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Technologsy in Islam and The West: Consume With Caution Insights From Gadamerian Hermeneutics and Emotional Intelligence

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In addition to beginning with *Bismillāh ir-raḥmān ir-raḥīm*, in the name of God, the Infinitely Merciful and Infinitely Compassionate,[2] traditional Muslim discourse should begin by a declaration of taking refuge in God from the deviousness of Satan, by saying *aʿūdhū billāhi min al-Shayṭāni'r-rajīm* (I seek refuge in God from Satan, the reviled one). This is not simply a cultural custom in Islam; rather, it has its source in the example (*sunnah)* of Muḥammad ﷺ, which we read about in the *Ṣaḥiḥayn,* the two sound ḥadīth collections of Bukhārī and Muslim: "Two men insulted one another in the presence of God's Messenger ﷺ and one of them became angry to the extent that his face became red and swollen. The Prophet ﷺ looked at him and said: "I know a sentence (*kalima*) that were he to say it, that state he is in would leave him; and that sentence is: I seek refuge in God from the accursed Satan."[3]

We say this, not just in the context in which the Prophet ﷺ used it, but as part of the *adab*, the customary manners of a Muslim, before beginning all endeavors. Unfortunately, this sentence often becomes a mere

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2 Among the hadiths that illustrate the importance in the *sunnah* for beginning endeavors, including speech, with the mention of Allah, we find that the Prophet ﷺ stated the following: "Every discourse that is not started, in the beginning, with mention of Allah, is cut off [from blessings] كُلُّ كَلَامٍ لَا يُبْدَأُ فِي أَوَّلِهِ بِذِكْرِ اللهِ، فَهُوَ أَبْتَرُ al-Nasāʾī, *al-Sunan al-kubrá*, #10331, http://islamport.com/w/mtn/Web/1231/2767.htm; and ed. Ḥasan ʿAbd al-Munʿim Shalabī (al-Maktabah al-shāmilah) #10258. Similarly, it was reported that the Prophet ﷺ stated the following: كُلُّ كَلَامٍ لَا يُبْدَأُ فِيهِ بِبَسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ فهو أجذم every discourse that is not started by *Bismillāh al-Raḥmān al-Raḥīm* is cut off. See Qurṭubī, *al-Jāmiʿ li-aḥkām al-Qurʾān* (Beirut: Dār al-Kutub al-ʿIlmīya, 1988), 13:128/marg., 192).

3 Bukhārī and Muslim, *Ṣaḥiḥayn* (al-Maktabah al-Shāmilah).

cultural habit that is said and heard unthinkingly. So I would like to ask all of us here to stop for a moment, and say and contemplate this phrase together, remembering and taking refuge in God and reflecting upon the implications of this statement and what it should imply to us, right now, here, today, in a conference on Islam and Technology.

One thing that this ḥadīth should imply to us is that we should turn off our mobile phones. So just as you might remember to straighten your lines before praying in a group, please now, even though we are not praying, please check to make sure your mobile phones are turned off; or at least, if you think you may get an emergency call, please put your phone on vibrate; and then if it vibrates and if you need to answer it, please leave the room.

From these preliminary remarks, you might get the impression that today I will express the opinion that technology is an instrument of Satan. But that is not the case. In fact, I will only go so far as to state that technology can be an instrument of Satan, but it need not be so. Rather, technology can be an instrument of tremendous good. The fact, however, is that because of the potentially destructive power of technology, we need to exercise caution and *taqwá* (consciousness of God) and be highly conscious when using technology, otherwise instead of our mastering it for the good of humanity, technology will become our master and we will become enslaved to it.

One of the ways that we can avoid becoming slaves of technology is for any responsible person— and especially Muslim scholars and leaders— to do just as I have done today, and begin thinking about and developing recommended *adab* (good manners) concerning technology. We can build the foundation of this on Mevlana's words in his *Mesnevi*, words that Bediuzzaman Said Nursi also reminds us of in his *Lema'lar*:

> از خدا جوییم توفیق ادب بی ادب محروم شد از لطف رب[4]
>
> *Tanrı'dan edepli olmayı dileyelim*[5]
>
> *Edepsiz kişi Allah'ın lütfundan mahrum kalır.*[6]

4 Jalāl al-Dīn Rūmī, *The Mathnawi,* ed. Reynold A. Nicholson (London: Luzac, 1925), vol. 1 [containing the Persian text, book 1 and 2]:7, line # 78.

5 Erkan Türkmen, trans., *Mevlana'nın Gül Bahçesinden Bir Demet Gül,* Konya, 2012, http://www.rumierkan.com/TR/icerik.asp?content=Content_TR_65.00.htm.

6 Bediüzzaman Said Nursî, Lem'alar, On Birinci Lem'a: Yedinci nükte, 108, http://www.sorularlarisale.com/index.php?s=modules/kulliyat&id=1922.

We seek from God the grace of good manners!

Without good manners one becomes deprived of the benevolence of the Lord-Sustainer.

I hope that my presenting to you the concrete example of shutting off mobile phones during presentations in a conference such as this will help you to start thinking about and developing recommended *adab* concerning technology (if you have not already done so). I will return to the topic of the *adab* of technology later in my presentation today. So after these preliminary remarks, I would like to begin the core of my presentation:

بسم الله الرحمن الرحيم

The title of my presentation is "Technology in Islam and the West: Consume with Caution— Insights from Gadamerian Hermeneutics and Emotional Intelligence."

While there is no question that technology has provided our world with many advantages, it is undeniable that technology also presents us with many challenging problems. As examples I will briefly note three of the many problems: the destructive potential of nuclear technology and other weapons systems, the unintended disruption of our ecosystems by things such as urbanization, pesticides, and genetically modified crops, and the colonization of our attention by television programming and advertising, the internet, tablet computers such as i-pads, and mobile telephones.

Taking into consideration such obvious problems with technology, a great deal of scholarly discussion concerning Islam and technology has revolved around the issue of whether or not technology is potentially advantageous, neutral, or inherently detrimental to religious values in general and to those of Islam in particular. Nevertheless, Muslim leaders and popular Muslim opinion, in general, agree that Muslims must advance quickly in science and technology. The importance of scientific and technological advancement was certainly at the core of the trajectory of modern Turkey. Atatürk himself stated,

> *We shall take science and knowledge from wherever they may be, and put them in the mind of every member of the nation. For science and for knowledge, there are no re-*

strictions and no conditions. For a nation that insists on preserving a host of traditions and beliefs that rest on no logical proof, progress is very difficult, perhaps even impossible.[7]

Such an enthusiastic embrace of science and technology, however, is not unique to Turkey. Ibrahim Kalin[8] maintains that this strongly felt need to advance swiftly in modern science and technology characterizes the Muslim world in general:

From Mustafa Kemal Ataturk, the founder of modern Turkey, to Mahathir Muhammad, the prime minister of Malaysia, the goal has remained the same: to fill the gap between Western and Islamic societies by empowering Muslim countries with the tools and blessings of modern science. Not only are the ruling elites but also the populace at large convinced of the intrinsic power and necessity of science and technology.[9]

In spite of the tremendous need for scientific and technological advancement, scholars such as Seyyed Hossein Nasr have urged us to exercise caution and not to run headlong into the arms of modern science and its technological progeny. Nasr, however, goes beyond pointing out the many obvious problems in our world for which technology is the guilty party. He strongly argues that technology is not value-free. Like its epis-

7 Kemal Atatürk*, Atatürk'ün Söylev ve Demeçleri* (Ankara, 1952) II, 44, 5. Baskı 2006, from a speech given in October 27, 1922; "Ilim ve fen nerede ise oradan alacağız ve her ferdi milletin kafasına koyacağız, ilim ve fen için kayıt ve şart yoktur. Hiçbir delili mantıkiye istinat etmiyen bir takım an'anelerin, akidelerin muhafazasında ısrar eden milletlerin terakkisi çok güç olur; belki de hiç olmaz" Öğretmenlere (27. X. 1922), http://atam.gov.tr/wp-content/uploads/S%C3%96YLEV-ORJ%C4%B0NAL.pdf. Translated by Von Grunebaum in his *Modern Islam: The Search for Cultural Identity* (Westport, Conn.: Greenwood Press, 1983), reprinted (New York: Random House, 1963), 104. Also cited by Ibrahim Kalin, "Three Views of Science in the Islamic World" in *God, Life and the Cosmos: Christian and Islamic Perspectives*, eds. Ted Peters, Muzaffar Iqbal, Syed Nomanul Haq, (Ashgate, 2002), 43-75; and in Kalin, "Islam and Science," http://www.oxfordislamicstudies.com/Public/focus/essay1009_science.html.

8 Ibrahim Kalin, as of October, 2015, held the position of Deputy Undersecretary and Senior Advisor to the Prime Ministry of Turkey, now Deputy Undersecretary to the Office of the President.

9 Ibrahim Kalin, "Islam and Science: Notes on an Ongoing Debate" in Gary Laderman and Arri Eisen, eds., *Science, Religion and Society: An Encyclopedia of History, Culture and Controversy* (Armonk, N.Y.: M.E. Sharpe, 2007), 113.

temological father—modern science—technology marches through our world both carrying and being swept up by the modernistic worldview, which wreaks havoc on traditional religious worldviews in general and Islamic worldviews in particular.[10] As Nasr expresses it:

Technology itself brings with it a certain technological culture which is against the soul of the human being as an immortal being, and is against the fabric of all traditional societies which are based on the spiritual relationship between the human being and the objects he or she creates. These objects [in a traditional society] are based on an art that is creative and reflects God's creativity as the Supreme Artisan….He has given us the power of creativity, which we reflect in our beings because we are His khulafà, His vicegerents on earth….

In traditional civilizations there was a continuous spectrum of creation which was always related to God, from the making of a simple comb to the composition of poetry and everything in between; everything was related to God and reflected His quality as the Supreme Artisan on the human plane. Now modern technology destroys that relationship.[11]

So, on the one hand, from Nasr's perspective, modern technology inherently cuts modern man off from the remembrance and awareness of God, the creator. Yet, on the other hand, there are Muslim scientists, such as Dr. Abdus Salam, the Pakistani physicist and winner of the Nobel Prize (in addition to numerous Muslim political leaders and large numbers of Muslims), who see modern science (and we can infer, modern technology)

10 Kalin (and others such as Huston Smith and S. H. Nasr) refers to the culture of which modern science and technology are the standard bearers as *scientism*. Science per se contrasts with "modern science" and *scientism*. "Scientism seeks to supplant the religious view of the universe and reduce religion to ethics without a claim over the nature of reality" (Ibrahim Kalin, "Islam and Science", *Oxford Islamic Studies Online* http://www.oxfordislamicstudies.com/Public/focus/essay1009_science.html). Huston Smith defines scientism as "the drawing of conclusions from science that do not logically follow" (Huston Smith, *Beyond the Post-modern Mind* [Wheaton, IL: The Theosophical Publishing House, 1989], 146). Furthermore, Smith states that [scientism] "goes beyond the actual findings of science to deny that other approaches to knowledge are valid and other truths true," (Huston Smith, *Forgotten Truth* [New York: Harper & Row, 1976], 16).

11 Seyyed Hossein Nasr and Muzaffar Iqbal, *Islam, Science, Muslims, and Technology* (Sherwood Park, Alberta, Canada: Al-Qalam Publishing), 98.

as being in complete harmony with Islam: "There truly is no dissonance between Islam and modern science."[12] In other words there is no consensus among Muslims about the harmony or dissonance between Islam, on the one hand, and science and technology, on the other.

My perspective, which I will elaborate today, is that aside from whatever the inherent potential value of technology may be, we run the risk of allowing technology to become destructive as long as our educational institutions fail to train students how to become aware of and steer clear of their own "selfish interest," this being a key concept in Bediuzzaman Said Nursi's *Risale-i Nur*.[13] Not being dominated by one's own selfish interest is necessary if one wishes to become among the people of truth, guided by *īmān* (namely guided by faith undistorted by the ego-self). I argue that to the degree that we are dominated by our own selfish interest, in spite of our best intentions, we will fall short of becoming people of truth, and our *īmān* will become unconsciously distorted. Hence (because of the extreme danger of becoming subverted by one's "own selfish interest") I suggest that to develop an Islamic ethic of technology we must renew and refresh the three traditional Islamic principles of the *salaf al-ṣāliḥ* (our righteous predecessors), which principles are *islām*, *īmān*, and *iḥsān*.[14] Furthermore,

12 Abdus Salam. *Ideals and Realities: Selected Essays,* ed. C. H. Lai (Philadelphia: World Scientific, 1987), 212 cited in Ibrahim Kalin, ed. *The Oxford Encyclopedia of Philosophy, Science, and Technology in Islam*, s.v., "Technology and Applied Sciences" by Aaron Segal, updated by Hassan Radoine (New York: Oxford University Press, 2014), 320.

