



Fake News is Nothing New: Misinformation and Islamic Critical Epistemology

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There has always been Fake News

World crises are not new to us. In our short lifespans, there have been multiple genocides, such as in Bosnia and Rwanda, and immense droughts and mass starvation, as in Somalia. We have experienced multiple economic recessions and violence and injustice continues against our brothers and sisters in [East Turkestan](#), [Kashmir](#), [Palestine](#), and beyond. Along with its impact on our lives, it also shapes our thinking. And with the increase of that impact, we also see an increasing awareness of intentional lies and conspiracy theories.^{1,2}

Islamic anthropology, the way Islam conceptualizes the human, is one of optimism as opposed to pessimism, as seen in its rejection of the concept of original sin.³ But Islam also promotes realism; it is not naïve. People hurt others and can be truly evil. And one of these harms is that a lot of people lie. But as a prophetic tradition states, this behavior should not become natural for a believer:

The believer has a nature with a multitude of dispositions and lying and being traitorous are not among them.⁴

¹ There is a certain psychology of conspiracy thinking that is abused during a crisis: Joe Pierre, “Understanding the Psychology of Conspiracy Theories: Part 1,” *Psychology Today*, January 14, 2020, <https://www.psychologytoday.com/us/blog/psych-unseen/202001/understanding-the-psychology-conspiracy-theories-part-1>.

² “Conspiracy theories are a symptom of a larger issue where people don’t trust politics and feel left behind ... when world-changing events happen we want them to have meaning. ... The idea that this could happen randomly is just not enough for many people.” Lizzie Dearden, “Coronavirus: Almost Half of Britons Believe Virus is ‘Man-Made’ as Conspiracy Theories Spread,” *Independent*, April 25, 2020, <https://www.independent.co.uk/news/uk/home-news/coronavirus-5g-conspiracy-theories-man-made-uk-poll-bleach-a9484066.html>.

³ What we mean here by optimism is that, in Islam, sin is not a necessary nature of a human in the way the Christian concept of original sin views the human. In Islam, sin is a chosen act by the accountable person (*mukallaf*, i.e., a sane and mature human); therefore, sin is self-imposed. Technically, we can choose not to sin (i.e., anthropological optimism). In Christian thought, sin is an unavoidable state of man (i.e., anthropological pessimism). It can even be stated that the Islamic concept of *fiṭrah* is the opposite of the concept of original sin. For a discussion on *fiṭrah*, see below. For a discussion on original sin in relation to Islam, see Yasien Mohamed, *Fitrah: The Islamic Concept Of Human Nature* (London: Ta-Ha Publishers, 1996), 25–32.

⁴ (“يطبع المؤمن على الخلال كلها إلا الخيانة والكذب”) Related in multiple collections, such as in al-Bayhaqī’s *Sunan al-kubrā* (Mecca: Maktabat Dār al-Bāz, 1414 AH), 10:197. See for its use and an overview of sources: al-Birgivi, *al-Ṭarīqat al-Muḥammadiyyah* (Damascus: Dār al-Qalam, 2011), 352n1.

Lying has always been seen as an evil within the intellectual history of mankind. Only in certain exceptional circumstances has it been viewed as acceptable or even necessary, such as to ward off an immense harm like the loss of life.⁵ Within the Islamic ethical tradition (*akhlāq*), lying (*kadhib*) is described thus:

It is an evil (*sharr*) composed of empty speech, for it communicates a conviction without any truthfulness and possibly causes harm. So to mention [any form of lying] makes one responsible for blame and is devoid of usefulness and is just frivolous behavior.⁶

The famous Ottoman scholar Ṭāshkuprī'zāda (d. 968 AH) comments on this by making a comparison between prophethood and civilization: If truthfulness (*ṣidq*) was not the foundation of prophethood, then revelation and the Shariah would become void. So, similarly, truthfulness is the foundation of civilization; no society can uplift itself without humans being truthful to another.⁷

It has always been a concern how lies, false information, and fake news affect personal character, relationships, and society as a whole. With the rise of social media and the associated ease of creating, receiving, and sharing information, this concern has increased as well. The basic definition of misinformation is “wrong information,” whereas disinformation is explained as “false information spread in order to deceive people.”⁸ Misinformation can be created unintentionally, or based on badly informed approaches to science,⁹ but disinformation is meant to distort our view on the truth of the matters involved. It involves a deliberate lie. We see

⁵ This is why the Qur'an allows in verse 16:106 lying about one's faith to protect one's own life, as the protection of life is a fundamental principle of the Shariah. Within the literature on the objectives of the Shariah (*maqāṣid al-sharī'ah*), the dominant order is the preservation of religion, and then life, mind, progeny, and wealth. But there is of course a holistic element between these objectives, as without life and mind there is no religion. We see this also with scholars like al-Bayḍāwī, Ibn Taymīyah, and al-Qarāfī who place the preservation of life as the first and dominant of the objectives. See: Gamal Eldin Attia, *Towards Realization of the Higher Intents of Islamic Law: Maqasid al-Shariah: A Functional Approach* (London: International Institute of Islamic Thought [IIIT], 2008), 16–36.

