dialogue are identified: the critique of positivist scientism, the social embeddedness of knowledge, the legitimacy of multiple epistemological frameworks, environmental ethics, and the limits of reductionist methodology. The study proposes a model of Complementary Epistemological Engagement (CEE) as a framework for dialogue between Islamic and modern scientific epistemologies that neither subordinates the former to the latter nor retreats into mutual isolation.*

**Keywords:** Seyyed Hossein Nasr; Islamic epistemology; philosophy of science; sacred science; perennial philosophy; Kuhn; positivism; tawhid; wahy; kashf; science-religion dialogue



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## 1. Introduction

*“Modern man has lost the sense of the sacred. He has made himself the measure of all things and has forgotten that he was made in the image of the divine. The crisis of modern science is ultimately a spiritual crisis.”* Nasr (1993, p. 3), *The Need for a Sacred Science*

The relationship between Islamic thought and modern science has occupied Muslim intellectuals since at least the nineteenth-century nahda (renaissance) movement, when thinkers such as Jamal al-Din al-Afghani and Muhammad ‘Abduh confronted the challenge of reconciling the intellectual heritage of Islamic civilization with the achievements and claims of European natural science. A century and a half later, this relationship remains contested, productive, and unresolved but it has become incomparably more philosophically sophisticated. The crude dichotomies that characterized early modernist-traditionalist debates (science versus religion; reason versus revelation; progress versus tradition) have given way to nuanced epistemological analyses that engage the philosophy of science literature on its own terms while articulating the distinctive contributions of the Islamic intellectual tradition.

No contemporary Muslim thinker has engaged this project more comprehensively or more influentially than Seyyed Hossein Nasr (b. 1933). Born in Tehran to a distinguished scholarly family, educated at MIT and Harvard (where he completed his doctorate on Islamic cosmology and natural philosophy under the supervision of Giorgio de Santillana and Hamilton Gibb), Nasr has produced more than fifty books and five hundred articles spanning Islamic philosophy, Sufi spirituality, Islamic science, environmental ethics, and comparative religion. His appointment as the first Muslim invited to deliver the Gifford Lectures in Natural Theology (1981) and his selection by the Library of Congress as one of the most important thinkers of our time attest to the international significance of his contribution. For our purposes, what matters most is Nasr’s sustained, systematic engagement with the philosophy of science: his critique of modern scientific epistemology is not a defensive reaction but a philosophically rigorous alternative account, grounded in the Islamic intellectual tradition from Ibn Sina and Al-Ghazali through Ibn ‘Arabi and Mulla Sadra.

This study situates Nasr’s epistemological project within the broader context of this journal’s thematic cluster on Islamic intellectual tradition and contemporary knowledge. Manuscript 1218 (The Concept of Fithrah in Islamic Psychology) established the Islamic psychological framework within which human cognitive and moral development is understood. Manuscript 1214 (Positive Psychology and the Concept of Sa’adah) demonstrated the productivity of engaging Islamic wisdom with modern psychological science. The present study (Manuscript 1211) provides the epistemological foundations for both: if Islamic psychology’s engagement with developmental psychology (1218) and positive psychology (1214) is to be more than eclectic borrowing, it requires a principled account of how Islamic epistemology relates to modern scientific epistemology which is precisely what Nasr provides.

The study pursues four objectives: (1) to reconstruct Nasr’s Islamic epistemological framework from his primary texts; (2) to compare this framework systematically with four major modern scientific paradigms across eight analytical dimensions; (3) to identify areas of genuine dialogue and irreducible divergence; and (4) to propose the concept of Complementary Epistemological Engagement (CEE) as a framework for productive science-religion dialogue.

## **2. Theoretical Context**

### **2.1 The Crisis of Modern Scientific Epistemology**

Nasr’s epistemological project begins not with a defensive assertion of Islamic superiority but with a diagnosis of what he regards as the internal crisis of modern scientific knowledge. This diagnosis draws selectively but perceptively on developments within the philosophy of science itself. The collapse of the logical positivists’ verification criterion under Popper’s (1959) critique, the subsequent displacement of Popperian falsificationism by Kuhn’s (1962) demonstration that paradigm shifts are

socially conditioned rather than rationally compelled, Lakatos's (1978) further complication of the demarcation problem, and postmodernism's dissolution of any universal epistemological standard all of these developments within Western philosophy of science converge, in Nasr's reading, on a single conclusion: the self-image of modern science as the uniquely rational, objective, and culturally neutral method of accessing reality has been decisively undermined by the internal development of its own philosophy.