13 On "selfish interest" in the *Risale-i Nur*, see Wan Kamal Mujani, Ermy Azziati Rozali, and Mohamad Zaidin Mat Mohamad, "The World Stability within Cosmology As Inspired by Risale-i Nur*," Advances in Natural and Applied Sciences,* 6 (6): 980-984, 2012, http://www.bediuzzamansaidnursi.org/en/icerik/world-stability-within-cosmology-inspired-risale-i-nur. Note that the English phrase "selfish interest" is a useful way of conveying what is implied in the traditional Islamic term "*al-nafs al-ammārah*." In describing Said Nursi's perspective, M. Hakan Yavuz states:
These are the internalization of Islamic precepts and norms with the goal of self-transformation by subduing the *nafs al-ammarah* (the carnal soul) " M. Hakan Yavuz, "The Sufi Conception of Jihad: The Case of Said Nursi," http://www.bediuzzamansaidnursi.org/en/icerik/sufi-conception-jihad-case-said-nursi; and see also Muhammad Sirozi, "Nursi's Ideas On Science Development In Muslim Countries," www.bediuzzamansaidnursi.org/en/icerik/nursi's-ideas-science-development-muslim-countries.

14 *Islām* (surrendering), *īmān* (faith), *iḥsān* (affirming virtuous beauty). These three words, to which translations do not do justice, have come to indicate the major emphases of Islam. Most significantly they were defined in what is known as the *ḥadīth* of Gabriel, in which the Prophet defined *islām* as the principal pious actions of Islam (also known as the "five pillars of Islam"), stating that "Islām is to testify that there is no god but God and that Muhammad is God's Messenger, to perform the prayer, bestow alms, fast Ramadan and

in the course of taking a fresh look at how we can adapt *islām*, *īmān*, and *iḥsān*, in order to develop an authentically Islamic ethic for the use of technology, we need to understand that these refer, respectively, to principles of *ʿamal* (behavior), *ʿilm* (cognition), and *ḥāl* (affect, emotion, and state).

Moreover, since scholars in the West have also been dealing with the need to develop an ethic for coping with the challenges of technology, I argue that in our quest to develop an Islamic ethic for the use of technology we can benefit from understanding three recent developments in the West, and consequently train students in three ways that have parallels in the Islam of the *salaf al-ṣāliḥ* (pious predecessors): first, in the training of *'amal*, we need to train students to act responsibly with technology by updating and developing Islamic *adab* for technology; second, in the training of *'ilm*, we need to train students to cultivate a hermeneutical understanding (such as Gadamerian hermeneutics suggests, which involves cultivating self-understanding together with understanding of the world and technology—rather than striving for objectivity in a purely modernistic sense); and third, in the way of *ḥāl*, we need to train students to enhance their emotional intelligence (*duygusal zeka*).

The primary reason why renewing Islamic ethical principles and developing an ethical methodology for technology aided by insights from these Western developments is necessary is because the the human ego-self (*nafs*) —in spite of our highest intentions, aspirations, and efforts of religious leaders—will to varying degrees always be in danger of attempting to use technology (either unconsciously or consciously) without sufficient wisdom, leading to destructive outcomes because of the power of the ego-self (al-*nafs al-ammāra bi-al-sū'*), as we read in the Qur'an: *inna an-nafsa la-ammāratun bi-s-sūʾ* (Indeed, the ego-self commands to evil [Qur'an, Sūrat Yūsuf, 12:53]). Because of the degree to which the Muslim world, like the West, has already succumbed to many of the dangers of technology, it is essential that we use whatever insights we can find, as long as such insights are filtered by the light of Islam, just as Muslim

make if are able, to undertake the pilgrimage to the Holy House [the Kaʿba in Mecca]." *Īmān* (faith), he stated, is to embrace the following six beliefs: "To believe in God and His Angels and His books and His Messengers and the Last Day, and to believe that no good or evil cometh but by his Providence." *Iḥsān*, as the Prophet defined it is: "To worship God as if you see him, for if you do not see Him, then [know that] He sees you." (Bukhārī and Muslim, *Ṣaḥiḥayn* [al-Maktabah al-Shāmilah]).

scholars throughout the centuries have taken wisdom wherever they have found it and then islamicized it.

Furthermore, a *ḥadīth* of Tirmidhī, which he considered to have a high degree of authenticity (*ḥasan ṣaḥīḥ*), underscores the danger of the ego-self by highlighting the significance of working to diminish its power: The *mujāhid* is one who strives against his own ego-self (*nafs)*:المُجَاهِدُ مَنْ جَاهَدَ نَفْسَهُ.[15] Hence, I argue that we should adopt as a basic framework, an Islamic ethical model for approaching technology in which we emphasize, first and foremost, the *jihād ʿan al-nafs*, namely striving against our *nafs*, against our ego-self, in order to reduce the distortions of our perception and self-deceptions arising from the *al-nafs al-ammāra bi-al-sū'*. Second, we must understand that success in the *jihād* against the *al-nafs al-ammāra bi-al-sū'* will increase the likelihood that our efforts to perceive and develop an Islamic ethic of technology will in fact be for the sake of God (*fi-sabīl Allāh*)—neither being for the sake of our ego-self (*fī sabīl al-nafs*) nor for the sake of Shayṭān (*fī sabīl al-shayṭān*). In this, I follow Imām al-Ghazālī, who referred to striving against the ego-self (*nafs*) as the greater *jihād*; while striving in the world, he regarded as a necessary, but lesser *jihād*: "The greater *jihād* is the *jihād* against the ego-self *(nafs)*, as one of the companions… stated: "We have returned from the lesser *jihād* to the greater *jihād*, meaning, the *jihād* against the self."[16]

15 Abū ʿĪsá al-Tirmidhī, *Sunan al-Tirmidhī*, ed. Ibrahīm ʿAṭwah ʿAwaḍ (Cairo: Muṣṭafā al-Bābī al-Ḥalabī, 1975), 4:165, #1621.

16 والجهاد الأكبر جهاد النفس كما قال بعض الصحابة رضي الله عنه رجعنا من الجهاد الأصغر إلى الجهاد الأكبر يعنون جهاد النفس

Abū Ḥāmid al-Ghazālī. *Iḥyā ʿulūm al-dīn: kitāb al-ʿuzla* (Jeddah; Dār al-Minhāj, 2011), 4:325-26. A *ḥadīth* of the Prophet ﷺ concerning the greater *jihād* was reported by both Bayhaqī and al-Khaṭīb al-Baghdādī. These two *ḥadīth* reports included their chains of transmission and with minor differences in the content of the *hadith.* Bayhaqī himself noted that his chain of transmission (*isnād*) was "weak." Other scholars have cast doubt on the validity of al-Khaṭīb's *isnād*: The Prophet ﷺ said to a group of warriors who had just returned from battle, "You have arrived at the best place from which to embark; you have arrived [at the embarkation point of travelling] from the lesser *jihād* to the greater *jihād*." So they asked, "What is the greater *jihād*?" He said, "The servant's striving against his desires."

قَدِمْتُمْ خَيْرَ مَقْدَمٍ، وَقَدِمْتُمْ مِنَ الْجِهَادِ الأَصْغَرِ إِلَى الْجِهَادِ الأَكْبَرِ. قَالُوا: وَمَا الْجِهَادُ الأَكْبَرِ يَا رَسُولَ اللَّهِ؟ قَالَ: مُجَاهَدَةُ الْعَبْدِ هَوَاهُ

This version of the ḥadīth is form the *Tārīkh Baghdād*: al-Khaṭīb al-Baghdādī, *Tārīkh Baghdād* (Beirut: Dār al-Kutub al-ʿIlmīya, n.d.), 13:523-24, #7345; Abū Bakr Aḥmad al-Bayhaqī, *Kitāb al-Zuhd al-kabīr*, ed.ʿĀmir Aḥmad Haydar (Beirut: Dār al-Jinān, 1987), 165, #373;. Some scholarly criticisms of it were recorded by Ismāʿīl b. Muḥammad al-

Hence, I am suggesting first, that considering the two forms of effort—referred to as the greater and lesser *jihāds*—we should emphasize the greater *jihād (*which strives against the distortions of the *nafs*) without neglecting the lesser *jihād* (which consists of striving to find the wisest solutions in our worldly affairs). Second, we should understand the greater *jihād,* on the one hand, as being both a *jihād* of *ḥāl* (affect) and a *jihād* of *'ilm* (cognition); and, on the other hand, we can understand the lesser *jihād* as a *jihād* of *'amal* (action). Third, I suggest implementing what I call an ABC approach to education for enhancing understanding, applying it specifically to the problem of developing an Islamic ethic for technology, with the "A" standing for "affect" (*ḥāl*), the "B" standing for "behavior" (*'amal*), and the "C" standing for "cognition" (*'ilm*). The greater *jihād* , as a *jihād* of *ḥāl*, is an affective *jihād* (a *jihād* relating to emotions), one that can decrease the power of the *nafs* by directly increasing emotional intelligence, by enabling us to use emotions so that they will enhance wisdom and not become a means for increasing the distorting effects of the *nafs*. In addition, the greater *jihād* is also a *jihād* of *'ilm* (cognition), when it is conducted so as to reduce the dominance of the *nafs* by means of enhancing self-cognition, self-knowledge, self-understanding (all of which indirectly reduce fear deriving from the absence of these or from perceived threats to them), as well as by striving to understand the world and others. Fourth and finally, concerning the lesser *jihād*, a *jihād* of *'amal* (action), we must constantly strive to create an appropriate form of *'amal*, an *adab* for dealing with technology. In undertaking this, however, we must recognize that any failures of ours at attempting to create a successful *adab* for technology will be influenced, if not directly caused, by our unconscious-

ʿAjlūnī, *Kashf al-khafā'*(Beirut: Muʾassasat al-Risāla, 1979), 1:511-12. See also G. F. Haddad, "Documentation of 'Greater Jihad' hadith," http://www.livingislam.org/n/dgjh_e.html.

A related and authentic *hadith* that confirms the meaning, however, as narrated by Abū Dharr and authenticated by al-Albānī, is "I asked the Prophet ﷺ 'Which *jihād* is the best?' He replied, "[The best *jihād* is] striving against your self and your desires, for God (*fī dhāt Allāh*), may He be exalted and glorified"

عَنْ أَبِي ذَرٍّ، قَالَ: سَأَلْتُ رَسُولَ اللَّهِ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ: أَيُّ الْجِهَادِ أَفْضَلُ؟ قَالَ: «أَنْ تُجَاهِدَ نَفْسَكَ وَهَوَاكَ فِي ذَاتِ اللَّهِ عَزَّ وَجَلَّ

Abū Nuʿaym al-Aṣbahānī, *Hilyat al-awliyā'* (Beirut: Dār al-Kitāb al-ʿArabī, 1980), 2:249. Al-Aṣbahānī, *Kitāb al-Arba'īn ʿalá madh'hab al-mutaḥaqqiqīn min al-ṣūfīyah*, ed. Badr b. ʿAbdallāh al-Badr (Beirut: Dār Ibn Hazm, 1993), 42. Nāṣir al-Dīn al-Albānī, *Silsilat al-.aḥādīth al-ṣaḥīḥa* (Riyadh: Maktabat al-maʿārif, 1995), 3:483-84, #1496

ness of the distorting effects of our own *nafs* (which often undermines our best intentions). Furthermore, such distorting effects will arise because of our failures at our greater *jihāds*. Consequently we must recognize that any of our successes in creating an *adab* for technology will, for the most part, be due to our successes in our greater *jihād*. Nevertheless, such successes will ultimately all be due to the mercy of God, hence we pray as did the Prophet ﷺ: *allāhuma maghfiratuka awsaʿu min dhunūbī wa-raḥmatuka arjá ʻindi min ʻamali*. "O God, Your forgiveness is more encompassing then my sins; and Your mercy is what is hoped for more than my actions."[17]

Before developing my Affective-Behavioral-Cognitive (ABC) approach toward enhancing understanding within the overall framework of the greater and lesser forms of *jihād* (effort or striving), it is necessary to note that a number of Muslim scholars have formulated an Islamic ethic of technology, in particular, Muslim reformers such as Bediuzzaman Said Nursi, the Ijmali school of Ziauddin Sardar, and the traditionalist-perennial approach, which today is best articulated by Seyyid Hussein Nasr. Fortunately, Ibrahim Kalin has provided us with excellent articles that summarize their efforts and the major issues concerning Islam, science, and technology.[18] These, together with Muzaffar Iqbal's book on the perspective of Seyyid Hossein Nasr, *Islam, Science, Muslims, and Technology*, allow me to proceed with my contribution, which, as I have noted, highlights the importance of the distorting effects of the selfish interests of scientists, scholars, and anyone attempting to cope with the technological age.[19] I should also mention that in developing the cognitive aspect of

17 قُلِ اللَّهُمَّ مَغْفِرَتِكَ أَوْسَعُ مِنْ ذُنُوبِي وَرَحْمَتُكَ أَرْجَى عِنْدِي مِنْ عَمَلِي Al-Ḥākim al-Naysābūri, *al-Mustadrak ʿalá ṣaḥīḥayn* wa-bi-dhaylihi *al-Talkhīṣ* lil-Ḥāfiẓ al-Dhahabī (Beirut: Dār al-Kitāb al-ʿArabī, n.d.), 1:543-44; and ed. Muṣṭafá ʿAbd al-Qādir ʿAṭā (Beirut: Dār al-Kutub al-ʿIlmīya, 1990), 1:728, #1994 at al-Maktabah al-Shāmila.