⁶ 'Aḍud al-Dīn al-Ījī (d. 756 AH), *Risālat al-akhlāq* (Kuwait: Dār al-Ḍiyā', 2018), 45. Translation by A. Y. Mol.

⁷ Ṭāshkuprī'zādah's (d. 968 AH) supercommentary (*sharḥ*) on al-Ījī's *Risālat al-akhlāq*, 142–43.

⁸ *Cambridge Dictionary*, s.v. “misinformation,” <https://dictionary.cambridge.org/dictionary/english/misinformation>; *Cambridge Dictionary*, s.v. “disinformation,” <https://dictionary.cambridge.org/dictionary/english/disinformation>.

⁹ We would place the Flat Earth Movement within this category: Natalie Wolchover, “Are Flat-Earthers Being Serious?,” May 30, 2017, <https://www.livescience.com/24310-flat-earth-belief.html>.

this spectrum of misinformation and disinformation with information on the coronavirus. During crises, people often turn to blaming the cultural and religious Other among them. During medieval plagues, Jews were seen by the dominant Christian community as the cause of the pandemic.¹⁰ In several countries, Muslim minorities were blamed for coronavirus outbreaks.¹¹ This cultural and religious othering is underpinned by the psychological mechanisms of xenophobia and, more recently, Islamophobia.¹² Some types of misinformation may seem harmless,¹³ much of which is also meant to scam people,¹⁴ but there is also misinformation that kills people.¹⁵

Although untruth and lies should be against the nature of a believer, Muslims also are both victims and perpetrators when it comes to misinformation. The amount of misinformation going around among Muslims is no different to that of non-Muslims and can include world politics, health and medicine, and even

¹⁰ “From the Black Death to Coronavirus: What We Haven't Learned from History,” World Economic Forum, March 12, 2020,

<https://www.weforum.org/agenda/2020/03/coronavirus-and-the-black-death-spread-of-misinformation-and-xenophobia-shows-we-haven-t-learned-from-our-past/>.

¹¹ MEE, “US and Rights Groups Warn Religious Minorities Being Blamed for Coronavirus,” Middle East Eye, April 4, 2020, <https://www.middleeasteye.net/news/coronavirus-religious-minorities-being-blamed-outbreaks>; Rowaida Abdelaziz, “Anti-Muslim Propaganda Is Seeping into Online Discourse about the Coronavirus,” HuffPost, April 10, 2020,

https://www.huffpost.com/entry/anti-muslim-propaganda-is-seeping-into-coronavirus-coverage_n_5e90b721c5b624efd9a27fab; Lizzie Dearden, “Coronavirus: ‘Dangerous’ Conspiracy Theories Could Spark Wave of Islamophobic Attacks When Lockdown Lifts, Report Warns,” *Independent*, April 19, 2020, <https://www.independent.co.uk/news/uk/home-news/coronavirus-muslim-lockdown-conspiracy-theories-tommy-robinson-katie-hopkins-a9471516.html>.

¹² For more on the psychological workings of xenophobia, see Lene Auestad, ed., *Nationalism and the Body Politic: Psychoanalysis and the Rise of Ethnocentrism and Xenophobia* (London: Karnac, 2014). For an excellent volume on the various dimensions of Islamophobia, see Nazanin Massoumi, ed., *What Is Islamophobia? Racism, Social Movements and the State* (London: Pluto Press, 2017).

¹³ Janosch Delcker, Zosia Wanat, and Mark Scott, “The Coronavirus Fake News Pandemic Sweeping WhatsApp,” *Politico*, March 16, 2020, <https://www.politico.com/news/2020/03/16/coronavirus-fake-news-pandemic-133447>.

¹⁴ Scott Zamost, “Coronavirus Fraudsters Prey on Fear and Confusion with Fake Products, Email Scams,” CNBC, March 24, 2020, <https://www.cnbc.com/2020/03/23/coronavirus-fraudsters-prey-on-fear-with-fake-products-email-scams.html>; Jane Lytvynenko, “Here's a Running List of the Latest Hoaxes Spreading about the Coronavirus,” BuzzFeed News, March 16, 2020, updated March 20, 2020,

<https://www.buzzfeednews.com/article/janelytvynenko/coronavirus-fake-news-disinformation-rumors-hoaxes>.