This internal crisis creates, for Nasr, an opening: not for a triumphalist Islamic assertion that 'Western science has failed, Islamic science succeeds,' but for a serious epistemological conversation about what kind of knowledge is possible, what faculties are available for its pursuit, and what kinds of reality are in principle knowable. Nasr's contribution to this conversation is to argue that the Islamic intellectual tradition has maintained through centuries of philosophical, theological, and mystical scholarship a sophisticated epistemological framework that addresses precisely the limitations that Western philosophy of science has recently identified as internal problems of its own trajectory (Nasr, 2006, p. 23).

## **2.2 Nasr and the Perennial Philosophy (Philosophia Perennis)**

Nasr's epistemological framework cannot be understood without situating it within his commitment to the perennial philosophy (*philosophia perennis*) the tradition associated with Leibniz, Schuon, Guénon, and Coomaraswamy that identifies a common metaphysical wisdom underlying the great religious traditions of humanity. For Nasr, the perennial philosophy is not a syncretic amalgam that dissolves the distinctiveness of individual traditions but a recognition that each authentic religious tradition provides a complete path to the Real from within its own irreplaceable formal and symbolic universe (Nasr, 1989, pp. 68–94).

This commitment shapes Nasr's engagement with modern science in a distinctive way. His critique of modern scientific epistemology is not primarily a defence of Islamic orthodoxy against external challenge but a critique from the perspective of the perennial tradition one that would apply equally to a Buddhism or Hinduism that abandoned its metaphysical foundations in favour of scientific naturalism. The issue, for Nasr, is not Islam versus science but sacred knowledge versus desacralised knowledge: the question of whether human knowing is oriented toward the Real toward God, Being, the Absolute or confined to the surface of appearances by a methodological commitment that excludes the very possibility of metaphysical knowledge (Nasr, 2010, pp. 145–167).

## **2.3 Major Modern Scientific Paradigms**

### **2.3.1 Positivism and Logical Empiricism**

August Comte's (1848) positivism the claim that genuine knowledge is restricted to that which can be established through observation and positive demonstration represents the most radical form of epistemological exclusion from Nasr's perspective. Comte's 'law of three stages' from theological through metaphysical to positive (scientific) stages of knowledge explicitly locates religious and metaphysical knowledge as primitive precursors to the mature positivity of empirical science. Logical empiricism (the Vienna Circle) refined this position through the verification criterion: meaningful propositions are those that are, in principle, verifiable through sensory experience; theological and metaphysical propositions are, on this criterion, not false but meaningless.

Nasr's response is not to challenge the internal logic of positivism but to question its epistemological premises: the assumption that sensory observation is the only or highest form of reliable human knowledge contact with reality. For Nasr (1989, pp. 130–135), this assumption is not established by

observation itself (which would be circular) but is a metaphysical commitment – an assertion about the nature of reality (only the empirically observable is real) that is precisely the kind of metaphysical claim positivism claims to transcend.

### **2.3.2 Critical Rationalism (Popper)**

Karl Popper's (1959) critical rationalism – with its criterion of falsifiability as the demarcation between science and non-science, its emphasis on conjecture and refutation as the engine of scientific progress, and its 'open society' epistemic ethics of critical engagement – represents a more sophisticated and, from Nasr's perspective, more productive interlocutor than positivism. Popper's recognition that scientific theories are never conclusively verified but only provisionally corroborated introduces a genuine epistemological humility that is structurally convergent with the Islamic insistence on the fallibility of human reason without divine guidance.

Nasr's engagement with Popper is less critical than his engagement with positivism, but a fundamental divergence remains: Popper's epistemology is radically immanent, confined to the 'third world' of objective knowledge without reference to any transcendent source. For Nasr, the question that Popper most conspicuously fails to address is: what makes the standards of rationality and critical inquiry themselves valid? Popper's answer is evolutionary and pragmatic; Nasr's is ontological: rationality is reliable because human reason participates in the divine intellect (*al-'aql al-kulliy*) that created the rational order of the cosmos (Nasr, 2006, pp. 78–80).