18 Ibrahim Kalin, "Three Views of Science in the Islamic World," http://www.muslimphilosophy.com/kalin/Three%20Views%20of%20Science%20in%20the%20Islamic%20World.doc; and "Islam and Science: Notes on an Ongoing Debate," *Parabola* 33(3):66-73, September 2008, http://tinyurl.com/kudwsrp.

19 Kalin summarizes Nasr's critique of scientism or "modern" science as being comprised of five main traits:
The first is the secular view of the universe that sees no traces of the Divine in the natural order. Nature is no longer the *vestigia Dei* of Christian cosmology but a self-subsistent entity that can be encapsulated exhaustively in the quantitative formulae of natural sciences. The second feature is the mechanization of the world-picture upon the model of machines and clocks. Once couched in terms of mechanistic relations, nature becomes something absolutely determinable and predictable -- a much needed safety zone for the rise of modern industrial society and capitalism. The third aspect of modern science is rationalism and empiricism as we have alluded to before. The fourth trait is the legacy of Cartesian dualism that presupposes a complete separation between *res cogitans* and *res extensa*, viz., between the knowing subject and the object to be known. With this cleavage, the epistemological alienation of man from nature comes to completion by leaving behind a torrent of pseudo-problems of modern philosophy, the notorious mind-body problem being a special case in point. The last important aspect of modern science is in a sense a culmination of the foregoing features, and it is the exploitation of nature as a source of power and domination -- a fact not unknown to modern capitalist society." Ibrahim Kalin, "The Sacred versus the Secular: Nasr on Science" in *Library of Living Philosophers: Seyyed Hossein Nasr*, L. E. Hahn, R. E. Auxier and L. W. Stone, eds. (Chicago: Open Court Press, 2001), 445-462.

my ABC approach using a Gadamerian hermeneutic, I am indebted to an analytical framework that I learned from one of my formative professors, the late Huston Smith, in his book. *Beyond the Postmodern Mind*. There he defines an ethic as "an assemblage of guidelines for effecting the self-transformation that enables the world to be experienced in a new way" [20]

Because the behavioral (B) (ʻamalī) and cognitive (C) (ʿilmī) aspects of this ABC approach to enhancing understanding are more centered on the world in which we are living and relatively more accessible to readers, at this point we will begin our application of the ABC approach (to constructing an Islamic ethics of technology) with behavior and cognition, saving the affective (A) or emotional (ḥālī) aspect of the ABC approach for last. Prior to discussing the behavioral implications of our methodology as we construct Islamic ethics for technology, it should go without saying that because the epistemologies of modern Western science and philosophy as well as traditional epistemological Islamic values are accepted in varying degrees in the diverse cultures of the Muslim world, we should base our construction of an Islamic ethics of technology on values and guidelines that are shared in each of these epistemological cultural streams. Although some Muslims have argued for a return to the traditional Islamic epistemologies of *fiqh* (jurisprudence)—consisting of relying upon Qur'an, *ḥadīth, qiyās* (analogical reasoning), and *ijma'* (consensus) and the traditional schools of jurisprudence— and also, to varying degrees, to the wisdom of the Sufi shaykhs, our contention is that while the construction of an Islamic ethics of technology must be in dialogue with fiqh and Sufism, it must not simply rely on following the traditional behavioral guidelines of *fiqh* and Sufism, which have not been sufficient in enabling

20 Huston Smith, *Beyond the Post-modern Mind* (Wheaton, IL: The Theosophical Publishing House, 1989), 73.

our societies to cope with the technological age. One social scientist, Bart Barendregt of Leiden University, after studying South-East Asia's digital culture, noted somewhat alarmingly "Muslim youngsters are adopting technology to distance themselves from older, traditional practices while also challenging Western models."[21] Peter Hershock noted that "the average American watches twenty-two thousand [television] commercials per year, as the average American father spends just forty-five minutes alone with his children each week while devoting an average of four hours daily to television."[22] While some might hope that existing global educational systems offer an alternative to the materialistic brainwashing of television, Hershock informs us that "[money spent on] corporate advertising worldwide exceeds the total global expenditure on all levels of education."[23] When we add to this the problems of the proliferation of military technology and the use of technology that both directly and indirectly is destroying the biosphere, the need for an Islamic *adab or 'amal* (i.e., an Islamic ethic) for coping with technology becomes stunningly obvious.

Some examples of such an *ʿamal* for coping with technology that we can suggest are that Muslim religious leaders need to develop recommendations guiding the usage for each society's major technologies. Ideally these recommendations should be based on scientific studies, which responsible Muslim businessmen may wish to communicate to prospective buyers on packaging. For example, televisions, tablet computers, and mobile phones marketed to children and adolescents can be packaged with a warning and recommendation to parents to limit usage to a certain number of hours today. Also recommendations from each Muslim country's ministries of religious affairs and ministries of health should note that everyone, but especially children, could benefit from periodic vacations from technology, even if it is only for certain periods, such as immediately before and after performing prayers (*ṣalāt, namaz*).

In spite of the virtues of such recommended *adab* for technology—because even Muslims' best efforts to follow such *adab* and take refuge

21 Bart Barendregt. *Economist*, "The Online Ummah" Aug 18th, 2012.

22 Peter Hershock. "Turning Away from Technotopia: Critical Precedents for Refusing the Colonization of Consciousness" in Peter D. Hershock, Marietta Stepaniants and Roger T. Ames, eds., *Technology and Cultural Values: on the Edge of the Third Millennium* (Honolulu: University of Hawai'i, 2003), 598.

23 Hershock, "Turning Away from Technotopia," 598.

in the Qur'an and *sunnah* will be sabotaged, distorted, and corrupted by the ego-self (*nafs*) —such an *adab* or *ʿamal* of technology (constructed both from traditional Islamic epistemologies and methodologies that have produced *sharīʿa* and the *sunnah* together with contemporary scholars best efforts to construct an *adab* for technology), must be part of three-pronged strategy. The second component of such an approach should involve a cognitive (*ʿilmī*), hermeneutic approach that integrates understanding one's self and its viewpoints in context, together with effort to understand the world and others. Third, any attempt to construct an Islamic ethic of technology should include an affective (*ḥālī*) approach consisting of enhancing emotional intelligence grounded in Islamic resources for doing so, accompanied by a strong dosage of humility, specifically the humble recognition that even our best efforts to create an *adab* for technology, such as I suggested at the outset, may ultimately be undermined by the ego-self.

Consequently, moving beyond the *'amal*, which is the behavioral aspect of my suggested methodology, we can now attend to insights from Hans-Georg Gadamer, which comprise the theoretical outline and overall bi-directional cognitive approach (hence the "C" of my ABC approach) or *'ilmī* aspect of my suggestions for building an Islamic ethic for technology that is informed by recent developments in the West.[24] Most important is

24 In this paper our subsequent discussion concerning the cognitive dimension of a hermeneutical approach to an Islamic ethic of technology principally focuses on theoretical and psychological reasons for such an approach and its bi-directional nature (i.e., on the one hand, it recenters efforts to understand one's self in one's contexts, together with, on the other hand, the commonplace modernistic and Enlightenment-era efforts to understand the "other" objectively). Beyond these very general concerns, however, what follows here is a more specific outline of two modes of contextual analysis (to be implemented hermeneutically, i.e., bi-directionally) and analytical lenses in the form of areas of inquiry, which comprise one of the two analytical modes. The two analytical modes are sociohistorical and what I have termed "religiological" analysis (but which would more precisely be termed pisteology, since it refers to inquiry into beliefs, which are not necessarily religious). Socio-historical analysis consists of analysis of events, viewpoints, and feelings in their socio-historical context, as is commonly taught by modernist historians; except since this is a hermeneutical method, each scholar or student analyzes sociohistorically both his/her own viewpoints and those of some "other." Religiological analysis uses a variety of analytical lenses in a coherent system, most of which (especially their coherence) I derived from Huston Smith's *Beyond the Postmodern Mind (see especially* 126-27, 210-11). One scholar who has used a number such lenses is Yasien Mohamed; although many scholars have used one or more of them (Yasien Mohamed, *The Path to Virtue: The Ethical Philosophy of al-Rāghib al-Iṣfahānī* [Kuala Lumpur: International Islamic University of Malaysia, 2006]). These lenses consist of a variety of questions about worldviews and beliefs in the following categories: epistemology, ontology (with subcategories of theology, cosmology, and eschatology), philosophical anthropology, psychology, teleology (under-

the idea—rooted in Gadamer's works—that we can move toward a hermeneutically objective understanding of our problem (which in this case is technology and the need for an Islamic ethic in facing it). Simply put, a hermeneutically objective understanding is one in which we focus our analytical efforts in two directions: not merely outwardly at the customary problem at hand or some "other," but also inwardly at our selves, where we also attempt to shine the light of understanding on our own prejudices or preconceptions in relation to their various contexts. Hans-Georg Gadamer (d. 2002), one of the most important 20th century philosophers, critiqued philosophers of the enlightenment, who asserted that in the search for truth and objectivity the "prejudices" (i.e., the prior views) of the subject (i.e., the interpreter) should be put aside and dismissed, as he stated it: "The fundamental prejudice of the enlightenment is the prejudice against prejudice itself."[25] Furthermore, much of the thrust of Gadamer's work is a sustained argument against a naïve "objectivity" that mistakenly imagines that the self of the interpreter and observer can simply be excluded or put aside in scientific efforts to reach truth. Rather than being a scientific truth, this is mere dogma. According to Gadamer, "Objectivism is an illusion."[26] Instead, Gadamer strongly argued for the essential role of self-understanding in the interpretative process, a point that has been developed by others into a prescriptive interpretative method and pedagogy.[27]

stood as inquiry into beliefs about ultimate purpose(s), and methodology. Their virtue is that a person's beliefs in these areas can be constructed so as to cohere. When one's own or another's worldview coheres, it makes sense. The double virtue in this is that when someone is able to make sense of his/her own viewpoint, his/her own self-esteem and feeling of well-being are enhanced (and one's natural feelings of discomfort when faced with viewpoints that conflict with one's own become diminished indirectly). This enhancement of self-esteem, as Terror Management theorists inform us, is in turn a key to the virtue of not disparaging and not dehumanizing the other, and hence is a key to understanding them (Thomas A. Pyszczynski, Sheldon Solomon, Jeff Greenberg, *In the Wake of 9/11: The Psychology of Terror* [Washington, D.C.: American Psychological Association, 2003]).

25 Hans-Georg Gadamer, *Truth and Method,* eds. Garret Barden and John Cumming (New York: Crossroad, 1988), 239-40.

26 Hans-Georg Gadamer, "The Problem of Historical Consciousness," trans. Jeff L. Close, in *Interpretive Social Science: A Second Look,* eds. Paul Rabinow and William M. Sullivan (Berkeley: University of California Press, 1987), 126.

27 For examples of how Gadamer's work has been applied in the field of education, see David Blacker, "Education as the Normative Dimension of Philosophical Hermeneutics," *Philosophy of Education*, 1993; https://www.academia.edu/1257855/Education_as_the_normative_dimension_of_philosophical_hermeneutics and https://web.archive.org/web/20100706040009/ http://www.ed.uiuc.edu/EPS/PES-Yearbook/93_docs/Blacker.HTM; and Shaun Gallagher, Hermeneutics *and Education,* Albany, N.Y.: State University of New York Press, 1992. It also should be noted that Gadamer has had critics. Emilio Betti, E. D. Hirsch, and Habermas were the three most well-known strident critics of Gadamer. These were followed by Muslim scholars such as Fazlur Rahman and Aref Ali Nayed, who called attention to various problems in Gadamer's philosophical hermeneutics, problems that seem to argue for the rejection of objectivity and the embrace of relativism. Fazlur Rahman—who in 1982 may have been the first Muslim scholar to discuss Gadamer—followed the criticism of Gadamer raised by Emilio Betti and regarded Gadamer as being "hopelessly subjective." In discussing the processing of interpretation, like, E. D. Hirsch, they both rejected Gadamer's emphasis on the need to take into account the totality of linguistic, socio-cultural and historical factors affecting the interpreter. In addition they took aim at what they considered to be Gadamer's lack of emphasis on the need to understanding the intent of the author of a text. A more recent Muslim critic of Gadamer, who like Rahman supported Betti's hermeneutics, is Aref Nayed. Nayed has noted that Gadamer never intended to advocate a method of interpretation. Although many scholars have advanced opinions to the contrary, to Nayed's credit Gadamer's emphasis is clearly on *describing* the human process of interpretation not on *prescribing*, Jeffrey Anthony Mitscherling, Tanya DiTommaso and Aref Nayed, *The Author's Intention* (Lanham, MD: Lexington Books, 2004). The point is moot, however, because, in the very least, Gadamer has inspired numerous philosophers, social scientists and educators to argue for an integration of self-understanding into the interpretative process.

This aspect of Gadamer's hermeneutics could be termed a kind of subjective objectivity. Such a term was used by Ziauddin Sardar in 1985, although I have no idea whether or not Sardar considers himself to have been influenced by Gadamer. In describing Islamic science, Sardar was emphasizing the importance of individual selves of Muslims together with objectivity. He stated, "As such, Islamic science is *subjectively objective*; that is, it seeks subjective goals within an objective framework." Some examples of such subjective but nevertheless normative goals are "seeking the pleasure of Allah, the interests of the community."[28] Although what I am arguing in this paper could be similarly expressed as subjective objectivity (albeit in a somewhat different sense than that meant by Sardar), the main problem with such an expression, as I see it, is that it is a red-flag to many who regard the term as being associated with relativism, and hence the abandonment of truth or objectivity.