¹⁵ Bel Trew, “Coronavirus: Hundreds Dead in Iran from Drinking Methanol amid Fake Reports It Cures Disease,” *Independent*, March 27, 2020, <https://www.independent.co.uk/news/world/middle-east/iran-coronavirus-methanol-drink-cure-deaths-fake-a9429956.html>.

financial scams, some of which are especially targeted at Muslims.¹⁶ The Prophet Muḥammad ﷺ warned us about uncritically forwarding information:

It is enough falsehood for a person to relate everything they hear.¹⁷

The Qur'an also warns us against accepting information uncritically:

O you who have believed, if there comes to you a disobedient one with information, investigate, lest you harm a people out of ignorance and become, over what you have done, regretful. (Qur'an 49:6)

Some fake news might kill people. One of the central maxims of Islamic law and ethics, as within the medical community, is to avoid and remove harm.¹⁸ We, therefore, have a strong obligation to understand how we are informed, and how we can be informed correctly to avoid harm to ourselves and to others (i.e., [information literacy](#)). This shows that Muslims (and non-Muslims as well) must adopt a critical engagement with information.¹⁹ Thankfully this knowledge has been taught for centuries by the Islamic tradition.

Islamic critical epistemology as a solution

Epistemology is the technical term for the theory of human knowledge, its nature, origin, and limits.²⁰ It is in a sense the first science of all other sciences. What is

¹⁶ Jamie Bartlett, "How the World's Biggest Crypto-Scam Targeted British Muslims," *Spectator*, October 20, 2019, <https://www.irtis.org.uk/activities/the-spectator-fatwa-by-mufti-amjad-mohammed-exposes-onecoin-scam/>.

¹⁷ (كَفَى بِالْمَرْءِ إِثْمًا أَنْ يُحَدِّثَ بِكُلِّ مَا سَمِعَ) Related in the collections of Muslim (introduction) and Abu Dawūd (*kitāb al-adāb*).

¹⁸ There are multiple maxims of Islamic jurisprudence (*al-qawā'id al-fiqhīyah*) concerning removing, avoiding, and balancing competing harms. These all center around the famous prophetic tradition: "There is no causing harm or reciprocating harm (لا ضرر ولا ضرار)", which has been related in many collections such as Ibn Mājah. Islamic law is understood by the majority of scholars as revolving around two main concerns: removing harm and securing benefit. Removing harm is therefore seen as half the law, but also takes precedence over securing benefit. See: Shahrul Hussain, *A Treasury of Sacred Maxims: A Commentary on Islamic Legal Principles* (Leicestershire: Kube, 2016), 48–58, 76–77.

¹⁹ Tara Haele, "Why It's Important to Push Back on 'Plandemic'—And How to Do It," *Forbes*, May 8, 2020, <https://www.forbes.com/sites/tarahaele/2020/05/08/why-its-important-to-push-back-on-plandemic-and-how-to-do-it/>.

²⁰ *Stanford Encyclopedia of Philosophy*, s.v. "epistemology," December 14, 2005, <https://plato.stanford.edu/entries/epistemology/>.

knowing, and how do we know? Greek philosophy understood it to be part of the discussion on psychology, the human mind, and this is also how it came to be studied within Islamic philosophy and its wider intellectual history.²¹ The question of how we can know things has a deep significance for theology as well. How can we know God, that He exists, what He wants from us, and that He communicates to us? Classical epistemology is therefore discussed both in works on dogma and philosophical theology (*‘aqīdah* and *‘ilm al-kalām*) and philosophy of law (*uṣūl al-fiqh*), wherein they were labeled “causes of knowledge” (*asbāb al-‘ilm*) or “sources of knowing” (*maṣādir al-ma‘rifah*). These causes are summarized in the famous 13th-century Māturīdī creedal tract *‘Aqā’id al-Nasafī* as:

- 1) sound sense perception (*al-ḥawāss al-salīmah*),
- 2) reliable reports (*al-khabar al-ṣādiq*),
- 3) intellect/reasoning (*al-‘aql*).²²

These debates on sources of knowledge were discussed in early works of *kalām* on the topic of both ethics and prophethood, as why would we need “revelation” as a source of knowledge?²³ Can humans attain full truth about the world on their own? So, theologians started to divide up different forms and causes of knowledge. The physical world and its physical workings are observable with the senses (*ḥiss*), understandable through the intellect (*‘aql*) which is aided by the imagination, the heart, and the primordial nature (*fiṭrah*),²⁴ which all together can direct us towards

²¹ *Stanford Encyclopedia of Philosophy*, s.v. “al-Farabi’s Psychology and Epistemology,” February 11, 2016, revised April 26, 2020, <https://plato.stanford.edu/entries/al-farabi-psych/>; Osman Bakar, *Classification of Knowledge in Islam* (Cambridge: Islamic Texts Society, 1998).

²² Al-Nasafī’s text (*matn*) with al-Taftāzānī’s supercommentary (*sharḥ*) in Aḥmad Farīd al-Mazīdī, ed., *Shurūḥ wa ḥawāshī al-‘aqā’id al-Nasafīyah li-ahl al-sunna wa-al-jamā‘ah al-Ashā‘irah wa-al-Māturīdīyah* (Beirut: Dār al-Kutub al-‘ilmiyyah, 2013), 1:87–95, 2:219–605; English translation: Earl Edgar Elder, *A Commentary on the Creed of Islam* (New York: Columbia University Press, 1950), 16.