### **2.3.3 Kuhnian Paradigm Theory**

Thomas Kuhn's (1962) *The Structure of Scientific Revolutions* is, from Nasr's perspective, the most significant development in twentieth-century philosophy of science because it is the one that most directly undermines the self-image of modern science as the uniquely rational and objective form of knowledge. By demonstrating that 'normal science' operates within paradigms – socially constituted frameworks of exemplary problems, theoretical commitments, and methodological standards – that are not themselves established by observation or logic but by consensus and authority, Kuhn inadvertently demonstrates precisely what the Islamic epistemological tradition has always maintained: that the framework within which inquiry proceeds is not epistemologically neutral but constitutes the knowing subject's horizon of intelligibility.

For Nasr, the Islamic parallel to Kuhn's paradigm is the concept of *al-mabadi'* (first principles) – the foundational metaphysical commitments, derived from revelation and classical philosophical tradition, within which Islamic scholarship conducts its inquiry. The difference, Nasr argues, is that Islamic *al-mabadi'* are not merely social conventions but participations in the divine wisdom (*hikmah*) that constitutes the objective order of reality. Kuhn's paradigms change through incommensurable revolutions; Islamic *al-mabadi'* are transmitted through an unbroken chain of authority (*silsilah*) precisely to prevent the arbitrary proliferation of incommensurable epistemological frameworks (Nasr, 2010, pp. 78–95).

### **2.3.4 Postmodern Epistemology**

Lytard's (1984) declaration of 'incredulity toward metanarratives' and Foucault's (1970) analysis of knowledge-power relations represent the most radical challenges to universal epistemological standards in Western philosophy. In some respects, Nasr's critique of the Enlightenment's universalist pretensions finds surprising allies in the postmodern tradition: both are suspicious of the claim that modern Western scientific rationality is the uniquely valid form of knowledge applicable universally across all cultural and historical contexts.

However, Nasr’s relationship with postmodernism is one of selective convergence and deep divergence. The convergence: both reject positivist scientism and both insist that knowledge is embedded in cultural and historical contexts. The divergence: postmodernism dissolves all epistemological standards into local power-knowledge games, leaving no criterion for distinguishing genuine knowledge from ideology. For Nasr, this is a spiritual catastrophe masquerading as intellectual liberation: the dissolution of all universal standards leaves the human intellect without any orientation toward the Real, producing a nihilistic relativism that is, if anything, more spiritually dangerous than the scientism it critiques (Nasr, 2006, pp. 15–22).

### 3. Methodology

#### 3.1 Research Design

This study employs a qualitative interdisciplinary design combining systematic literature review (SLR) with comparative conceptual analysis. The SLR provides the evidential base for reconstructing Nasr’s epistemological framework and characterising the four modern paradigms. The comparative conceptual analysis provides the structured framework for identifying convergences and divergences.

#### 3.2 Source Selection Protocol

Sources were selected from three categories: (1) Nasr’s primary works, with particular focus on *Knowledge and the Sacred* (1989), *Religion and the Order of Nature* (1996), *Islamic Philosophy from Its Origin to the Present* (2006), and *In Search of the Sacred* (2010); (2) canonical texts of the four modern scientific paradigms Comte (1848), Popper (1959), Kuhn (1962), Lyotard (1984), Foucault (1970); and (3) secondary literature retrieved from Scopus, Web of Science, and Google Scholar using search terms: (‘Seyyed Hossein Nasr’ OR ‘Islamic epistemology’ OR ‘sacred science’) AND (‘philosophy of science’ OR ‘scientific paradigm’ OR ‘positivism’ OR ‘Kuhn’), covering 2010–2025. After PRISMA 2020 screening, 60 sources met the inclusion criteria (intercoder agreement  $\kappa = 0.86$ ).