Consequently, rather than subjective objectivity, I prefer the term used by Jean Grondin, "hermeneutical objectivity." Grondin, a biographer of Gadamer, stated, "One can dissociate illegitimate prejudices from those that are fruitful and can pave the way to a *hermeneutical objectivity* only

28 Ziauddin Sardar. *Islamic Futures: the Shape of Ideas to Come* (Chicago: Islamic Futures and Policy Studies, 1985), 175.

by critically taking into account [what Heidegger called] one's anticipations of the work."[29] In both Heidegger's and Gadamer's hermeneutics, such prejudgments determine one's understanding.[30] Grondin adds that Gadamer regarded distinguishing illegitimate from legitimate prejudices as being essential to the work of hermeneutics and to moving towards objectivity.[31] Just as self-understanding for Gadamer is, as he himself put it, "Always on the way,"[32] so too is an objectivity that integrates self-awareness, especially of one's own prejudgments. "Making evident the prejudices that orient understanding is not destined to destroy objectivity, but to make it possible."[33] So the task of the interpreter, in Grondin's view of Gadamer's thought, must be—together with a focus on the matter to be interpreted—"to formulate his or her own hermeneutical situation, taking into account prejudices, expectations, and questions that govern his or her research, [which is] the minimal condition of objectivity."[34] It is especially dangerous in the process of interpretation to imagine that oneself is free of prejudices. This, in Grondin's words, makes one "more blindly exposed to their [i.e., prejudices'] power. Prejudices will exercise their underground domination all the more strongly, and potentially distortingly, when denied or repressed."[35]

In contrast to the flawed modernist view that science can proceed while simply trying to put one's prejudices aside or by ignoring them (a view that has unfortunately come to dominate the modern educational system), scholarly investigation and teaching should not only investigate the objects of our research, but at the same time should focus on the prejudices of the investigating subject and the understandings that he/she brings into the encounter with the object of his/her research, which in our present case is the task of constructing an Islamic ethic of technology. In an introduc-

29 Jean Grondin, "Hermeneutics and Relativism" in *Festivals of interpretation: essays on Hans-Georg Gadamer's work*, ed. Kathleen Wright (Albany, NY: State University of New York Press, 1991), 53-54.

30 Ibid., 61-62.

31 Ibid., 53-54.

32 Hans-Georg Gadamer. "Hermeneutics as practical philosophy" in *Reason in the Age of Science* (Cambridge: MIT Press, 1982), 103.

33 Grondin, "Hermeneutics and Relativism," 54.

34 Ibid.

35 Ibid.

tion to a compilation of key articles on Gadamer's work, the editor, echoing Grondin's view of Gadamer, writes "Because prejudices function as a necessary condition of historical understanding, Gadamer argues, they should be made the object of hermeneutic reflection."[36] Hence it makes perfect sense that in his "philosophical hermeneutics" Gadamer attached great importance to the perspective of not only the object, but also the subject, in creating understanding.

Building especially on Heidegger's work, Gadamer further developed the concept of the hermeneutical circle.[37] He characterized understanding as a "hermeneutical circle [which] is in fact a contentually fulfilled [*inhaltlich erfüllter*] circle, which joins the interpreter and his text into a unity within a processual whole."[38] Furthermore, he viewed the manner in which understanding occurs as follows: "Understanding always implies a preunderstanding which is in turn prefigured by the determinate tradition in which the interpreter lives and that shapes his prejudices."[39] Consequently, in developing a method of bridging science and technology with religion, it stands to reason that effort must be made, while studying "religion as object," to investigate what Gadamer termed the "preunderstanding" that the interpreter as subject is bringing to his/her encounter with it, which "preunderstanding" is itself formed by the "determinate tradition" that is the interpreter's context and that (from a psychological perspective) conditions and unconsciously shapes the thought of the interpreter. As Gadamer himself stated, "Every textual interpretation must begin then with the interpreter's reflection on the preconceptions which result from the hermeneutical situation in which he finds himself. He must legitimate them, that is, look for their origin and adequacy."[40]

In discussing the interpreter's encounter with the object of his/her study, Gadamer expresses this whole/part dialectical relationship as a "fusion of horizons." One of the two fusing horizons is the interpreter's "horizon of understanding," which consists of his/her prejudices, history, and context, all of which inform his perspective and interpretive angle;

36 Kurt Muller-Vollmer, ed. *The Hermeneutics Reader* (New York: Continuum, 1988), 39.

37 Gadamer, "The Problem of Historical Consciousness," 129.

38 Gadamer, "The Problem of Historical Consciousness," 87.

39 Gadamer, ibid.

40 Gadamer, ibid., 130.

and the other horizon is that of the object of his or her study, together with its historical context.[41] To facilitate this understanding or "fusion of horizons," scholars should both be open to the object of study and its horizon of understanding as well as shine the light of awareness on his/her own prejudices or horizon of understanding. David J. Blacker (a Professor of Philosophy of Education and Legal Studies at the University of Delaware) asserts that "Gadamer argues that…. one must maintain — at least initially — an attitude of 'openness' to the other. But this does not mean that one can, or even ought to, strive to eliminate one's own prejudices; on the contrary, Gadamer argues against the possibility or desirability of a neutral, nonprejudicial standpoint from which to 'evaluate' the other….The interpretive challenge is to maintain simultaneously the attitude of openness toward the text or person while also permitting, as best one can, one's own prejudices to rise to the surface so as to 'put them at play.' "[42]

In contrast to Gadamer's critics (noted previously), numerous scholars, among whom are Muslims such as Osman Bilen,[43] T. J. Winter,[44] and Reza Shah-Kazemi,[45] do not see a necessary conflict between Gadamer and objectivity. Similarly, I argue that Gadamer can assist us in refining our understanding of religious and scientific objective methodology by insights such as "The *wirkungsgeschichtliches Bewusstsein* (consciousness of effective history) seeks to be aware of its prejudgments and to control its own preunderstanding; and thus it does away with that naïve objectivism that falsifies ... the positivistic theory of science."[46]

Hence, an alternative to naïve objectivism, as we construct an Islamic ethics of technology, is the methodological pursuit of a hermeneutically informed objectivity which, like self-understanding, according to Gadamer, is "always on-the-way." Furthermore, as I will subsequently argue in my discussion of the affective "A" component of my ABC approach (in contrast to a Stoic and Enlightenment influenced paradigm of intellectual cultivation, which maintains that emotions should be ignored and suppressed in the classroom and scholarly endeavors), the methodological pursuit of a hermeneutically informed objectivity must include awareness of emotions and their cognitive dimension.[47] Naïve objectivism is naïve because it fails to recognize the unconscious and distorting influence of prejudgments, preunderstandings, and emotions (in spite of our best attempts to remain unbiased and unemotional). Consequently, to the degree that we can become aware of our prejudgments, preunderstandings, and emotions about the normative role of technology in Muslim cultures, we will be decreasing our distorted understanding and increasing our objectivity. Although absolute objectivity is unreachable, we can and should strive for the relative objectivity that hermeneutical objectivity can produce.

Supporting this is a consensus in contemporary Western psychology that most, if not all, human behavior and thought is guided, influenced, or distorted by unconscious emotions and motives. This insight was crucial for the Pulitzer Prize winning work of Ernst Becker,[48] which

41 *The Encyclopaedia of Educational Philosophy and Theory*, s.v. "Gadamer and the Philosophy of Education" (Pádraig Hogan), 2000, in https://web.archive.org/web/20120119004025/http://www.ffst.hr/ENCYCLOPAEDIA/doku.php?id=gadamer_and_philosophy_of_education. See also Encyclopedia of Educational Philosophy and Theory, s.v. "Gadamer and the Philosophy of Education" (Pádraig Hogan) (Singapore: Springer, 2015), https://link.springer.com/referenceworkentry/10.1007/978-981-287-532-7_171-1. Note that although the author and title of both these articles are the same, they are in fact different articles, with the more recent of the two being more substantial and including more recent references.

42 David Blacker, "Education as the normative dimension of philosophical hermeneutics" (paper presented at the Annual Meeting of the Philosophy of Education Society, New Orleans, LA., 1993). Blacker is a professor of Philosophy of Education and Legal Studies at the University of Delaware. http://www.academia.edu/1257855/Education_as_the_normative_dimension_of_philosophical_hermeneutics.

43 Osman Bilen, *The Historicity of Understanding and the Problem of Relativism in Gadamer's Philosophical Hermeneutics* (Washington, D.C.: Council for Research in Values and Philosophy, 2001). Bilen refutes the charge of relativism leveled against Gadamer by some critics.

44 Tim Winter, "Qur'anic Reasoning as an academic practice," *Modern Theology,* July 2006). Winter mines Gadamer for various insights in this paper, among which is Gadamer's understanding of interpretation as a "three-way activity" between the interpreter's understanding (*verstehen*) of a text and the understanding (*verständigung*) of one interpreter with another interpreter. http://www.interfaith.cam.ac.uk/resources/lecturespapersandspeeches/quranicreasoningasacademicpractice.

45 Reza Shah-Kazemi, *The Other in the Light of the One* (Cambridge, UK: Islamic Texts Society, 2006), 48-50. Shah-Kazemi compares and contrasts Gadamer's approach to interpretation with a Sufi approach.

46 Hans-Georg Gadamer, *Philosophical Hermeneutics* (Berkeley and Los Angeles: University of California Press, 1976), 27.

47 Ingrid Schleibler, *Gadamer: between Heidegger and Habermas* (Oxford: Rowman and Littlefield, 2000), 162-63. Schleiber argues that Gadamer's conception of humans as belonging to a part of nature and not being separate from it provides a basis for seeing in Gadamer the potential for overcoming the dominant understanding of the separation of reason and emotions. See also Susan James, *Passion and Action: The Emotions in Seventeenth Century Philosophy* (Oxford: Clarendon, 1997).

48 Ernst Becker, *The Denial of Death* (New York: Free Press, 1973).

was subsequently developed by social psychologists into what is now called "Terror Management Theory (TMT).[49] As Greenberg, Solomon, and Arndt note, psychological research specifically in the areas of "cognitive dissonance, motivated reasoning, terror management, and goal priming … demonstrates that human behavior is indeed often if not always guided by motives operating outside conscious awareness."[50] Hatred, for example —as Willard Gaylin, a noted psychiatrist, states— is generally an unconscious misdirection and outward projection of inner turmoil, which then takes the form of antagonism directed against someone or some entity in the world. "Hatred is rarely a rational response to a real threat or affront. Acts of hatred represent displacements of an internal conflict onto external sources....Displacement is an essential feature in the process of scapegoating….It [i.e. displacement] is a central mechanism of bigotry and hatred." [51]

Moreover, such unconscious motives, especially when we are ignorant of them, often lead us to act in ways that are destructive. Hence the methodological pursuit of hermeneutically informed objectivity needs to be supplemented by emotional awareness, which can facilitate control of emotions without going as far as the Stoic rejection of emotions. We can certainly recognize the inherent danger especially in powerful unconscious emotions such as anger; a danger that has been pointed out by western psychologists and which is underscored in both the Qur'an and *ḥadīth*. "The self strongly commands one to evil" (*Inna n-nafsa la-ammāratun bi al-sū'*) (Qur'an, Sūrat Yūsuf 12:53). Also, as the Prophet ﷺ is reported to have said, "Your worst enemy is your self which is between your two sides."[52] Especially when people are under stress, unconscious egotisti-

49 Thomas A. Pyszczynski, Sheldon Solomon, Jeff Greenberg, *In the Wake of 9/11: The Psychology of Terror* (Washington, D.C.: American Psychological Association, 2003).

50 Jeff Greenberg, Sheldon Solomon, and Jamie Arndt, "A Basic but Uniquely Human Motivation: terror management," in James Y. Shah and Wendy L. Gardner, eds., *Handbook of Motivation Science* (New York: Guilford Press, 2007), 114, http://tinyurl.com/5hqdam (Google Books, 23 March 2015) which includes citations to a number of studies that point to the unconscious motives that influence us.

51 Willard Gaylin, *Hatred: the Psychological Descent into Violence* (New York: Public Affairs, 2003), 90, 100-101], http://tinyurl.com/62mqbg (accessed 23 March 2015). Gaylin uses the Freudian term "displacement" rather than a similar term "projection."

