

Islam: friend or fiend?

In Part 2 of a series, Muriel Mirak-Weissbach addresses the historical background to a Christian-Muslim dialogue around economic policy issues.

Both the advanced sector economies and those of the "Third World" are convulsed by the deepest depression in modern history. Whether or not this worldwide breakdown crisis will lead to further social upheaval, depopulation through famine, epidemic disease, migration, and wars, opening the chasm of a new Dark Age for humanity, or whether worldwide recovery will usher in an era of unprecedented growth and social progress depends on the extent to which those cultural impulses imbedded in our civilizations, responsible historically for generating human development, are mobilized for the task.

To be so mobilized, they must first be identified and scientifically understood. Lyndon LaRouche, in his groundbreaking work *The Science of Christian Economy* (Washington, D.C.: Schiller Institute, 1992), has articulated the first scientific approach to physical economy, built on the epistemological foundations of Christianity. With this and subsequent prison writings, including "On the Subject of God," published in *Fidelio* magazine (Spring 1993), LaRouche has provided the teaching for profound economic policy changes to occur in those nations of the world of a Christian cultural matrix, nations, such as France, the United States, and the nations of Ibero-America, for instance, which first emerged as industrial societies precisely due to the application of Christian humanist principles in economic and social policy, and which fell into decay as a direct result of their having betrayed those principles. LaRouche's works point the way for these nations to recover economic health, by rediscovering the science embedded in their Christian heritage.

In those nations of the world stretching from the Mediterranean across the Middle East and Persian Gulf, through Central Asia, the subcontinent, and into the Pacific, whose primary cultural impulse has been shaped historically by Islam, no such elaboration comparable to LaRouche's exists. A myriad of works has appeared, particularly in the last decade, purporting to define the parameters of Islamic economics, but they have by and large missed the mark, due to one fundamental methodological error. Rather than seeking to recover the seed-form in Islamic philosophy, which, planted in the soil of Arabic culture, gave rise to a flourishing industrial society, a veritable garden, they have fixated on the shape of certain specific leaves, so to speak, hanging on the tree. These are the financial mechanisms gleaned from a

literal reading of certain passages in the holy book of Islam, the Koran. The system thus constructed by assembling financial mechanisms, known as "Islamic" banking, may have facilitated the administration of vast fortunes, as in the case of Saudi Arabia (which pioneered Islamic banking), Kuwait, and Pakistan, but, as the respective economies show, it has not generated real wealth. Conversely, Iraq, which did generate enormous physical economic development, until it was stopped by the 1991 war, did so without the trappings of Islamic banking practices. For the economies of predominantly Muslim nations to pick up and continue the thread of successful economic development, which ran broadly from the 8th to the 13th centuries, it is necessary to revive for practice the philosophical outlook of that tradition.

Man as the subject of physical economy

In *The Science of Christian Economy*, LaRouche writes: "The possibility of a successful society depends upon two conditions. First, the society must generate scientific and technological progress; to do this, the society must have developed in its members the disposition and capacity for scientific progress. Second, the society must adopt policies which cause (the physical equivalent of) productive investment in scientific and technological progress to prevail over opposition to such policies.

"Thus, with certain qualifications, we must speak now of 'man the creator.' The mental-creative powers, which mankind demonstrates through the use of scientific revolutions, to increase qualitatively the potential population-density of our species, is the generality referenced. This generality shows mankind to mirror the Creator. Thus, man is designed to become the 'little creator,' the small mirror-image of the universal Creator. . . .

"Not only is this creative power uniquely characteristic of mankind, among all species; this creative power is located within the individual human personality, as a *sovereign* potential contained within that individual personality. Thus, it is the individual person who, by virtue of representing this *sovereign* power, is, individually, in the *living image of the Creator (imago viva Dei)*. . . .

"These two conceptions, *the role of scientific and technological progress*, and the fact that *each creative mental act is a sovereign process of an individual personality*, are the essence of all economic science" (pp. 227-229).

LaRouche shows that “economic science was developed . . . by Christianity; furthermore, the evidence is that perhaps economic science could not have been developed except by Christianity” by virtue of the fact that Christianity “organizes society implicitly according to the principle of the sovereignty of the human individual, defined in the way we have defined it here” (pp. 229-230).

Universal principles

If the principles underlying LaRouche’s economic science are universal—and they must perforce be, as it is a science—then those same principles must be reflected, albeit in another form, in Islam; otherwise, Arab society, organized through the revolutionary impulse of Islamic culture, could not have met the criteria for a “successful society” as defined by LaRouche. Since the historical record documents that Islam did lead Arab society to qualitatively increase its population potential, through the mediation of scientific and technological progress over centuries, the question is: How are the principles governing the relationship between God and man, as developed in Islam, coherent with those introduced by Christianity? And what are the implications for economic policy shaping?