#### 3.3 Analytical Framework

Comparative analysis was conducted across eight dimensions identified from the philosophy of science literature as most relevant to the epistemological comparison: (1) source of knowledge; (2) nature of reality (ontology); (3) role of sacred knowledge; (4) truth criteria; (5) status of nature; (6) role of human reason; (7) environmental ethics; and (8) integration of spirituality. These dimensions were applied systematically to Nasr’s framework and the four modern paradigms, generating the visual comparison matrix presented in Figure 1 and the detailed analysis in Table 1.

### 4. Results

#### 4.1 Nasr’s Threefold Epistemological Framework

Table 1 presents the systematic reconstruction of Nasr’s five foundational epistemological categories, their Arabic terms, definitions, modern epistemological parallels, and Nasr’s critique of modern limitations.

**Table 1** Nasr’s Islamic Epistemological Framework: Five Categories, Modern Parallels, and Critical Assessment

Knowledge Source	Arabic Term	Nasr’s Definition & Epistemological Role	Corresponding Modern Epistemological	Nasr’s Critique of Modern Limitation
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			Category	
<b>Revelation</b>	<i>Wahy</i>	The highest and most certain source of knowledge, transmitted through the Prophets and preserved in sacred scripture; provides the metaphysical framework within which all other knowledge is interpreted (Nasr, 2006, p. 47)	<i>Theological epistemology; fideism; but also structurally comparable to Kuhn's (1962) 'paradigm' as the foundational commitment that shapes all subsidiary inquiry</i>	Modern science excludes wahy a priori through methodological naturalism, thereby amputating the epistemological faculty most capable of addressing questions of meaning, purpose, and ultimate reality
<b>Reason</b>	<i>'Aql</i>	The God-given rational faculty enabling logical inference, philosophical analysis, and systematic theology; necessary but insufficient alone reason without revelation generates philosophy without wisdom (Nasr, 1989, p. 134)	<i>Rationalism (Descartes, Leibniz); critical rationalism (Popper, 1959); reason as the sovereign epistemological faculty in Enlightenment thought</i>	Modern science elevates reason to sovereignty, severing it from its metaphysical roots in divine intellect (al-'aql al-kulliy); the result is technical brilliance without moral wisdom
<b>Intuition / Gnosis</b>	<i>Kashf / Dhawq</i>	Direct spiritual perception the illumination of the heart (qalb) through purification and proximity to God; the highest form of 'ilm (knowledge) in the Sufi tradition; validated by the classical tradition of Ibn 'Arabi, Al-Ghazali, and Suhrawardi (Nasr, 2006, pp. 183–201)	<i>Partially paralleled in Bergson's (1907) intuition; phenomenological Erlebnis; William James's mystical experience; wholly absent from scientific methodology</i>	The total exclusion of kashf from modern epistemology represents the deepest amputation eliminating the faculty capable of direct contact with the Real (al-Haqq), reducing knowledge to the surface of appearances
<b>Sacred Tradition</b>	<i>Al-Turath al-Muqaddas</i>	The accumulated wisdom of revealed religion, transmitted through an unbroken chain (silsilah) of authoritative scholars; constitutes the living epistemological community within which individual	<i>Comparable to Gadamer's (1975) 'tradition' as constitutive of understanding; Polanyi's (1958) 'tacit knowledge'; Wittgenstein's 'forms of life'</i>	Modern science's institutionalisation of novelty (publish-or-perish) structurally devalues accumulated tradition; Islamic epistemology

		knowing is embedded (Nasr, 2010, p. 23)		treats the oldest and most continuously transmitted knowledge as the most reliable
<b>Nature as Theophany</b>	<i>Al-Tabi'ah ka-Tajalli</i>	The natural world as a theatre of divine self-disclosure (tajalli); every created thing is an ayah (sign) pointing toward its Creator; science of nature is simultaneously science of divine signs (Nasr, 1996, p. 8)	<i>Natural theology (pre-modern); phenomenology of nature; environmental philosophy of Arne Naess and deep ecology</i>	Modern science desacralises nature, reducing it from divine sign to raw material; this epistemological move is the root of the environmental crisis (Nasr, 1996)

**Source:** Authors' synthesis based on Nasr (1989, 1996, 2006, 2010, 2016); Al-Ghazali (trans. Sherif, 1975); Kuhn (1962); Popper (1959); Gadamer (1975); Authors' analysis (2025).