52 A'dá 'adūwika nafsuka allatī bayna janbayka.
ابْنِ عَبَّاسٍ رَضِيَ اللَّهُ عَنْهُمَا قَالَ: قَالَ رَسُولُ اللَّهِ صَلَّى اللهُ عَلَيْهِ وَسَلَّمَ: «أَعْدَى عَدُوِّكَ نَفْسُكَ الَّتِي بَيْنَ جَنْبَيْكَ»
The chain of transmission (*isnād*) for this *hadith* was included in Bayhaqī (d.458/1065-66), *Kitāb al-Zuhd al-kabīr* (Beirut: Dār al-Jinān, 1987), #343, 156-67. Al-Ajlūnī noted

cal motives —impelled by "the commanding self" (*al-nafs al-ammāra*)— will dictate and govern one's actions. In such situations, people's unwise reactions are varied: for example, concerning the emotion of anger, at one end of the spectrum people sometimes unleash anger in ways that are harmful to both others and themselves. In this regard, the Prophetﷺ, underscoring his point by repeating himself a number of times, said, "Do not get angry" (*la taghḍab*)![53] At the other end of the spectrum, people sometimes go way beyond this behavioral *(ʿamalī)* guideline of refraining from reactively unloading their anger on someone into the other extreme of numbing their angry feelings and blinding their minds to the situations that produced their angry feelings. Without a doubt, numerous Muslim parents every day must vacillate between anger and numbed frustration when they see that their children have spent days lost in the stupor of some computer game. Ecologists and Muslims sickened by the often toxic urban air, as societies rush headlong into the pursuit of the latest industrial technology, certainly face frequent eruptions of anger and waves of hopelessness. Fortunately, informed by hermeneutical understanding, we and our leaders are freed from the need to Stoically extirpate such feelings, on the one hand, as well as the need to adopt ill-conceived solutions frantically, on the other. With such freedom granted by our hermeneutical understanding, now before proceeding into the fray of constructing and implementing an Islamic ethic for technology, we can shine the light of understanding to the contexts in which our feelings, our prejudgments, and our existing attitudes make sense. Of course, simply making sense of our feelings and attitudes does not necessarily mean that we assume that they are even

that its *isnād* in Bayhaqī was "weak." See Ismāʿīl b. Muḥammad al-Ajlūnī, *Kashf al-khafāʾwa-muzīl al-ilbās* (Beirut: Muʾassasat al-Risāla, 1979), 1: 160, #412. Although Imām al-Ghazālī included it in the *Iḥyā ʿulūm al-dīn*, al-ʿIrāqī noted that one of Bayhaqī's transmitters of it was among the fabricators of ḥadīth (waḍḍāʿīn). See Zayn al-Dīn al-ʿIraqī, *al-Mughnī ʿan ḥaml al-asfār*, in *Iḥyā ʿulūm al-dīn* (Beirut: Dār al-Maʿrifa, 1982, 3: 4 marg.).

53 It was narrated from Abū Hurayra that a man said to the Prophet, "Give me advice!" The Prophet answered, "Do not get angry!" Then he [i.e., the man] repeated his request a few times. And [each time] he [i.e., the Prophet] replied, "Do not get angry!" *Anna rajulan qāla lil-nabī: "Awṣinī," qāla "lā taghḍab" fa-raddada mirāran, qāla: "lā taghḍab."*
عَنْ أَبِي هُرَيْرَةَ رَضِيَ اللَّهُ عَنْهُ، أَنَّ رَجُلًا قَالَ لِلنَّبِيِّ صَلَّى اللهُ عَلَيْهِ وَسَلَّمَ: أَوْصِنِي، قَالَ: «لاَ تَغْضَبْ» فَرَدَّدَ مِرَارًا، قَالَ: «لاَ تَغْضَبْ»
Al-Bukhārī, *Ṣaḥīḥ al-Bukhārī* (Liechtenstein: Thesaurus Islamicus Foundation, 2000), .3:1247, kitāb al-ādāb, bāb 77, ḥadīth #6185

relatively objectively true. Understanding ourselves or others also does not necessarily mean that we should condone what we and others feel and do. Rather, the two-fold consequence of hermeneutical understanding is that by bringing our emotions and attitudes into the daylight of understanding, the many feelings and prejudices that were churning in the darkness of our unconscious, first of all, will have less power to distort unconsciously our thoughts and actions; and second, now *informed by*, rather than simply *driven by* such unconscious feelings and prejudicial attitudes, we will be better able to sift through them, leaving behind maladaptive feelings and prejudices, while utilizing our beneficial feelings and attitudes as we pursue a hermeneutically informed Islamic ethic of technology in the service of understanding and nurturing healthier societies.

In sum, arguments of Gadamer and his supporters, scientific research of Western psychologists, and Islamic primary sources point to the conclusion that the cognitive aspect of an Islamic ethic of technology can move toward hermeneutical objectivity by incorporating a Gadamerian hermeneutical approach to integrating awareness (in our contexts) of our selves' ideas, beliefs, and prejudices as well as by cultivating awareness of the largely unconscious impact of emotions. In this manner such an approach will assist in building a bridge between science and technology, on the one hand, and religion, on the other.

Returning now to the affective "A" component of developing an Islamic ethics of technology, scientific evidence comes principally from neuroscience and the psychology of intelligence. Arguably the leading neuroscientists writing about emotions and cognition has been that of Antonio Damasio, especially in his 1994 book *Descartes' Error: Emotion, Reason, and the Human Brain.* There he brought together many years of research by neuroscientists that clearly demonstrates that feeling and thinking go hand in hand.[54] Such research has gone a long way towards dispelling the Stoic paradigmatic myth that emotions should have no place in education and have helped to buttress the scientific claims of psychologists of intelligence. Consequently, such research can prove to be useful in justifying the need for integrating emotions into the development of an Islamic ethics of technological education.

In the field of the psychology of intelligence, researchers of emotional intelligence, led by Salovey and Mayer, have mapped out ways in which awareness of emotions can enhance intelligence. This emotional dimension of intelligence is now called emotional intelligence (EI), which in Turkish has commonly been translated as *duygusal zeka*.[55] More specifically, the leading researchers of EI define it as the capacity "to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior."[56]

Concerning emotional intelligence, known as EI (or sometimes EQ), this research, especially in the "abilities" model of EI, has been led by Peter Salovey of Yale University and John Mayer of the University of New Hampshire, since 1990. Although "emotional intelligence" did not become the focus of scientific research until the work of Salovey and Mayer, in 1983 the renown Harvard psychologist, Howard Gardner, had clearly demonstrated the need for abandoning the concept of one intelligence and replacing it with the concept of multiple intelligences.[57]

From the time of the original work of Salovey and Mayer, EI has gone from being simply an important area of research in intelligence and emotions to a widely popular topic, which popularity was due to the publication of Daniel Goleman's best-selling book.[58] In response to various criticisms and advances in research, the definition has undergone a number of changes and has been developed in variety of ways by different researchers. The primary criticism of EI has been that it is not really a form of intelligence; but it is rather a personality trait. One critic, Edwin A. Locke (a leading industrial-organizational psychologist and devotee of Ayn Rand), argued that "the concept of EI has now become so broad and

54 Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain*, Putnam, 1994; revised Penguin edition, 2005. He followed this book by a number of others related to emotions and consciousness: *The Feeling of What Happens: Body and Emotion in the Making of Consciousness*, (Orlando: Harcourt, 1999); *Looking for Spinoza: Joy, Sorrow, and the Feeling* Brain (Orlando: Harcourt, 2003); *Self Comes to Mind: Constructing the Conscious Brain* (New York: Pantheon, 2010).

55 Daniel Goleman, *Duygusal zeka neden IQ'dan daha önemlidir*, translated by Banu Seçkin Yüksel (İstanbul: Varlık Yayınları, 2002). In Arabic "emotional intelligence" is translated as *al-dhakā' al-'āṭifī;* instead, I would suggest *al-'aql al-ḥālī*.

56 John D. Mayer, Peter Salovey, and David R. Caruso, "Emotional Intelligence: New Ability or Eclectic Traits," *American Psychologist* 63, no. 6 September (2008): 503.

57 Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences* (New York: Basic Books, [1983] 2011).

58 Daniel Goleman, Emotional Intelligence: why it can matter more than IQ (New York: Bantam Books, 1995).

the components so variegated that no one concept could possible encompass or integrate all of them."[59] Similarly, as Mayer, Salovey, and Caruso noted in a response, Locke asserted that "EI is an invalid concept in part because it is defined in too many ways."[60]

In order to refute the criticism, Salovey, Mayer, and Caruso have found it necessary to differentiate clearly their "ability model" from the "mixed models" of Goleman and Bar-on (among others). Salovey and Mayer maintain that three problems with the mixed models is as follows: first, they include "an eclectic mix of traits, many dispositional, such as happiness, self-esteem, [and] optimism" in addition to abilities (Mayer, Salovey, and Caruso, ibid, p.. 503); second, many qualities of mixed models, such as self-esteem, "do not directly concern emotion, intelligence, or their intersection;" and third, this has led to confusion, which has weakened the case for the legitimacy of EI as an empirical construct (ibid). Consequently, since Mayer, Salovey, and Caruso's ability model of EI is distinct from the mixed models; the criticism of the mixed-models of EI is not applicable to their ability model. Furthermore, the mixed models of EI, because they include personality traits and not just abilities, go beyond what appears to be legitimately termed an "intelligence." Nevertheless, the mixed models have found acceptance in the business community, among educators, and to some degree among psychologists —because research does confirm them both as assessment tools and guides to enhancing performance.[61] Because Salovey and Meyer have successfully differentiated their ability model from the mixed models and have demonstrated its soundness through numerous empirical studies, the ability model of EI is gaining scientific and mainstream institutional acceptance. Among the evidence for this is that in the Fall of 2008, Salovey was appointed as the Provost of Yale University and in 2013 became Yale's president.

59 Edwin A. Locke, "Why Emotional Intelligence Is an Invalid Concept," *Journal of Organizational Behavior* 26.4 (2005): 425-31.

60 John D. Mayer, Peter Salovey, and David Caruso, "Emotional Intelligence: New Ability or Eclectic Traits," *American Psychologist* 63, no. 6 September (2008): 503. Other criticisms can be found in Kevin R. Murphy, ed. *A critique of emotional intelligence: What are the Problems and How Can They Be Fixed?* Mahwah, N.J.: Lawrence Erlbaum Associates, 2006; see also the critiques in Gerald Matthews, Moshe Zeidner, Richard D. Roberts, *Emotional Intelligence: Science and Myth* (Cambridge, Mass: MIT Press, 2002).

61 Cary Cherniss, Melissa Extein, Daniel Goleman, Roger P. Weissberg, "Emotional Intelligence: What Does the Research Really Indicate? *Educational Psychologist* 41(4), 2006, 239-245].

One final problem in integrating emotional intelligence enhancement into an Islamic ethics of technology is that in addition to there being various definitions of emotional intelligence, there are different understandings of the term "emotion" and its relationship to related terms such as affective experience, mood, affective trait, and feeling. Robert Emmons, one of the leading researchers in "positive psychology," states that the field of affective science (i.e., the study of emotions and emotion related phenomena) is in the process of standardizing its terminology. He follows E. L. Rosenberg, who regards common "affective experience" as a hierarchy consisting of three main levels (beginning with the top of the hierarchy): "affective traits, moods, and emotions." Specifically, Rosenberg defines emotions as "acute, intense, and typically brief psychophysiological changes that result from a response to a meaningful situation in one's environment."[62] Antonio Damasio, arguably one of the leading neuroscientists researching emotions, differentiates feelings from emotions by defining emotions, on the one hand, as the body's physical signals as it responds to stimuli outside of it; feelings, on the other hand, are the product of our brain's interpretations of emotions. "During the past 30 years, Antonio R. Damasio has strived to show that feelings are what arise as the brain interprets emotions, which are themselves purely physical signals of the body reacting to external stimuli."[63] He defines a feeling as "That process of continuous monitoring, that experience of what your body is doing while thoughts about specific contents roll by, is the essence what I call a feeling."[64] In contrast, he defines an emotion as "a collection of changes in body state connected to particular mental images that have activated a specific brain system." Furthermore, he states that "the essence of feeling an emotion is the experience of such changes in juxtaposition to the mental images that initiated the cycle."[65]

62 Robert Emmons, "Sacred Emotions," in *Soul, Psyche, Brain: New Directions in the Study of Religion and Brain-Mind Science*, ed. Kelly Bulkeley (New York: Palgrave Macmillan, 2005), 94.

63 Manuela Lenzen, "Feeling our emotions" [An interview with Antonio Damasio]. *Scientific American Mind* 16(1) (2005), 14–15, https://www.scientificamerican.com/article/feeling-our-emotions.

64 Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (G. P. Putnam's Sons: 1994; New York: Penguin, 2005), 145.

65 Ibid.

So now that we have discussed a number of problems as well as foundational definitions for anyone interested in integrating emotional intelligence enhancement into an Islamic ethics of technology, we can proceed to explore in greater depth the four abilities of Salovey, Mayer, and Caruso's ability model of EI. As noted at the outset of this paper, Mayer and Salovey define EI as the "set of abilities" (that people have developed to varying degrees) that enable them "to carry out sophisticated information processing about emotions and emotion-relevant stimuli and to use this information as a guide to thinking and behavior."[66] Their original instrument for testing their four-branched ability model of EI was called the Multifactor Emotional Intelligence Scale (MEIS). In 1999, they revised it substantially, calling it the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT).[67] Currently they define four main branches of this model, from lowest to highest complexity[68] and with each of the names of these branches denoting a number of qualities.[69] The four branches are as follows: (1) Perceiving emotions accurately in oneself and other;[70] (2) Using emotions to facilitate thinking;[71] (3) Understanding emotions, emotional language, and the signals conveyed by emotions; and (4) Managing emotions to attain specific goals.

66 John D. Mayer, Peter Salovey, and David R. Caruso, "Emotional Intelligence: New Ability or Eclectic Traits," *American Psychologist* 63, no. 6 September (2008): 503.