²³ Bakar, *Classification of Knowledge in Islam*, 69–73; Abū Manṣūr al-Māturīdī (d. 333 AH), *Kitāb al-tawḥīd* (Beirut: Dār al-Ṣādr, 2010), 69–72.

²⁴ There are multiple approaches toward *fiṭrah* within Islamic theology that revolve around the issues of it being coercive (i.e., pushing towards certain knowledge/acts) or only receptive (i.e., confirming or subtly urging towards certain knowledge/acts) in relation to the concept of the existence of God, good ethics, and norms. According to Yasien Mohamed, these approaches can be categorized into: (1) predestinarian, each person is born with a *fiṭrah* of faith (*īmān*) or unbelief (*kufir*) that correlates with the predestined place in either heaven or hell; (2) neutral, the *fiṭrah* is a blank state at birth which attains the state of faith or unbelief through the person’s own choice; and (3) positive, the *fiṭrah* is a state of goodness that naturally responds to truth and good acts, and therefore responds best to Islam. This last approach is the dominant approach and is adhered to by important scholars such as Ibn Taymiyya, Sahl

truth and goodness.²⁵ These constitute empirical, rational, and deductive knowledge (*al-‘ilm al-naẓarī wa-al-istidlālī*). Humans also create knowledge, customs, and technology; i.e., cultural knowledge. Some natural and cultural knowledge is continually generated anew (“innovation”), other forms are lost but, in general, there is a form of knowledge accumulation within cultures that is shared through “reports,” i.e., related or transmitted knowledge (*al-‘ilm al-naqlī*).²⁶ Some reports are doubtful, others trustworthy. So, there are grades of trustworthiness of related knowledge, in the same way prophetic traditions (*ḥadīth*) were graded²⁷ and the people relating them were judged on reliability (the science of *‘ilm al-rijāl*), whereby unknown and lying persons were not accepted.²⁸ You can have general reports which generate speculative or possible knowledge (*ẓannī*), and undeniable or certain knowledge (*al-‘ilm al-ḍarūrī*)—for example, knowledge of the existence of a major city like London or a major historical figure such as Alexander the Great.²⁹ So, we have constant newly generated knowledge about the world around us and shared accumulated knowledge, both of which provide us several possibilities for how to explain the world. But does this provide us with a total explanation of the world? Is there existence beyond the physical? How do we attain certain knowledge about the non-physical world? Is there a purpose to the world and can we know its end? *Kalām* theologians³⁰ believed a certain ‘minimal’ theology and ethics were knowable to humans through senses, intellect, and shared

al-Tustarī, and al-Raghib al-Iṣfahānī. Yasien Mohamed, *Fitrah*, 35–55. See also: Frank Griffel, “Al-Ghazālī’s Use of ‘Original Human Disposition’ (*fiṭra*) and Its Background in the Teachings of Al-Fārābī and Avicenna,” *The Muslim World* 102 (2012); Muḥī al-Dīn Mustawa and Muṣṭafā al-Khin, *al-‘Aqīdat al-Islāmīyah* (Damascus: Dār Ibn Kathīr, 2011), 126–36.

²⁵ Mustawa and al-Khin, *al-‘Aqīdat al-Islāmīyah*, 59–61; Bakar, *Classification of Knowledge in Islam*.

²⁶ Mustawa and al-Khin, *al-‘Aqīdat al-Islāmīyah*, 63.

²⁷ A *mutawātir* report is a hadith or saying (*ḥabār*) that is transmitted in every stage of the stages of the transmission-chain (*sanad*) by multiple transmitters (the generally agreed-upon requirement is ten transmitters), whereby it can be rationally concluded that these transmitters could not have agreed upon a fabrication (*ikhtilāq*). It also provides necessary knowledge (*al-‘ilm al-ḍarūrī*). Any *ṣaḥīḥ* tradition that doesn’t conform to these criteria, but has an authentic *isnād*, is of the status of *āḥād* (singular transmission), and thus only provides conditional knowledge (*al-‘ilm al-mutawaqqif*), and therefore needs further investigation. Maḥmūd al-Ṭaḥḥān, *Taysīr muṣṭalah al-ḥadīth* (Riyadh, 1425/2004), 23–25, 27; See also Mustawa and al-Khin, *al-‘Aqīdat al-Islāmīyah*, 67–79.

²⁸ See the Yaqeen series on the science of hadith: <https://yaqeeninstitute.org/series/hadith-series/>.

²⁹ Al-Nasafī with al-Taftāzānī, *al-‘Aqā’id al-Nasafīyah*, 1:90–91; Elder, *Commentary on the Creed of Islam*, 20–21.