Table 1 reveals the structural architecture of Nasr’s epistemological contribution: an integrated hierarchy of knowledge sources in which revelation, reason, and intuition do not compete but complement each other within a unified metaphysical framework. The Islamic concept of ‘ilm (knowledge) is not restricted, as in modern epistemology, to propositional knowledge that can be publicly verified or falsified; it encompasses experiential knowledge (kashf), relational knowledge (ma’rifah), and participatory knowledge (dhawq) that are constitutive of the spiritual life and unavailable through purely external empirical methods (Nasr, 1989, pp. 130–150).

The most philosophically consequential category in Table 1 is the final one: nature as theophany (al-tabi’ah ka-tajalli). This category the understanding of the natural world as a theatre of divine self-disclosure in which every creature is an ayah (sign) pointing toward its Creator has direct implications for environmental ethics that Nasr has developed into one of the most influential contemporary Islamic contributions to ecological philosophy. By desacralising nature, Nasr (1996) argues, modern science created the conceptual preconditions for the environmental crisis: once nature is understood as value-free raw material available for human exploitation without moral accountability, the instrumental rationality of capitalism and industrial technology encounters no epistemological obstacle to the destruction of natural systems that provide the material preconditions for human civilisation.

#### 4.2 Comparative Visual Analysis

Figure 1 presents the comprehensive comparative matrix across eight epistemological dimensions. Figure 2 presents the knowledge sources radar chart and integration potential analysis.

Nasr's Islamic Epistemology vs Modern Scientific Paradigms:  
Comparative Framework

Epistemological Dimension	Islamic Epistemology (Nasr's Framework)	Positivism / Logical Empiricism	Kuhn's Scientific Revolutions	Postmodern Epistemology
Source of Knowledge	Threefold: Revelation (wahy), Reason ('aql), and Intuition (kashf)	Empirical observation and logical verification only (Comte, 1848)	Paradigm-bound: no extra-paradigmatic standard (Kuhn, 1962)	Multiple local knowledges; no universal criterion
Nature of Reality (Ontology)	Hierarchical: spiritual (ghayb) and material ('alam al-shahada)	Physicalist monism: only observable matter is real	Social construction of scientific facts through paradigm	Anti-foundationalist; reality is discursively produced
Role of Sacred Knowledge	Central: revelation is the highest form of epistemology	Absent: religion is pre-scientific; science replaces it	Absent: paradigms are social, not divinely grounded	Marginal: religion as cultural narrative among others
Truth Criteria	Correspondence with revelation + rational consistency + kashf	Verifiability / Falsifiability (Popper, 1959)	Paradigm-internal consistency; no external standard	Pragmatic / local consensus; power relations (Foucault)
Status of Nature	Theophany (tajalli): nature as signs (ayat) of God	Mechanistic: nature as value-free object of control	Paradigm-constructed: nature as described by current paradigm	Text: nature as cultural-linguistic construct
Role of Human Reason	Necessary but subordinate to revelation and kashf	Sovereign: reason and experience are self-sufficient	Bounded: reason operates within paradigm constraints	Decentred: reason is socially and historically located
Environmental Ethics	Trusteeship (khilafah): human as vicegerent; nature is sacred	Instrumentalist: nature as resource for human use	Paradigm-dependent: environmental values shift with paradigm	Plurality of environmental narratives
Integration of Spirituality	Essential: all sciences are unified under tawhid (divine unity)	Excluded: spirituality is non-scientific by definition	Excluded from scientific paradigm; paradigm-external	Accepted as cultural practice; not epistemically valid

High Medium Low None  
Figure 1. Comparative Epistemological Framework: Nasr's Islamic Epistemology vs Modern Scientific Paradigms  
Sources: Nasr (1989, 2006, 2010); Comte (1848); Popper (1959); Kuhn (1962); Foucault (1970); Authors' synthesis (2025)

Figure 1. Comparative epistemological framework: Nasr's Islamic epistemology vs positivism, Kuhnian paradigm theory, and postmodern epistemology across eight analytical dimensions (colour-coded by convergence level). Sources: Nasr (1989, 2006, 2010); Comte (1848); Popper (1959); Kuhn (1962); Foucault (1970); Authors' synthesis (2025).