The Koran is explicit enough to suffice, without immediate recourse to the schools of Platonic philosophers who elaborated the question. According to the holy book of Islam, believed to have been revealed to Mohammed, the Prophet, there is only one God:

God! There is no God
But He—the Living,
The Self-subsisting, Eternal (S ii, 255).

God, who is Life, Eternity, Unity, Power, Truth, Beauty, Justice, Love and Goodness, is the Creator of all things:

Lord and Cherisher,
Who created—
Created Man, out of
A (mere) clot
Of congealed blood . . . (S xcvi, 1).

His creation, furthermore, is continuing:

Praise be to God,
Who created (out of nothing)
The heavens and the earth,
Who made the angels . . .
He adds to Creation
As He pleases: for God
Has power over all things (S xxxv, 1).

This God does through the agency of man, the crown of His creation:

We have indeed created man
In the best of moulds (S xcv, 4)

who is endowed with the divine essence:

Behold, the Lord said
To the angels: “I am
About to create man
From clay:
When I have fashioned him
(In due proportion) and breathed
Into him of my Spirit,
Fall ye down in obeisance
Unto him (S xxxviii, 71).

Man is created, as is the rest of the universe, with a specific task or goal:

To each is a goal
To which God turns him.
Then strive together (as in a race)
Toward all that is Good (S ii, 148).

Man, by nature, has been created with a nature biased toward striving for the Good:

Him who created thee,
Fashioned thee in due proportion,
And gave thee a just bias (S xxxii, 7).

Specifically, the goal of man, as God’s representative on earth, is to engage in the process of self-perfection:

But God will not allow
But that His Light should be
Perfected, even though the unbelievers
May detest it (S ix, 32).

This means subjugating nature, by learning the laws of the universe:

He has made subject to you
The Night and the Day;
The Sun and the Moon;
And the stars are in subjection
By His command: verily
In this are signs
For men who are wise (S xvi, 12).

The conception of man sketched through these references is seen to cohere with that of the Christian tradition, which Islam explicitly incorporates, though in different form. Consequently, the economic teaching of Islam, in part explicitly laid out in the Koran, imbeds this conception in the laws of

social organization.

Man is provided by God with resources and natural means of production:

It is We Who have
Placed you with authority
On earth, and provided
You therein with means
For the fulfillment of life (S vii, 10).

As God's representative on earth, man must develop these means lawfully, that is to say, in respect for fellow man, without thievery, fraud, or misappropriation. Explicitly forbidden, on grounds that they violate the nature of man and the laws of the universe, are economic practices involving prostitution, gambling, alcohol, idols, or divination. All these practices tend toward reducing man to a beast, in violation of the way he was created. The most severe ban is on all forms of usury, which represents the greatest perversion of the lawful production of real wealth.

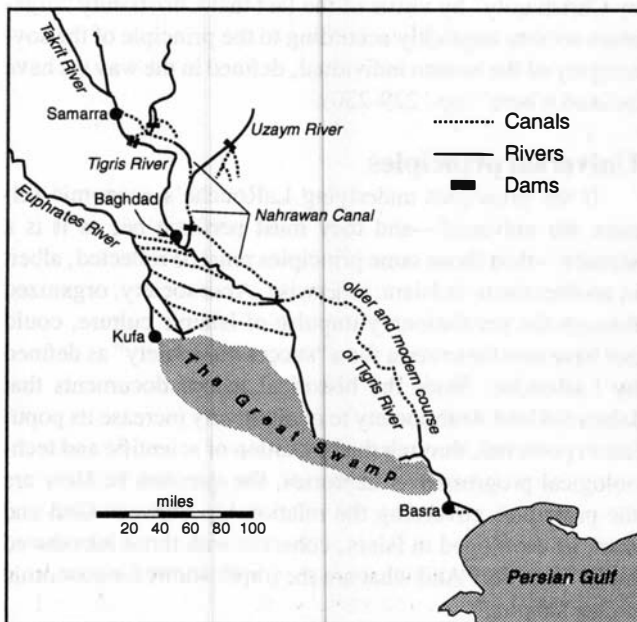
The Islamic injunction is for man to harness his God-given faculties of mind, creative reason, to produce wealth, for the benefit of himself and his family, as well as of his fellow man, through the institution of *zakat*, or charity tax. The way this and other taxes were levied and the revenues allocated in those periods of Arab history when the moral precepts of economic teaching were followed, demonstrates how technological progress was thereby stimulated through conscious policy. A brief reference to some highlights of Arab society following the death of Mohammed illustrates the point.