³⁰ There are three main schools of Sunnī theology: the two schools of philosophical theology (*Kalām*), the Ash‘arī and Māturīdī (which are dominant among the Shāfi‘ī, Mālikī, and Ḥanafī), and the narration-based theology school of the Atharī (which is dominant among the Ḥanbalī). This paper applies the perspective of the philosophical theology schools.

knowledge without the assistance of revelation.³¹ But to fully know our ethical responsibility, what God expects from us, how to be in this world, we need help. We need prophets!³² But how do we know what information is truly from God? Many people claim prophethood. There are many religions. To know who is sent by God, to know his information is truly from God, we need signs of authenticity only God could generate. Miracles, supernatural events, could only be generated by the Controller of the World.³³ How do we recognize them and know about these signs? We end up again with our human limitations of senses (observe miracles), intellect (recognize true from false and think about their meaning), and shared knowledge (we tell others about them). Also, prophets bring information, i.e., revelation, which we need to maximize our theology. So, we also then need to distinguish possible from certain knowledge in relation to the shared knowledge going around about prophets and their revelations. We need to check if they fit with our minimal theology and we need to grade the shared reports. The shared reports need to be graded from unreliable to possible to certain knowledge as different aspects of our lives demand different levels of certainty. If a certain act must be punished with the death penalty, we want to have maximum certainty God said this

³¹ “But our scholars [of the Ḥanafī] follow the opinion that good and evil are known by reason as established by the Most Wise, who is God the Exalted. ... And this is the opinion of Imām Abū Ḥanīfah in that anyone to whom revelation has not reached, and who does not believe in the existence of God and His Oneness, then that person will be in the hellfire forever as this is a fact known by reason.” ‘Iṣām al-Dīn al-Qūnawī, *Ḥāshiyat al-Qūnawī ‘alā tafsīr al-imām al-Bayḍāwī* (Beirut: Dār al-Kutub al-‘Ilmiyyah, 2001), 11: 463. Translation by A. Y. Mol. See the concept of “minimal theology” discussed here: Arnold Yasin Mol, “Divine Respite in the Ottoman *Tafsīr* Tradition: Reconciling Exegetical Approaches to Q.11:117” in *Osmanli ‘da ilm-i tefsir*, ed. M. T. Boyalik and H. Abaci (Istanbul: ISAR, 2019), 543–52,

https://www.academia.edu/36916673/Divine_respite_in_the_Ottoman_tafsir_tradition_Reconciling_exegetical_approaches_to_Q.11_117_Osmanli_da_ilm-i_tefsir_ed_M.T.Boyalik_and_H.Abaci_Istanbul_ISAR_2019_539-592

³² Ibn Kamāl Pāshā discusses in his work on dogma al-Māturīdī’s position behind the wisdom of the sending of messengers by emphasizing, from a philosophical perspective, religion as the basis for civilization:

We say: As God the Exalted created mankind and determined for them that their existence is dependent on survival, and He created for them the necessities [of survival] such as food, drinks, clothing, homes, and things of such nature. So, mankind was made covetous for those necessities in service of their own existential survival [and are therefore hostile] towards others, and are not content with what God the Exalted provides them and will therefore allow injustice, usurpation, theft, murder, etc. So there is no escaping that men are to be united by people of law, who are sent to them to forbid those evils. They make a system of law and order between the people in this world and in order that they do not destroy this world. And guide them towards worshipping their Lord with their bodies and wealth so that they deserve by it paradise in the Hereafter. And those who do not do this are, in the Hereafter, a people lost and destroyed.

Ibn Kamāl Pāshā, *al-Munīr fī al-mawā‘iz wa-al-‘aqā‘id* (Istanbul: Dār al-Lubāb, 2018), 46. Translation by A. Y. Mol.

³³ Al-Nasafī with al-Taftāzānī, *al-‘Aqā‘id al-Nasafīyah*, 1:91; Elder, *Commentary on the Creed of Islam*, 21–22.

and meant this. So, the level of certainty required of the attained knowledge is equal to the impact it has on our lives. So minimal theology is dependent on empiricism, historicity, reason, and logic,³⁴ and maximal theology also depends on them. We therefore need to use these three sources of knowledge in all things and use them critically as we are responsible for what we accept as knowledge, especially knowledge that is the basis of our acts. We therefore also need to know how we can critically examine the contents of both the shared knowledge and the reasoning applied to it. Here again, the Islamic tradition has provided us with a lifeline.