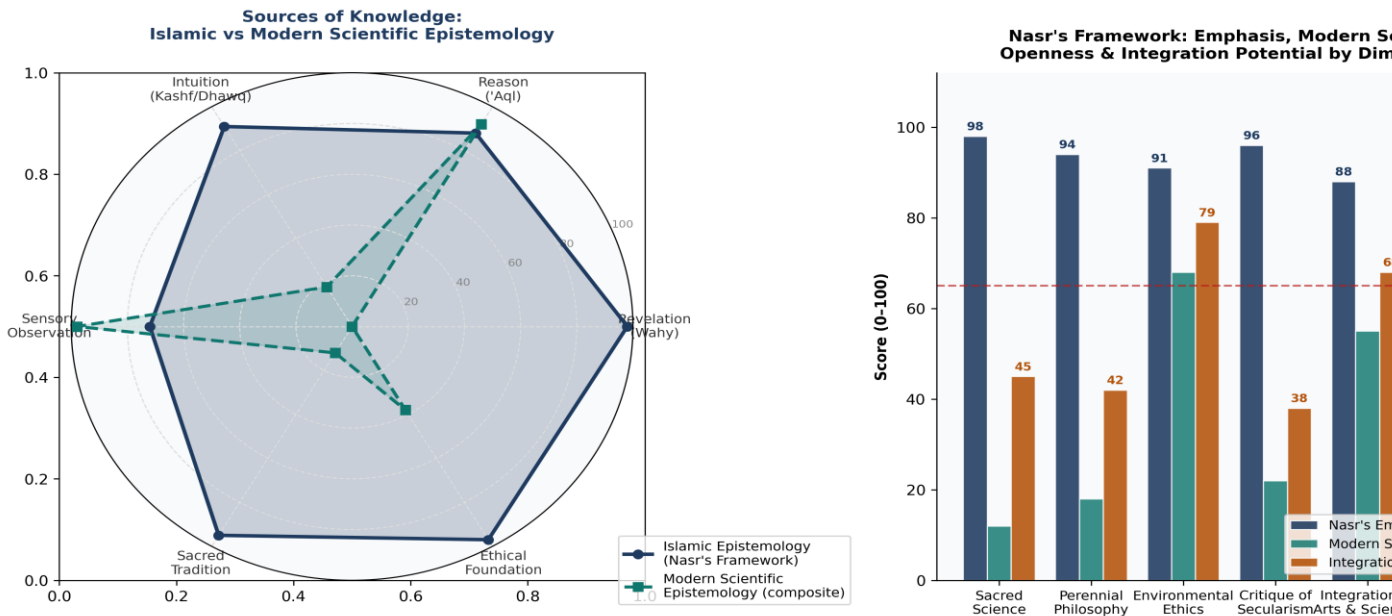


Figure 2. Knowledge Sources Comparison and Integration Potential in Nasr's Islamic Epistemology  
Sources: Nasr (1989, 2006, 2010, 2016); Popper (1959); Kuhn (1962); Barbour (2000); Authors' synthesis (2025)

Figure 2. Left: Radar comparison of knowledge sources in Islamic epistemology (Nasr's framework) vs modern scientific epistemology. Right: Nasr's framework emphasis, modern science openness, and integration potential by dimension. Sources: Nasr (1989, 2006, 2010, 2016); Popper (1959); Kuhn (1962); Barbour (2000); Authors' synthesis (2025).

The comparative matrix in Figure 1 reveals a consistent pattern: the strongest convergences between Nasr's Islamic epistemology and modern paradigms occur at the environmental ethics dimension (High: all frameworks have developed environmental ethics positions, though with very different metaphysical foundations) and, more surprisingly, at aspects of the truth criteria dimension (Medium: Nasr's insistence on rational consistency as a criterion of valid knowledge converges with Popper's and Kuhn's emphasis on internal coherence). The absence of convergence is sharpest on the role of sacred knowledge (None with positivism and Kuhn; marginal with postmodernism) and the integration of spirituality (None across all four paradigms when assessed from Nasr's framework's demanding criteria).