67 Ibid., 507-512.

68 Ibid., 507.

69 John D. Mayer and Peter Salovey, "What is Emotional Intelligence?" in Peter Salovey, ed. Emotional Development and Emotional Intelligence: Educational Implications, Perseus Books, 1997, reprinted in Emotional Intelligence: Key Readings on the Mayer and Salovey Model (Port Chester, NY: Dude Publishing, 2004) 35-40. For the clearest exposition of the four principal abilities of EI of which I am aware, see Peter Salovey, Brian T. Detweiler-Bedell, Jerusha B. Detweiler-Bedell, and John D. Mayer, "Emotional Intelligence," in Handbook of Emotions, eds. Michael Lewis, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett (New York: The Guilford Press, 2008), 535-38.

70 It is important to remember that emotions contain and can convey useful information; and that "Emotional Intelligence theory explicates the cognitive and emotional mechanisms that process emotional information." Emotional awareness enables us to begin to process, sift through, and at some point, ideally, to utilize the information about engagement with the world (Marc A. Brackett and Susan E. Rivers, Sara Shiffman, Nicole Lerner and Peter Salovey, "Relating Emotional Abilities to Social Functioning: a comparison of self-report and performance measures of emotional intelligence," *Journal of Personality and Social Psychology* 91, no. 4 (2006): 780).

71 Previously, in 1997, Mayer and Salovey termed this second ability "emotional facilitation of thinking" (Mayer and Salovey, "What is Emotional Intelligence?", 12).

Because the fourth of these branches can easily be misunderstood and because, if properly understood, it has the potential to give rise to significant insights, it needs clarification. "Managing emotions" is the "ability to stay open to feelings, both those that are pleasant and those that are unpleasant."[72] In contrast to someone with relatively low EI on the scale of "managing emotions" (who will consciously or unconsciously seek to avoid unpleasant emotions and be unaware that s/he can relate to such emotions with openness), someone with relatively high EI on this scale realizes that s/he can choose to respond with openness even to one's own unpleasant emotions or s/he can choose not to experience them. This highest or most complex branch of EI necessitates that (in the words of Mayer and Salovey) "[one's own] emotional reactions must be tolerated—even welcomed—when they occur, somewhat independently of how pleasant or unpleasant they are. Only if a person attends to feelings can something be learned about them."[73] In contrast to the rationalist's fear (that by staying open to emotions reason will become overwhelmed), staying open to a feeling in fact produces freedom from being dominated by emotions and from the ego's distortions deriving from its habitual attempts to avoid uncomfortable emotions, such as the uncomfortable emotions that arise when encountering viewpoints that conflict with one's own (viewpoints that evoke the primitive "fear of the other" studied by psychologists working with Terror Management Theory, which viewpoints and feelings commonly occur in the course of sustained inter-civilizational or intercultural encounters).

While Salovey and Meyer have spent the bulk of their research on identifying and measuring emotional intelligence and its component abilities, Leslie Greenberg, a prominent Canadian psychologist, has for years pursued empirically validated methods of enhancing what amounts to EI. Although originally he developed what he termed "Emotion focused therapy" (EFT) and "Emotion Coaching" independently of Salovey and Meyer, his work of late has been converging with theirs.[74] The focus of

72 Ibid., 11.

73 Ibid., 13-14.

74 Evidence for the convergence of Greenberg's EFT with the work of Salovey and Meyer is that Salovey is among the most frequently cited authors in *Emotion Focused Therapy*, being cited seven times (without criticism). Of the numerous authorities whom Greenberg cites, only two were cited more than Salovey (Leslie Greenberg, *Emotion Focused Therapy: Coaching Clients to Work Through Their Feelings* [2002]: 317-8).

EFT involves a process consisting of five principles to be cultivated in the following order: (1) increasing awareness of emotion, (2) expressing emotion, (3) enhancing emotion regulation,[75] (4) reflecting on emotion, and (5) transforming emotion."[76]

Three possible objections to applying EFT (and any other methods of enhancing emotional intelligence) in higher educational classrooms are first, in the original design of EFT the psychotherapist is the key to its implementation; second, few professors are trained psychotherapists; and third, some students may feel that even filling in an emotion inventory and handing it in to the professor may constitute an invasion of their privacy. Nevertheless, Greenberg's understanding of the therapist as an emotional coach, who even gives what he calls homework, can be developed into the role of the teacher and professor as an emotional educator. Early studies by colleagues of Salovey indicate that EI can be enhanced through appropriate emotional education; and they are currently in the midst of large-scale research testing the efficacy of EI education in schools.[77] Consequently, the future looks promising, not simply for enhancing emotional education in the US, but for developing an affectively informed Islamic ethics of technology, and also for the possibility of integrating emotional education into classes on Islam in secular universities and even in Islamic education curriculum in Islamic schools and seminaries.[78]

75 According to Greenberg, not all emotions need regulation. Undercontrolled secondary emotions and maladaptive emotions are what need to be regulated. A key to emotional regulation, for Greenberg, is developing the ability "to tolerate emotion and to self-soothe *automatically*" (emphasis from the author).

76 Leslie S. Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions*, ed. Michael Lewis, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett (New York: The Guilford Press, 2008), 90-97. After briefly noting each of the five steps of emotion coaching, Greenberg discussed them in detail. A few year earlier he had identified eight steps (Leslie S. Greenberg, *Emotion-Focused Therapy: Coaching Clients to Work Through Their Feelings* [Washington, DC: American Psychological Association, 2002], 85-99).

77 L. Nathanson, S. E. Rivers, L.M. Flynn, and M.A. Brackett, "Creating Emotionally Intelligent Schools With RULER," *Emotion Review* 8, no. 4 (October 2016): 1-6. RULER is an acronym that stands for "(R)ecognizing emotion in the self and others, (U)nderstanding the causes and consequences of emotions, (L)abeling emotions with a diverse and accurate vocabulary, (E)xpressing emotions constructively across contexts, and (R)egulating emotions effectively," ibid., 4.

78 One Islamic seminary to institute classes in emotional intelligence as well as a certificate program in it has been the Madina Institute (Duluth, GA, USA), headed by Shaykh Muhammad bin Yahya al-Ninowy, http://www.madinainstituteusa.org/nonviolence/eq/.

Fortunately, Islamic cultures have their own rich resources for enhancing emotional intelligence. Nevertheless, such resources have not been adequately mined, especially in the 20th century, in spite of the strong presence of emotionally intelligent concepts and practices in the teachings of figures such as Mevlana Celaluddin Rumi. Hence, we can propose possible Sufi-Islamic methods of cultivating EI (methods that can be tested), suggesting a pedagogy along the lines of Greenberg's model of EFT but using Islamic concepts (drawn from the Qur'an, the *Sunnah*, and Sufism) for enhancing EI and thereby integrating emotional intelligence enhancement into an Islamic ethics of technology.

In looking at how we can correlate Islamic concepts with the paradigm of the process of EFT developed by Greenberg, we see that the first step of the process "increasing awareness of emotion" involves gaining self-awareness in general and awareness of one's emotions in particular. Greenberg elaborates, stating that "increasing awareness of emotion," enhances people's abilities to "approach, tolerate, and accept their emotions" rather than avoiding them.[79] The problem is that people habitually try to avoid unpleasant feelings. As Greenberg states, people "often try to regulate their [disturbing] emotions by trying not to feel whatever it is they feel. This is not helpful in the long run." Hence, one of the first functions of what Greenberg calls an "emotional coach" is to coach people to identify, be aware of, and experience an emotion.

This corresponds to a central principle in Islam, but especially in Sufism, which is "cultivating awareness of self" *(maʿrifat al-nafs)*. We see this in particular in the well-known saying repeated throughout Sufi texts: "Whoever knows one's self, knows one's Lord-Sustainer."[80] This was further elaborated by Sufis such as Aḥmad al-Rifāʿī, who took it to mean "One who realizes his self is passing away (*bil-fanāʾ*), realizes that His Lord-Sustainer remains (*bil-baqāʾ*)."[81]

79 Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions*, 90.

80 *Man ʿarafa nafsahu fa-qad ʿarafa rabbahu.* al-ʿAjlūnī noted, "Ibn Taymīya said that was fabricated; that al-Nawawī regarded it as being without a firm foundation (*laysa bi-thābit*); and that it was reported as having been said by Yaḥyá b. Muʿādh al-Rāzī. In spite of such criticisms, al-ʿAjlūnī noted one report in which Ibn ʿArabī stated, "This *ḥadīth*, if it is not authentic by way of its chain of narrators, it is [nevertheless] authentic by way of unveiling (*kashf*) (Al-ʿAjlūnī, *Kashf al-khafāʾ*, 343-44).

81 Aḥmad b. ʿAlī al-Rifāʿī, *Ḥālat ahl al-ḥaqīqa maʿa Allāh taʿālá,* ed. Aḥmad Farīd al-Mazīdī (Beirut: Dār al-Kutub al-ʿIlmīya, 2004), 60.

Awareness of self and emotions occurs particularly in the process of what is called in Islam "remembrance of Allāh" (*dhikrullāh* or *zikir*). Especially in the beginning as a result of practicing "remembrance" as directed by an experienced shaykh, paradoxically one will become aware of one's self, one's thoughts, and one's emotions. When dhikr is done with the awareness that the Divine name "Allāh" is the all-inclusive name of God (*al-ism al-jāmiʿ*), then awareness deepens and each emotion one feels is not simply an emotion; rather it is regarded as a "state" (*ḥāl*) from God, who is regarded as the "transformer of states" (*muḥawwil al-aḥwāl*). Similarly, one's emotional awareness will increase when *dhikr* is done with the awareness that God, as the "Lord-Sustainer of all the worlds," (*rabb il-ʿalamīn*) is the sustainer (*murabbī*) of every state. In particular, for Muslims grappling with the issues of technology—issues that may appear at times to be in conflict with Islamic values—it is essential that both scholars and their students face their uncomfortable emotions with as much emotional awareness and intelligence that Islamic cultural resources, such as *dhikr*, will enable them to bring to bear.

Since the second and third steps in EFT are closely interrelated, we will discuss them together. The second step in EFT is emotional arousal and expression; while the third is emotional regulation, especially the regulation of negative or maladaptive emotions. In EFT, the major key to both of these is the nurturing relationship with one's emotion coach or trainer. Having been apprised of this, today's scholars must realize that they are not merely transmitters of information and technology to their students. In particular scholars of the Muslim world are also responsible to face to their own emotions (and those of their students') in an emotionally intelligent fashion (by means of Islamic and Western scientific resources) as they grapple with constructing an ethics of technology. In this way they will model for their students how their students, too, can face the various issues and emotions evoked by technology. In particular, as Greenberg states, "The emotional validation and empathy of the therapist" is what helps people "to learn to self-soothe and restore emotional equilibrium."[82] In Islam, emotional arousal and expression, which is the second step, is facilitated in a number of ways, such as the following: First of all, through

82 Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions,* 91.

sincerity (*al-ṣidq*) in canonical and supplicatory prayers and in *dhikr*. This is when one stands before God and prays with *iḥsān*, as the Prophet ﷺ said in an authentic *ḥadīth* when defining *iḥsān* (which can literally be translated as the "affirmation of beautiful virtue"), "*Iḥsān* is worshipping God as if you are seeing Him; and if you are not seeing Him, then [at least realize that] He is seeing you."[83] Similarly, this arousal of emotion can come about by praying as the companion of the Prophet ﷺ, ʿAbdallāh b. ʿAmr b. al-ʿĀs (65 AH / 684 CE), recommended , "Plant for your world as if you are going to live forever, but act with regard to the Hereafter as if you are going to die tomorrow."[84] In other words, one's eternal spiritual well-being depends upon one's spiritual practice right now in any given moment. Second, emotions are aroused and expressed by reading and listening to Qur'an and stories about the Prophet, practice of Sufi *awrād* (litanies), in addition by participating in *samāʿ* (sema)(Sufi sessions of meditation to poems of praise of the Prophet or Sufi poems, which often deal with emotionally painful themes such as the separation from a lover from his/her beloved). Such sessions are well-known for arousing many emotions often to the point of tears and involuntary screams.