Thinking straight: The centrality of logic in Islamic learning

Islamic civilization from its inception had systematic ways of correct reasoning that were indigenous to the Islamic intellectual tradition; however, from the 11th century onwards, the formalized system of Arabic logic (*‘ilm al-mantiq*) became the dominant intellectual tool for reasoning and critical analysis.³⁵ As the Islamic scholar Abū Ḥāmid al-Ghazālī famously proposed in his influential treatise on Islamic legal philosophy, *Distillation of the Principles of Jurisprudence* (*al-Mustasfā min ‘ilm al-uṣūl*), Islamic logic is not merely a tool for correct reasoning. He says about logic:

[Logic] is an introduction to *all the sciences*, and he who does not comprehend it is not ever to be trusted in his scholarship.³⁶

³⁴ Logic (*mantiq*) is a classical tool to “protect the mind from mistakes in thinking” and has pervaded the totality of Islamic sciences since early Islam. See: *Stanford Encyclopedia of Philosophy*, s.v. “Arabic and Islamic Philosophy of Language and Logic,” July 23, 2008, revised November 11, 2013, <https://plato.stanford.edu/entries/arabic-islamic-language/>.

³⁵ While Arabic logic was ultimately based on the earlier Greek tradition of Aristotelian logic, through Syriac intermediaries, it was never uncritically adopted. In fact, a long critical process took place of selection, digestion, and assimilation into the intellectual world of Islamic orthodoxy. Arabic logic hence became an independent and mature logical tradition fully harmonized with Islamic law and theology. For an excellent overview of this process of integration, see Tony Street, “Arabic Logic,” in *Handbook of the History of Logic*, eds. Dov. M. Gabbay and John Woods, vol. 1, *Greek, Indian and Arabic Logic* (Amsterdam: Elsevier, 2004), 523–96.

³⁶ “هي مقدمة العلوم كلها، ومن لا يحيط بها، فلا ثقة له بعلمه أصلاً”، Abū Ḥāmid Muḥammad b. Muḥammad al-Ghazālī, *al-Mustasfā min ‘ilm al-uṣūl*, 2 vols. (Cairo: al-Maṭba‘a al-Amīriyya, 1324/1906), 10.15–17. Slightly adjusted translation by T. Street (emphasis by the authors). al-Ghazālī is seen as the Islamic scholar who was most

Logic in the Islamic intellectual tradition serves as a principal tool for scientific discourse and discovery, which guarantees a certain precision in scientific reasoning and a safeguard against hidden assumptions and logical fallacies.³⁷ As a system of rules and guidelines regarding correct thinking, logic covers such topics as how to make proper definitions (*al-ḥadd*) and propositions (*al-qadīyah*) and how to construct correct arguments in the form of syllogisms (*al-qiyās*).³⁸ What are the underlying premises of a provided argument—how is it conceptualized (*taṣawwur*)? We also need to verify (*taṣdīq*) this conceptualization—are correct definitions and propositions being used? Do we know exactly what we mean when we speak of a term? Are we speaking about the same thing?³⁹ Logic as a system for proper reasoning and eliminating unwarranted beliefs, hasty conjectures, or fallacious arguments can provide rational guidance in our modern world of fake news and misinformation.⁴⁰

Logic is, in fact, part of a larger toolkit in the Islamic tradition for “thinking straight” (i.e., proper reasoning) in all intellectual endeavors. This toolkit includes, besides logic, the sciences of dialectics (*‘ilm al-baḥth wa-al-munāẓarah*), rhetoric (*‘ilm al-balāghah*), and semantics (*‘ilm al-waḍ‘*). Together, these are called the “instrumental sciences” (*‘ulūm al-ālah*), which were fundamental prerequisite

instrumental in integrating logic into the Islamic sciences. See Wael B. Hallaq, *A History of Islamic Legal Theories: An Introduction to Sunnī Uṣūl al-Fiqh* (New York: Cambridge University Press, 1997), 39–40; Khaled El-Rouayheb, “Theology and Logic”, in *The Oxford Handbook of Islamic Theology*, ed. Sabine Schmidtke (Oxford: Oxford University Press, 2016), 411–14.

³⁷ Jon McGinnis provides an excellent outline of logic, especially with regards to its relationship to scientific inquiry; see his *Avicenna* (New York: Oxford University Press, 2010), 27–52.

³⁸ Logic as a science is a vast subject that extends beyond the scope of this article. However, the basics of logical thinking are easy to grasp. For an accessible introduction to logic in the English language, see Peter Kreeft, *Socratic Logic* (South Bend, IN: St Augustine’s Press, 2010). For an extensive treatment of Avicenna’s syllogistics, see Tony Street, “An Outline of Avicenna’s Syllogistic,” in *Archiv für Geschichte der Philosophie* 84 (2002): 129–60.

³⁹ Terms are notoriously ambiguous and making sound definitions helps us to clarify our terms. Hence, definitions are of utmost importance if we really want to understand each other (“coming to terms”). For a helpful guide to understanding definitions in a logically sound way, see Kreeft, *Socratic Logic*, 123–37.