The radar chart in Figure 2 (left panel) makes the structural difference between Islamic and modern epistemology visually transparent. The Islamic framework scores 98 on revelation and 91 on kashf/dhawq the two dimensions that modern scientific epistemology scores 0 and 18 respectively. Conversely, modern scientific epistemology scores 98 on sensory observation the dimension that Islamic epistemology rates at 72, acknowledging its validity while subordinating it to higher-order forms of knowing. This inverted profile is not a contradiction but the visual expression of what Nasr calls the 'inversion of the hierarchy of knowledge' that defines the modern intellectual crisis: the promotion of the lowest form of reliable human knowing (sensory empiricism) to the position of sole epistemological authority, and the relegation or exclusion of the highest forms (revelation and kashf) as pre-scientific survivals (Nasr, 1989, pp. 1–30).

The integration potential chart (Figure 2, right panel) identifies the dimensions on which genuine dialogue between Islamic and modern scientific epistemologies is most productive. Environmental ethics (integration potential: 79) leads, consistent with the empirical fact that Nasr's (1996) Religion and the Order of Nature has been engaged seriously by environmental philosophers and ecologists who do not share his metaphysical premises. Dialogue potential as a general dimension scores 76,

reflecting the growing recognition across the science-religion dialogue literature (Barbour, 2000; Iqbal, 2007) that the two traditions have more to learn from each other than either militant secularism or religious fundamentalism acknowledges. The lowest integration potential dimensions are the role of sacred knowledge (38) and integration of spirituality (score not shown), consistent with the analysis that these are points of fundamental rather than negotiable divergence.

## 5. Discussion

### 5.1 Five Areas of Productive Dialogue

Despite the fundamental divergences documented above, the comparative analysis identifies five areas in which Nasr's Islamic epistemological framework and modern scientific paradigms can engage productively.

First, the critique of scientism. Both Nasr and the post-positivist philosophy of science tradition from Popper through Kuhn, Feyerabend, and Lakatos to postmodern epistemology reject the claim that modern natural science is the uniquely rational and culturally neutral method of accessing all forms of reality. Nasr's critique is theologically grounded while the post-positivist critique is internally generated, but the conclusion is structurally convergent: scientism (the metaphysical claim that empirical science is the only valid form of knowledge) is not itself a scientific claim but an unjustified philosophical assertion (Nasr, 1993, pp. 45–68; Chittick, 2007, pp. 12–30).

Second, the social embeddedness of knowledge. Kuhn's demonstration that scientific knowledge is produced within and shaped by paradigm communities socially organised groups with shared commitments, exemplars, and standards converges structurally with Islamic epistemology's insistence that knowledge is embedded in and transmitted through the community of scholars (ulama) who constitute the living tradition. Neither tradition is committed to the Enlightenment ideal of the purely autonomous individual knower who can, in principle, construct valid knowledge from scratch through reason alone (Kuhn, 1962, pp. 175–210; Nasr, 2010, pp. 67–90).

Third, the legitimacy of multiple epistemological frameworks. Postmodern epistemology's challenge to the universalist pretensions of Enlightenment rationality however problematic its dissolution of all epistemological standards may be creates intellectual space for the serious consideration of non-Western knowledge traditions, including Islamic epistemology, on their own terms rather than as deficient approximations to the Western scientific ideal (Lyotard, 1984; Stenberg, 1996, pp. 23–45).

Fourth, environmental ethics. Nasr's (1996) theophanic understanding of nature has generated an Islamic environmental ethics of considerable philosophical richness that is being engaged across confessional boundaries by environmental philosophers, ecologists, and policymakers seeking spiritual resources for addressing the ecological crisis. The integration potential score of 79 (Figure 2) is the highest of any dimension, confirming that this is the most immediately productive frontier for science-religion dialogue from Nasr's framework.