Arab policies for productive investment

Arab society, under the impulse of Islam, gave birth to a flourishing culture, organized around cities which were centers of industry, agriculture, commerce, and science. The enormous economic growth in the 8th and 9th centuries led to a demographic explosion; in Mesopotamia, the area of today's Iraq, it is estimated that 30 million people lived (as opposed to 18 million now). This correlation of an increase in potential population-density with the progress of civilization was noted, later, by the Arab historian Ibn Khaldoun (1332-1406) who, in his *Muqqadimah* ("An Introduction to History") used the word *'umran*, based on the verb "to build up, to develop," to designate both "civilization" and "population." Ibn Khaldoun saw the qualitative and quantitative increase in urban-based population correctly as an indication of an improvement in civilization.

Significantly, in Mesopotamia, 80% of the population which worked the land were not serfs, but free farmers. Islamic inheritance laws regarding private property, which excluded the right of primogeniture, favored the maintenance of family farms through distribution of lands to all the heirs.

Irrigation systems in Mesopotamia, A.D. 762-1200



Source: Donald Hill, *A History of Engineering in Classical and Medieval Times*, La Salle, Illinois: Open Court.

Following the founding of Baghdad in A.D. 762, the Arabs maintained an elaborate system of irrigation canals and dams in Mesopotamia (the area of modern-day Iraq), in order to control flooding along the Tigris and Euphrates rivers. Earlier, in A.D. 629, a disastrous flood had radically changed the course of the Tigris; beginning around 1200, the Tigris began to gradually shift back to its older bed.

Whether farmers maintained their independence or placed themselves under the custody of larger landowners, who managed their taxes, productivity was not affected, as economic legislation supported agriculture, through taxation. If a farmer produced food, simply reaping the fertility of God's land without making investments, he was expected to give 10% of his yield to the state. If, however, he developed irrigation, he would have to pay only 5% of his produce in taxes. Generally, it was the central state which invested in irrigation, with the idea that it was better to have a wealthy peasant than a poor one. In a *Book on Land Taxes* from the late 8th century, Abu Yusuf writes: "If you inform the Caliph that there is land in this region which could be cultivated if it were irrigated, and if this is confirmed, then you should give the order to dig canals. The cost will be covered by tax revenues of the state and not paid by the inhabitants. It is in fact better for people to be well off than to be poor, and that

they enrich themselves rather than going to ruin, and being condemned to helplessness" (André Clot, *Harun al-Raschid: Kalif von Bagdad*, note 2, p. 264).

Irrigation given top priority

Irrigation systems were the most important infrastructural prerequisite for all agricultural production (except wheat and grain), and their development and expansion were treated as a top priority. Canals, dams, and reservoirs ordered the flow of water around the new city of Basrah as well as Baghdad, and severe regulations were defined there as in Spain, northern Africa, and the East, regarding their upkeep and the distribution of water. Clot reports that in one city, Merv, "the head of the water works was a high-level official with 10,000 workers" and he enjoyed a higher social standing than the police chief. A waterwheel moved by animals was developed, as were water mills.

As a result of this advanced irrigation system, and the enlightened taxation regime, agriculture flourished. The yields were much higher than in non-Muslim Europe at the same time. "The ratio of yield to seed for wheat in Egypt was 10 to 1 . . . compared to 2 or 2½ in Europe at the time of Charlemagne. Comparable yields were not achieved in France until the 18th century" (Clot, p. 204). The main crops, aside from wheat and grain, were rice (brought in from India), dates, sugar beets (also from India), all sorts of fruits and vegetables, and spices. Overproduction in agriculture kept food prices at a very low level. Plants for industrial use included cotton, brought in from India and cultivated in Transoxonia, Iran, Iraq, Palestine, and Syria. Flax grew in Egypt, Tunisia, Spain, Iraq, and Iran. Wool was another textile product developed, and the Islamic world was the leading producer, especially North Africa. Silk was also developed.

Textiles the leading manufacture

Thus the textile industry was the leading manufacturing branch, providing clothing of the simplest cotton or flax to the finest silk for the caliphs and their entourages. The textile shops were owned by the caliph and run as state enterprises, but there were also private textile shops, as, for example, in Tinnis in the Nile Delta, where the textile industry employed the entire population (Clot p. 211). Spindles were used to spin, and a horizontal loom or a pedal-run one were used to weave. Tents, carpets used in homes as well as for prayer purposes, and clothing of all sorts were manufactured.