⁴⁰ While logic as a system of rules for correct reasoning has been adopted by the vast majority of Muslim scholars in traditional Islam, the authors are well aware that an important minority of scholars have rejected the use of logic for various reasons, most notably the Shāfi‘ī jurist Ibn al-Ṣalāḥ (d. 643/1245) and the Ḥanbalī scholar Ibn Taymīyah (d. 728/1328). It is beyond the scope of this article to explore the scholarly positions for and against logic (we hope to dedicate a full article to this topic in the future), but for more details on this debate see Khaled El-Rouayheb’s excellent overview: “Sunni Muslim Scholars on the Status of Logic, 1500–1800,” *Islamic Law and Society* 11, no. 2 (2004): 213–32.

studies for the student of sacred knowledge (*ṭālib al-‘ilm*) to master before moving on to the so-called “higher sciences” (*‘ulūm al-‘āliyah*), such as Islamic law (*fiqh*), legal philosophy (*uṣūl al-fiqh*), Qur’anic exegesis (*tafsīr*), or philosophical theology (*kalām*).⁴¹ Logic became part of an Islamic *Organon* of sorts, that was to take center stage in the classical Muslim *madrasah* educational curriculum.⁴²

Notwithstanding Orientalist claims that logic in the Islamic world stopped flourishing after the 14th century, recent academic scholarship has shown that logic, in fact, continued to develop and flourish well into our modern times.⁴³ Current research is thus slowly, but steadily, catching up to the fact that logic and other intellectual ancillary sciences are being taught in Muslim theological seminaries today throughout the Muslim world as part of a *lived* intellectual tradition.⁴⁴ We, as Muslims, would do well to cherish this tradition and learn it, especially in times in which misinformation, faulty reasoning, and conspiracy thinking reign supreme.

Conclusion: An *adāb* of forwarding

⁴¹ From early Islamic history, Islamic scholars and encyclopedists have put great effort into systematizing and categorizing the different fields of knowledge. As a result, different scholars have used different sets of criteria to construct categorizations. The two-fold distinction of “instrumental” and “higher” sciences used here reflects the Ottoman *madrasa* tradition. Another well-known and much more comprehensive categorization is found in the famous encyclopedic work of Ṭāshkuprī’zādah, *Miftāḥ al-sa’ādah wa miṣbāḥ al-sayādah* [The Key to Happiness and the Lamp of Lordship] (Beirut: Dār ibn Ḥazm, 1431/2010). For more on the classification of the sciences in Islam, see Hans Hinrich Biesterfeldt, “Medieval Arabic Encyclopedias of Science and Philosophy,” in *The Medieval Hebrew Encyclopedias of Science and Philosophy*, ed. Steven Harvey (Dordrecht: Springer, 2000), 77–98; Bakar, *Classification of Knowledge in Islam*.

⁴² *Organon* (lit. “instrument” or “tool”) is the ancient Greek term that came to be used for the standard collection of Aristotelian logical writings that were part of the scientific-philosophical curriculum of the Hellenistic world. For more on the Islamic *madrasa* curriculum and its importance, see Hamza Karamali, *The Madrasa Curriculum in Context* (Abu Dhabi, UAE: Kalam Research & Media, 2017) and John Walbridge, *God and Logic in Islam: The Caliphate of Reason* (New York: Cambridge University Press, 2011).

⁴³ For a classical Orientalist expression of the “decline theory” in Arabic logic, see Nicholas Rescher, *Studies in the History of Arabic Logic* (Pittsburgh, PA: University of Pittsburgh Press, 1963). For an important corrective of this paradigm, see: Khaled El-Rouayheb, *Relational Syllogisms and the History of Arabic Logic 900–1900* (Leiden, Boston: Brill, 2010).

⁴⁴ Fortunately, we can witness what seems to be the beginnings of a revival of this intellectual tradition throughout the Muslim world, for example in the reopening of the famous Suleymaniye Madrasa in Istanbul, which served as the top theological seminary of the Ottoman empire for centuries, see: “Süleymaniye Campus Opened with Ribbon-Cutting Ceremony,” Ibn Haldun University, October 3, 2018, <https://www.ihu.edu.tr/en/suleymaniye-campus-opened-with-ribbon-cutting-ceremony/>.