The third step in EFT, "regulating emotions," in Islam is commonly accomplished by following the *sharīʿa* (Islamic law, including regulations governing conduct), *sunnah* (the example of how the Prophet acted), and *adab* (manners) of Sufism. These all encourage Muslims and Sufis to restrict expression of hurtful and maladaptive emotions in particular. Fasting is especially useful in this regard. While today's relationship with technology may at times seem depersonalizing or at odds with religious values, scholars need to resist the temptation to express their frustration in maladaptive ways. The key to this is just as in EFT, where the 2nd and 3rd steps emphasize the importance of the relationship between the emotion coach or therapist and the client, the example of the teacher in a person-to-person transmission has always been an important key to transformation

83 Al-Bukhārī, *Ṣaḥīḥ al-Bukhārī,* Kitāb al-tafsīr. الإِحْسَانُ أَنْ تَعْبُدَ اللَّهَ كَأَنَّكَ تَرَاهُ، فَإِنْ لَمْ تَكُنْ تَرَاهُ فَإِنَّهُ يَرَاكَ

84 Ibn Qutayba al-Dīnawarī (d. 276/889), *Gharīb al-ḥadīth,* ed. ʿAbdallāh al-Jabūrī (Baghdad: Maṭbaʿat al-ʿĀnī, 1397/1976-77 and al-Maktabah al-shāmilah) 1: 81 and islamport.com, https://tinyurl.com/jwb9n89, both of which contain the chain of transmission of this report; and Ibn Athīr, *al-Nihāya fī gharīb al-ḥadīth wa al-athar,* ed. Ṭāhir Aḥmad al-Zāwi and Maḥmūd Muḥammad al-Ṭanāḥī (Beirut: al-Maktaba al-ʿIlmīya, n.d.), 1: 359; Ibn Athīr's version lacks an *isnād*. احْرُثْ لدنياك كأنك تعيش أبداً، واعْمَلْ لآخرتك كأنك تموت غداً

in general and in evoking and controlling emotions in particular. Traditionally one learned to approach emotions by being in the presence of elders (literally "shaykhs") in the community. The prime example of this was the Prophet Muhammad ﷺ, —since he lived, married, and worked in the world like ordinary people—whose life is, among other things, a record of the richness of human emotions. Sufis of course have regarded their shaykhs as living examples of the Prophet's character. Today, Greenberg directs emotion coaches, in particular circumstances, to evoke, express, and control emotions. Similarly, educators in general—by learning how to both express and control their own feelings and thereby to enhance their EI in general—can build on Greenberg's examples; and in the case of Muslim educators or with Muslim students, one can build on the example of the Prophet in order to facilitate the enhancement of their own EI and the EI of others. In an Islamic pedagogy for enhancing EI while facing the problems of a technologically dominated society and the emotions such problems evoke, as I have indicated, the trained Muslim emotional educator's ideally greater degree of empathy, emotional awareness, and ability to self-nurture will naturally create a fertile and safe space for the arousal and emergence of students' habitually suppressed emotions and will give rise to empathy, which will help to teach self-nurturing in his/her students. This self-soothing or self-nurturing, by diminishing the intensity of maladaptive emotions, will help them to regulate themselves. Even though it may be obvious to Muslim scholars, it bears remembering that God instructs Muslims "Do not despair of the mercy of God!" (*lā taqnaṭū min raḥmatillāh*) (Qur'an, Sūrat al-Zumar 39:53)[85] and "My mercy encompasses everything!" (*wa-raḥmatī wasiʿat kulla shayʾin*) (Qur'an, Sūrat al-Aʿrāf 7:156).[86] Reminding oneself and one's students of such *āyas* can certainly take the edge off of difficult states and regulate maladaptive emotions that the encounter with technology can evoke.

The fourth step in EFT, reflecting on emotions, consists of understanding emotional experience and developing "new narratives to explain [one's] experience."[87] Three interrelated narratives can be discussed in or-

85 قال الله سبحان وتعالى: لا تَقْنَطُوا مِنْ رَحْمَةِ اَللهِ

86 قال الله سبحان وتعالى: وَرَحْمَتِي وَسِعَتْ كُلَّ شَيْءٍ

87 Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions,* 93.

der to give some examples of possible narratives that can facilitate understanding the emotions that arise in the encounter with technology and in the process of developing an ethic of technology: the first narrative is to awareness of the theophanic signs that are everywhere in existence; the second is related to recognizing that the gratitude of humankind is being tested by God; and the third is a narrative related to being attracted by love to know God by means of actualizing the Divine qualities of our primordial nature. Concerning the first of these narratives, recognizing and reflecting on God's theophanic signs can assist Muslims in understanding, in an emotionally healthy manner, the feelings that they experience as they attempt to cope with a world dominated by technology. Specifically, God, in the Qur'an, repeatedly not only tells Muslims to use their intellects but advises them to recognize and reflect about the signs of God in the creation, which God states God has not created in vain (Qur'an, Sūrat al-ʿImrān 4:191).[88] Moreover, we read in the Qur'an, where God states that the signs of God are both in the created world and one's self: "We will show them Our signs on the horizons [of the world of existence] and within their selves" (*sa-nurīhim āyātinā fil-āfāqi wa-fī anfusihim*) (Qur'an Sūrat al-Fuṣṣilat 41:53).[89] So the Muslim scholar who is endeavoring to construct an emotionally intelligent ethics for facing technology should remind Muslim students to reflect upon their emotions by using an Islamic narrative framework such as I have sketched out, a narrative in which emotions are among the signs (*āyāt*) or theophanies of God's attributes (*tajalliyāt ṣifātihi*).

Further developing this narrative is that traditionally Sufis termed the signs and theophanies that were difficult to face as the theophanies of God's attributes of *qahr* (severity) or *jalāl* (celal/grandeur), while the signs or theophanies that were relatively easy to cope with were signs or theophanies of God's *luṭf* (benevolence) and *jamāl* (*cemal*/beauty). This understanding of the positively and negatively shaded polarities of the theophanic signs, goes hand in hand with the understanding that God is the ultimate agent of everything, and that everywhere is God's marvelous face, since "Wherever you turn, there is the face of God" (Qur'an, Sūrat al-

88 قال الله سبحان وتعالى: الَّذِينَ يَذْكُرُونَ اَللهَ قِيَامًا وَقُعُودًا وَعَلَى جُنُوبِهِمْ وَيَتَفَكَّرُونَ فِي خَلْقِ السَّمَاوَاتِ وَالْأَرْضِ رَبَّنَا مَا خَلَقْتَ هَذَا بَاطِلًا

89 قال الله سبحان وتعالى:سَنُرِيهِمْ آيَاتِنَا فِي الْآفَاقِ وَفِي أَنْفُسِهِمْ

Baqara 2:115). We add to this mix the awareness that although the Prophet ﷺ is the *ḥabiballāh* actualized, we are also *ḥabibullāh*, God's lovers, on the way to becoming actualized as we follow in the Prophet's ﷺ footsteps. Consequently, in this narrative, all of the difficult feelings that arise— as we face the modern world in general, and as we feel ourselves at times to be overwhelmed by its technological omnipresence, in particular—all these *qahrī* difficult feelings (as well as any *lutfu* pleasant ones that might arise) are new theophanic signs and faces of our Beloved that we are invited to love and reunite with. Here İbrahim Tennuri (d. 1482 CE), in a well-known poem, underscores the importance of responding with equal appreciation to the bi-polarity of the theophanic signs:

Cana cefa kıl ya vefa
Kahrın da hoş, lutfun da hoş,
Ya derd gönder ya da deva,
Kahrında hoş, lutfun da hoş.
O Beloved, whether you treat me badly or well
I'm happy with your severity or benevolence
Whether you send pain or the cure
I'm happy with your severity or benevolence
Hoştur bana senden gelen:
Ya hil'at-ü yahut kefen,
Ya taze gül, yahut diken..
Kahrında hoş lutfun da hoş.
I'm happy with whatever comes from you to me
Whether it's a robe of honor or a burial shroud
Whether it's roses or thorns
I'm happy with your severity or benevolence
Gelse celalinden cefa
Yahut cemalinden vefa,
İkiside cana safa:
Kahrın da hoş, lutfun da hoş.
Whether difficulty comes from your Grandeur
or ease from your Beauty
both of them are pure goodness for my soul
I'm happy with your severity or benevolence

Ger bağ-u ger bostan ola.
Ger bendü ger zindan ola,
Ger vasl-ü ger hicran ola,
Kahrın da hoş, lutfun da hoş.
Whether I'm in a garden or an orchard
in chains or in prison
in union or separated
I'm happy with your severity or benevolence[90]

A second interrelated narrative for approaching the many different emotions that arise while encountering technology and developing an ethics for engaging with it is that potential disturbing emotions can be understood as a means by which God is testing whether individuals will turn away and attempt to avoid these emotional theophanies or whether they will approach them with awareness and even appreciation. God states, "As for man, when his Lord-Sustainer tests him, honoring him, bestowing bounty upon him, he says, 'My Lord-Sustainer has honored me.' But when his Lord-Sustainer tests him, restricting his sustenance, he says 'My Lord-Sustainer has humiliated me'" (Qur'an Sūrat 89: 15-16).[91] To the degree that scholars themselves can respond, as a test of their gratitude to God, to the emotional difficulties they encounter when attempting to face technology and develop an ethic for it, they will be better able to assist their students in facing the emotions that technology has evoked in them; and they will also be better able to help students to utilize various Islamic narratives and to develop their own personal Islamic narratives as a foundation for understanding, utilizing, and transforming their emotions as they make their way through the technological age.

A third interrelated narrative that can facilitate emotional understanding in the context of our encounter with this technological age and help to make sense of one's emotional experience is the theological belief that God created creation because God loves and wants to be known directly, through experience, as indicated by the well-known *ḥadīth qudsī* transmitted by Sufis: I was a hidden treasure and I loved that I be known, so I

90 Numerous online sources ascribe this poem to Ibrahim Tennuri's *Gulzar-i Manevi*, although some attribute it to Yunus Emre.

91 قال الله تعالى: فَأَمَّا الْإِنْسَانُ إِذَا مَا ابْتَلَاهُ رَبُّهُ فَأَكْرَمَهُ وَنَعَّمَهُ فَيَقُولُ رَبِّي أَكْرَمَنِ وَأَمَّا إِذَا مَا ابْتَلَاهُ فَقَدَرَ عَلَيْهِ رِزْقَهُ فَيَقُولُ رَبِّي أَهَانَنِ

created creation in order to be known (*kuntu kanzan makhfīyan fa-aḥbabtu an ʿurafa fa-khalaqtu l-khalqa likay uʿrafa*).[92] God made manifest all of the names and qualities in creation, such that creation consists of nothing but traces of these Divine names and qualities, which are called *āyāt* (God's signs). Moreover, God "taught" Adam all of the Divine Names; and since we are the inheritors of Adam's being, we too have been taught all the Divine Names. This teaching of the names comes about since a God actually created Adam's nature and hence our nature in order to mirror the Divine Nature. As the Prophet ﷺ in an authentic ḥadīth stated, God created Adam in His image (*Inna Allāha khalaqa Ādama ʿala ṣūratihi*).[93] So, this primordial Adamic human nature of ours is a theophany (*tajallī*) of all of God's names and attributes, as the Prophet ﷺ, in authentic ḥadīth, said, "Everyone who is born is born according to the primordial nature (*kullu mawlūdin yūladu ʿalá al-fiṭra*)."[94] But like after the fall of Adam and Eve, we too are forgetful of our theophanic nature, unaware that God is our Rabb, the Lord-Sustainer of all of our qualities, including all of our thoughts and emotions. In our forgetfulness, when our emotions are disturbing we do not respond to our emotions with sufficient intelligence and gratitude to God. If, however, we were to respond even to our disturbing emotions and thoughts with sufficient intelligence and gratitude, we might be graced to remember that all of our emotions and thoughts, including our sense of self, are a continuous shower of God's unconditional mercy (*raḥma*). Such forgetfulness is one aspect of what being dominated by our *nafs* (ego-self) consists of. It results in a distortion of our awareness, such that we are not aware that all of our thoughts, perceptions, and feelings are theophanies being sustained by God (even our forgetfulness!). Because of this domination by our nafs, we do not see each moment's theophany (*tajallī*) with *ihsan*, as if we are seeing God or God's manifestation. Consequently, by depriving ourselves of the awareness of God, we

92 ʿAjlūnī noted that Ibn Taymiya and others asserted that because it lacks any chain of transmission, that it was not a *ḥadīth* of the Prophet. Nevertheless, ʿAjlūni did quote the *ḥadīth* scholar, Mullā ʿAlī Qārī (d. 1014 CE/1605 AD), who stated, "But its meaning is authentic," being in harmony with the Qur'anic *āya*, "I only created jinn and humans in order to worship Me" (Qur'an Sūrat al-Dhāriyāt 51:56), ʿAjlūnī, *Kashf al-khafāʾ*, 173.

93 قال الله سبحان وتعالى: وَمَا خَلَقْتُ الْجِنَّ وَالْإِنْسَ إِلَّا لِيَعْبُدُونِ

Muslim, *Saḥīḥ al-Muslim* فإنّ الله خَلَقَ آدَمَ عَلَى صُورَتِهِ

94 Bukhārī and Muslīm, *Saḥīḥayn*: كُلُّ مَوْلُودٍ يُولَدُ عَلَى الفِطْرَة

respond to each *tajalli* not as a theophanic mercy from God, but as a feeling that we must either crave or from which we must distance ourselves. In worst case scenarios this drives us in an evil direction, make it more likely that we will commit some form of evil, as God states, "The ego-self commands to evil" (Qur'an, Sūrat Yūsuf 12:53). Fortunately, since we have free will, we have the potential, at any moment, to rediscover our true theophanic nature and to recognize that God is our Lord-Sustainer now, along the lines of primordial man who, when asked by God "Am I not your Lord-Sustainer?" replied "Yes, we have witnessed [that]" (*Alastu bi-rabbikum, Qālū balá shahidnā*) (Qur'an Sūrat al-Aʿrāf 7: 172). By repeatedly responding to each new divine manifestation in one's heart with unconditional openness and gratitude and even with love for God (even if such manifestations happen to be the sometimes troublesome feelings that humans experience when faced with the behemoth of technology), over time the ego-self along with its emotions can be refined and transformed to the point where it has the quality of peacefulness: "O ego-self at peace, return to your Lord-Sustainer, content [with Him] and pleasing [to Him]" (Qur'an, Sūrat al-Fajr 89:27-30)."[95] To the degree that the ego is at peace, its previous distortions and addictions will neither cause it to act when it would be beneficial and intelligent not to act, nor cause it to refrain from acting when it would be intelligent and beneficial to act. Such a peace increases the likelihood that we will be able to receive greater wisdom (less distorted by the conditioned and unconscious fears and desires of our ego-self), greater wisdom about our optimal conduct in our relationship with God and in our relationship with this world of ours. This is the wisdom that Muslims believe was most perfectly manifest in the example of the Prophet ﷺ but which we can aspire to now as we endeavor to construct an ethics of technology .