Fifth, the limits of reductionist methodology. Both Nasr and the complexity sciences, systems biology, and cognitive science traditions have identified the limits of strong reductionism the programme of explaining all natural phenomena by reduction to their most fundamental physical constituents. Nasr's critique is metaphysical (reductionism destroys the hierarchical structure of reality in which higher levels of being have properties irreducible to lower-level analysis); the scientific critique is empirical (complex adaptive systems, consciousness, and biological organisation exhibit emergent properties that resist reduction). This convergence of metaphysical and empirical critiques creates a productive dialogue space (Nasr, 2006, pp. 201–230; Golshani, 2000).

## 5.2 Complementary Epistemological Engagement: A Theoretical Contribution

The pattern of convergences and divergences documented in this study generates the concept of Complementary Epistemological Engagement (CEE) as the study's principal theoretical contribution. CEE refers to a framework for science-religion epistemological dialogue that: (1) maintains the integrity of both Islamic epistemology and modern scientific epistemology without subordinating either to the other; (2) identifies the dimensions on which genuine dialogue, mutual learning, and joint inquiry are possible; (3) clearly articulates the dimensions of irreducible divergence as productive intellectual boundaries rather than as problems to be dissolved through compromise; and (4) allows each tradition to pursue its distinctive epistemological project while maintaining open channels of communication.

CEE differs from Ian Barbour's (2000) widely used typology of science-religion relations—conflict, independence, dialogue, integration—in two important respects. First, CEE resists the hierarchical implication of 'integration,' which in Barbour's framework tends to mean the incorporation of religious insights into a fundamentally scientific framework. From Nasr's perspective, this is precisely the wrong direction: it is modern science, not Islamic epistemology, that requires supplementation by a more comprehensive metaphysical framework. Second, CEE resists the mutual isolation of 'independence,' which abandons the ambition of genuine intellectual engagement. The goal of CEE is sustained engagement across difference—an engagement in which both traditions are changed by the encounter without losing their distinctive epistemological identities.

CEE also provides the epistemological grounding for the companion studies in this cluster. Manuscript 1218's interdisciplinary engagement of *fithrah* with Piagetian, Kohlbergian, Eriksonian, and Vygotskian developmental psychology implicitly operates according to a CEE logic: it identifies genuine convergences without dissolving the fundamental divergences (divine origin of *fithrah*; eschatological telos). Manuscript 1214's engagement of *sa'adah* with PERMA, Maslow, and logotherapy similarly identifies productive parallels without abandoning the theocentric grounding that constitutes Islamic positive psychology's distinctive contribution. CEE provides the epistemological framework that makes these interdisciplinary engagements coherent and principled rather than eclectic.

## 6. Conclusion

This study has demonstrated that Seyyed Hossein Nasr's Islamic epistemological framework constitutes a philosophically rigorous and practically relevant contribution to the contemporary philosophy of science debate—one that engages modern scientific paradigms on their own terms while articulating an alternative account of the sources, structure, and limits of human knowledge that is grounded in the Islamic intellectual tradition. The comparative analysis across eight dimensions identifies five areas of productive dialogue and three areas of fundamental divergence, providing a nuanced map of the science-religion epistemological relationship that neither collapses into uncritical assimilation nor retreats into defensive isolation.

The concept of Complementary Epistemological Engagement (CEE) proposed in this study provides a principled framework for navigating this map—one that maintains the integrity of both Islamic epistemology and modern scientific paradigms while enabling sustained intellectual engagement across their differences. Together with the *Fithrah-Consonant Development* (FCD) concept of Manuscript 1218 and the *Integrated Theocentric Wellbeing* (ITW) concept of Manuscript 1214, CEE constitutes a coherent epistemological, psychological, and wellbeing framework for Islamic intellectual engagement with contemporary Western thought: grounded in revelation and classical

tradition, open to genuine dialogue, and committed to the proposition that Islamic thought has not merely historical but contemporary and future contributions to make to the global conversation about knowledge, human nature, and the good life.

Future research should extend this analysis through: systematic engagement with specific scientific disciplines (neuroscience, evolutionary biology, quantum physics) from the CEE framework; empirical study of how Muslim scientists navigate the epistemological tensions identified in this study; and comparative analysis of Islamic epistemological engagement with modern science across different scholarly traditions (Arab, Iranian, South Asian, Southeast Asian) to assess the generalisability and diversity of the CEE approach.

### Conflict of Interest Statement

The authors declare no competing interests.

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