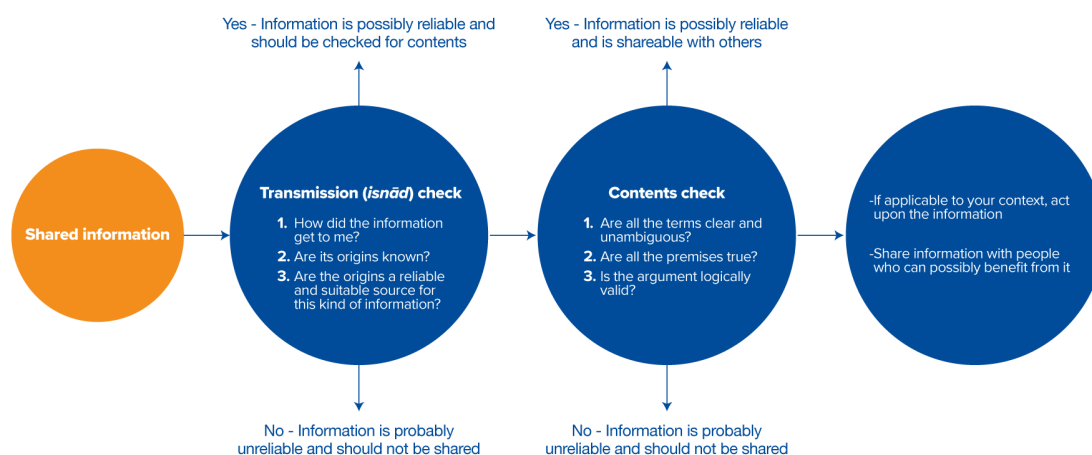
And now we return to where we started. False information can have an immense negative impact on our lives. It therefore requires high reliability before any information is accepted, applied, and shared around with others. *Uṣūl al-fiqh*, the fundamentals of Islamic jurisprudence, only accept a certain scope of sources, tools of interpretation (hermeneutics), and expertise to determine Islamic law.⁴⁵ The science of medicine has its own *uṣūl* as well, which is why Islamic *fiqh* councils across the world have involved medical experts to create opinions on modern bioethical issues such as cloning and organ donation.⁴⁶ We need to respect the domain of each science. We have to trust and follow (*taqlīd*) the experts who are qualified to deal with these subjects (Qur'an 21:7). But like Muslim scholars, members of the scientific community also differ with one another, so it is strongly recommended in the same spirit to follow the majority (*jamhūr*) and consensus (*ijmā'*) opinions, and avoid outlying (*shādhah*) ones. We have both the right and obligation to be informed, to understand what is going on, and to know how to act in the best fashion so we can avoid harm. This requires a critical engagement with information as has been taught by our intellectual tradition for centuries. The Islamic tradition has provided us with powerful tools to assess the information coming to us at multiple levels of analysis. We observe them through our senses almost unwillingly, so we need to judge them critically. Where is this information from, what is its source, and what is its chain of transmission (*isnād*)? How did it reach me? Who said it, and are they reliable and qualified to discuss these matters? What is the background of this information? Is it reasonable, logical, and can it be confirmed and corroborated by other information out there? What is the majority opinion or consensus on this? Does it have sound premises? Does this information help me avoid harm to myself and others?

A case study we can all learn from, were the many false claims circulated in the early days of the COVID pandemic. When it was claimed, for example, that 5G technology was related to the coronavirus outbreak, we should have asked where

⁴⁵ See this discussed in Amjad M. Mohammed, *Muslims in Non-Muslim Lands: A Legal Study with Applications* (Cambridge: Islamic Texts Society, 2013), 60–70.

⁴⁶ See this discussed in Mohammed Ghaly, “Biomedical Scientists as Co-Muftis: Their Contribution to Contemporary Islamic Bioethics,” *Welt des Islams* 55, nos. 3–4 (2015): 286–311, <https://doi.org/10.1163/15700607-05534p03>.

this claim originated from. Was it claimed by scientists who had the necessary knowledge to question and research such a connection, or was it a claim of non-specialists? It turns out it was the latter.⁴⁷ We always need to investigate if non-specialists are utilizing sound definitions and premises. For example, did they use valid data and arguments to make the claim for a causal relationship between 5G electromagnetic radiation and a transmittable biological disease? It turns out they did not.⁴⁸ When we dig deeper, we see that there had been earlier public concerns about 5G technology, and this concern was then falsely connected to the coronavirus outbreak. Not only was it a claim of non-specialists, but it also lacked a sound *isnād*. It could therefore be dismissed as unreliable knowledge. Fake news.



When a fellow believer shares information, we are obliged to have a good opinion (*ḥusn al-ẓann*) about that person. But there is a scope to *ḥusn al-ẓann*. Trust your fellow human, especially your brother or sister in faith. But don't assume they have checked the sources. Ask them where they got their information from and why they think it is reliable. Be critical together. In the spirit of the critical apparatus of our

⁴⁷ Rebecca Heilweil, "How the 5G Coronavirus Conspiracy Theory Went from Fringe to Mainstream," Vox, April 24, 2020,

<https://www.vox.com/recode/2020/4/24/21231085/coronavirus-5g-conspiracy-theory-covid-facebook-youtube>.

⁴⁸ Stanley Shanapinda, "No, 5G Radiation Doesn't Cause or Spread the Coronavirus. Saying It Does Is Destructive," The Conversation, April 7, 2020,

<https://theconversation.com/no-5g-radiation-doesnt-cause-or-spread-the-coronavirus-saying-it-does-is-destructive-135695>.

intellectual tradition, we need to apply an *adāb*, an ethical conduct, of forwarding and sharing information.