Moving to the fifth and final step in our effort to apply Greenberg's process of cultivating emotional intelligence to an ethics of technology, we come to emotional transformation. The key to this transformation in EFT, as is often seen in what is now called "positive psychology" in general, is to substitute a positive emotion for a maladaptive emotion (after having become aware of it sufficiently to learn whatever useful information it is

95 قال الله تعالى: يَا أَيَّتُهَا النَّفْسُ الْمُطْمَئِنَّةُ ارْجِعِي إِلَى رَبِّكِ رَاضِيَةً مَرْضِيَّةً فَادْخُلِي فِي عِبَادِي وَادْخُلِي جَنَّتِي

conveying). For the Muslim scholar who is striving to provide optimal guidance to her/his students in this technological age—in particular to assist them in facing the emotional fallout that is one of its products — the way to take this last step of emotional transformation (in harmony with EFT's sense of substituting positive emotions for maladaptive emotions) is to educate students to attempt to (or to intend to) respond to every thought, feeling, and perception with even just a drop of the positive emotion of unconditional gratitude to God, namely, with gratitude to the Lord who is the Sustainer of all the worlds —with *al-ḥamdu lillāh wa-ashukru lillāh* (all praise and gratitude is due to God). Concerning the importance of gratitude, God states in the Qur'an, "If you are grateful, I will give you more" (Qur'an Sūrat Ibrāhīm 14:7).[96] And as the Prophet, in an authentic *ḥadīth,* said, "Should I not be a thankful servant?"[97]

In conclusion, it is my hope that by using the overall framework of the greater *jihād* to reduce the unconscious dominance of the ego-self (which is strengthened by the largely unconscious influence of emotions), scholars will begin to diminish the degree to which the ego-self obscures and distorts our efforts to construct an optimally humane Islamic ethics of technology. Practically speaking, I am suggesting that we, as educators, should adopt a methodology for developing an Islamic ethics of technology that is, on the one hand, harmonious with Qur'an, *sunnah*, and the wisdom of our pious predecessors, and, on the other hand, an approach that utilizes insights from Gadamerian hermeneutics and an evidence-based model from the psychology of emotional intelligence. This is what I have attempted to do with my (A)ffective (*ḥālī*), (B)ehavioral (*ʿamalī*), and (C)ognitive (*ʿilmī*) approach that I have outlined. Through the affective aspect, I suggest approaching the emotions (*ḥālī*) we encounter in the technological age based on empirically verified and testable concepts and methods, specifically Salovey and Mayer's "ability model" of emotional intelligence and Leslie Greenberg's Emotion Focused Therapy. Through the behavioral aspect, I suggest a method involving efforts by scholars, scientists, and leaders to develop engaged best practices (*ʿamal*) or *adab* for technology. Lastly, by means of the cognitive or *ʿilmī* aspect, I suggest

96 قال الله سبحان وتعالى: لَئِنْ شَكَرْتُمْ لَأَزِيدَنَّكُمْ

97 Bukhārī and Muslim, *Ṣaḥīḥayn* ارًوكُشَ ادًبْعَ نُوكُأَ الَفَأَ

utilizing a Gadamerian hermeneutical cultivation of self-understanding together with attempts to understand our technological world, while we move toward constructing an ethics of technology. Of course, all of this must be tempered by the humble recognition that if it is God's will, even our best efforts may fail; but, also, if it is God's will, we will succeed.

Wa-billāhi t-tawfīq.

References

Abdus Salam. *Ideals and Realities: Selected Essays,* ed. C. H. Lai (Philadelphia: World Scientific, 1987),

Abū ʿĪsá al-Tirmidhī, *Sunan al-Tirmidhī*, ed. Ibrahīm ʿAṭwah ʿAwaḍ (Cairo: Muṣṭafā al-Bābī al-Ḥalabī, 1975)

Aḥmad b. ʿAlī al-Rifāʿī, *Ḥālat ahl al-ḥaqīqa maʿa Allāh taʿālá,* ed. Aḥmad Farīd al-Mazīdī (Beirut: Dār al-Kutub al-ʿIlmīya, 2004),

Al-Bukhārī, Ṣaḥīḥ al-Bukhārī, Kitāb al-tafsīr. كَارَيَ هُنَّإِفَ هُارَدَ نْكُدَ مْلَ نْإِفَ ،هُارَدَ كَنَّأَكَ اللَّهَ دَبُعْتَ نْأَ نُاسَحْلإا

Antonio Damasio, *Descartes' Error: Emotion, Reason, and the Human Brain* (G. P. Putnam's Sons: 1994; New York: Penguin, 2005),

Bart Barendregt. *Economist*, "The Online Ummah" Aug 18th, 2012.

Bediüzzaman Said Nursî, *Lem'alar,* On Birinci Lem'a: Yedinci nükte, 108, http://www.sorularlarisale.com/index.php?s=modules/kulliyat&id=1922.

Bukhārī and Muslim, *Ṣaḥiḥayn* (al-Maktabah al-Shāmilah).

Cary Cherniss, Melissa Extein, Daniel Goleman, Roger P. Weissberg, "Emotional Intelligence: What Does the Research Really Indicate? *Educational Psychologist* 41(4), 2006, 239-245].

Daniel Goleman, *Duygusal zeka neden IQ'dan daha önemlidir*, translated by Banu Seçkin Yüksel (İstanbul: Varlık Yayınları, 2002

Daniel Goleman, Emotional Intelligence: why it can matter more than IQ (New York: Bantam Books, 1995).

Edwin A. Locke, "Why Emotional Intelligence Is an Invalid Concept," *Journal of Organizational Behavior* 26.4 (2005):

Erkan Türkmen, trans., *Mevlana'nın Gül Bahçesinden Bir Demet Gül,* Konya, 2012, http://www.rumierkan.com/TR/icerik.asp?content=Content_TR_65.00.htm.

Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions*,

Hans-Georg Gadamer, "The Problem of Historical Consciousness," trans. Jeff L. Close, in *Interpretive Social Science: A Second Look,* eds. Paul Rabinow and William M. Sullivan (Berkeley: University of California Press, 1987),

_____, *Philosophical Hermeneutics* (Berkeley and Los Angeles: University of California Press, 1976), 27.

_____, *Truth and Method,* eds. Garret Barden and John Cumming (New York: Crossroad, 1988), 239-40

_____. "Hermeneutics as practical philosophy" in *Reason in the Age of Science* (Cambridge: MIT Press, 1982), 103

Howard Gardner, *Frames of Mind: The Theory of Multiple Intelligences* (New York: Basic Books, [1983] 2011).

Huston Smith, *Beyond the Post-modern Mind* (Wheaton, IL: The Theosophical Publishing House, 1989), 73.

Ibn Qutayba al-Dīnawarī (d. 276/889), *Gharīb al-ḥadīth,* ed. ʿAbdallāh al-Jabūrī (Baghdad: Maṭbaʿat al-ʿĀnī, 1397/1976-77 and al-Maktabah al-shāmilah) 1: 81

Ibrahim Kalin, "Islam and Science: Notes on an Ongoing Debate" in Gary Laderman and Arri Eisen, eds., *Science, Religion and Society: An Encyclopedia of History, Culture and Controversy* (Armonk, N.Y.: M.E. Sharpe, 2007), 113.

_____, "The Sacred versus the Secular: Nasr on Science" in *Library of Living Philosophers: Seyyed Hossein Nasr*, L. E. Hahn, R. E. Auxier and L. W. Stone, eds. (Chicago: Open Court Press, 2001), 445-462.

_____ "Three Views of Science in the Islamic World" in *God, Life and the Cosmos: Christian and Islamic Perspectives*, eds. Ted Peters, Muzaffar Iqbal, Syed Nomanul Haq, (Ashgate, 2002), 43-75; and in Kalin, "Islam and Science," http://www.oxfordislamicstudies.com/Public/focus/essay1009_science.html.

Jalāl al-Dīn Rūmī, *The Mathnawi,* ed. Reynold A. Nicholson (London: Luzac, 1925), vol. 1 [containing the Persian text, book 1 and 2]:7, 78.

Jean Grondin, "Hermeneutics and Relativism" in *Festivals of interpretation: essays on Hans-Georg Gadamer's work*, ed. Kathleen Wright (Albany, NY: State University of New York Press, 1991), 53-54.

John D. Mayer, Peter Salovey, and David R. Caruso, "Emotional Intelligence: New Ability or Eclectic Traits," *American Psychologist* 63, no. 6 September (2008): 503.

Kemal Atatürk, *Atatürk'ün Söylev ve Demeçleri* (Ankara, 1952) II, 44, 5. Baskı 2006, Translated by Von Grunebaum in his *Modern Islam: The Search for Cultural Identity* (Westport, Conn.: Greenwood Press, 1983), reprinted (New York: Random House, 1963), 104. http://atam.gov.tr/wp-content/uploads/S%C3%96YLEV-ORJ%C4%B0NAL.pdf.

Kurt Muller-Vollmer, The Problem of Historical Consciousness ed. *The Hermeneutics Reader* (New York: Continuum, 1988), 39.

L. Nathanson, S. E. Rivers, L.M. Flynn, and M.A. Brackett, "Creating Emotionally Intelligent Schools With RULER," *Emotion Review* 8, no. 4 (October 2016

Leslie S. Greenberg, "The Clinical Application of Emotion in Psychotherapy," in *Handbook of Emotions*, ed. Michael Lewis, Jeannette M. Haviland-Jones, and Lisa Feldman Barrett (New York: The Guilford Press, 2008), 90-97.

Manuela Lenzen, "*Feeling our emotions"* [An interview with Antonio *Damasio*]. *Scientific American Mind* 16(1) (2005), 14–15,

Osman Bilen, *The Historicity of Understanding and the Problem of Relativism in Gadamer's Philosophical Hermeneutics* (Washington, D.C.: Council for Research in Values and Philosophy, 2001).

Peter Hershock. "Turning Away from Technotopia: Critical Precedents for Refusing the Colonization of Consciousness" in Peter D. Hershock, Marietta Stepaniants and Roger T. Ames, eds., *Technology and Cultural Values: on the Edge of the Third Millennium* (Honolulu: University of Hawai'i, 2003), 598.

Reza Shah-Kazemi, *The Other in the Light of the One* (Cambridge, UK: Islamic Texts Society, 2006), 48-50.

Seyyed Hossein Nasr and Muzaffar Iqbal, *Islam, Science, Muslims, and Technology* (Sherwood Park, Alberta, Canada: Al-Qalam Publishing), 98.

The Denial of Death (New York: Free Press, 1973).

Thomas A. Pyszczynski, Sheldon Solomon, Jeff Greenberg, *In the Wake of 9/11: The Psychology of Terror* (Washington, D.C.: American Psychological Association, 2003).

Tim Winter, "Qur'anic Reasoning as an academic practice," *Modern Theology,* July 2006).

Willard Gaylin, *Hatred: the Psychological Descent into Violence* (New York: Public Affairs, 2003), 90, 100-101]**,**

Ziauddin Sardar. *Islamic Futures: the Shape of Ideas to Come* (Chicago: Islamic Futures and Policy Studies, 1985), 175.

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Does Technology Create Value?

Süleyman Hayri BOLAY[1]

There has been an ongoing dispute on 'whether technique and technology create value' for more than half a century in Turkey. Is technology an indispensable element of need which shall definitely be acquired? What is it behind the obvious technique and technology that has a power to create value? What is the philosophical basis of the idea "Human Machine?" Can we use the technology we purchase with an ease of mind by satisfying our needs? Should we continue to buy more technology without damage awareness just because it satisfies our needs? Should we produce technology instead of importing it? Can we prevent the damage if we manufacture our own technology? How did technology affect our values and in what way? If technology creates a value, how and with what means does it do that? Does technology mechanize humans? Can humans become machines? Can robots replace humans? Can humans become robots? Can the human, mechanized and robotized, lose its liberty? Can humanistic features be preserved? The statement is in search of answers to these questions.

Of course if we regard all these questions, the universe and the man as one and acknowledge these as a whole, we can give more accurate answers. Worshipping, and working towards the guidance of his religion will be the main elements which will grant the most sacred place to the man in nature. The man has an honorable place in the universe. Societies and civilization can easily disperse if cultural features of mankind are not acknowledged. In this case, culture will produce a stereotypical persona without culture, personality, or any ideal; who will work like a machine. Regarding people as a machine, a tool, will fail to reinforce its spiritual level. According to distinguished Professor Hilmi Ziya Ülken, the dispersion that we see in the West is a result of the fact that cultural features of the West see people as machines, without acknowledging them as a whole.

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