In 751, the Arabs introduced paper into their part of the world from China, and a paper industry rapidly grew up with the first factory in Baghdad in 794-795, followed quickly by others in Andalusia (Spain), Morocco, Sicily, Damascus, and Tiberias. Metalworking was very advanced, for weaponry, building fixtures, scientific instruments for weighing and measuring, for medical application, as well as for astronomical observation and navigation. A hefty construction industry

existed to build housing and government palaces, and shipbuilding was necessary for commercial fleets engaged in trade. Trade routes were expanded massively, both by land and sea, bringing the Arabs into constant contact with peoples throughout the Mediterranean as far east as China and as far north as Scandinavia.

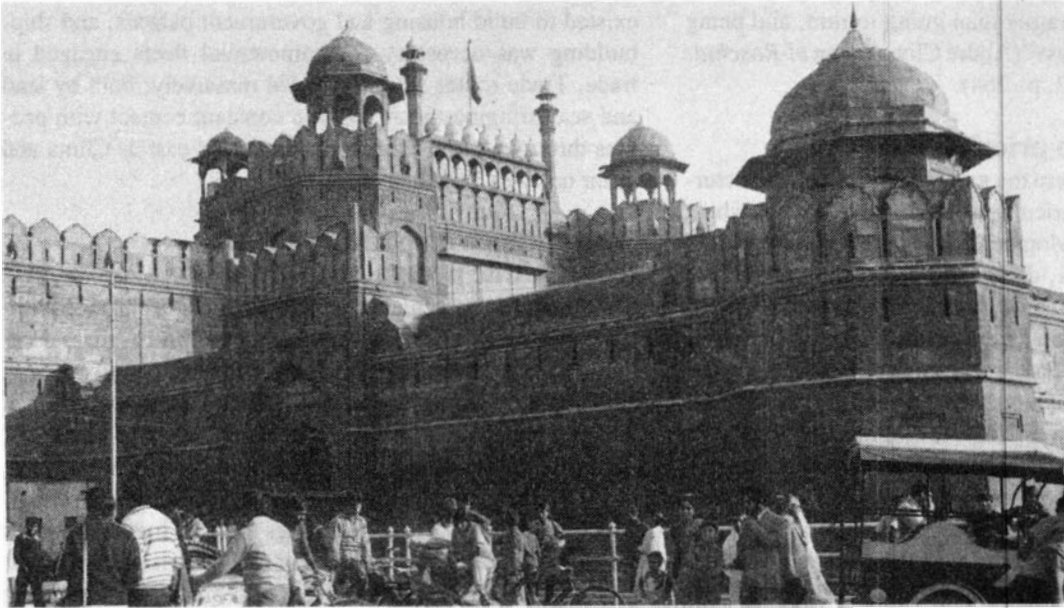
Generating a disposition for scientific progress

None of these achievements could have been made without a conscious effort, on the part of the first Abbassid caliphs, to develop cities as poles of economic activity as well as science. Two of the earliest cities, Basra, which had 300,000 inhabitants in 670, and Kufa, became centers of linguistic study, where the study of Arabic, the language of the Koran, engendered an advanced philological school, which incorporated the teachings of the Indian Sanskrit scholars. But certainly the jewel of early Islam was Baghdad, a city built from scratch by the Abbassids into a thriving metropolis and world center of learning.

Since Islam views man's capacity for Reason as that which separates him utterly from all lower species and destines him to comprehend God's universe in order to develop it further, the greatest of all human activities, to be fostered by the ruling institutions, is learning. The first task taken on by the Omayyad and Abbassid dynasties, was that of translation, to render into Arabic the knowledge available in other language cultures, especially from the Greeks, the Persians, and the Indians. From the end of the 7th century come the first reports of libraries in Baghdad.

It is absolutely crucial to understand that the intellectual awakening that took place under the first Arab caliphs (as well as later in Andalusia) was an ecumenical process, involving the works of the greatest minds of Judaism, Greece, and Christianity, conversing in the language of the Syrians, Aramaic, as well as Persian. It was the extraordinarily open characteristic of Arab culture, open to anything of value which could be introduced from any other culture, which constituted its greatness. As the Prophet is said to have stated, "Seek out wisdom, even if you have to travel to China to find it."

The routes through which classical Greek learning reached the Arabs were several. One was through the university of the Nestorian Church in Nisibis at the end of the 5th century, which was a center for translation of Greek classics into Syrian. Another was the school in western Iran at Gundeshapur, under the Sassanid (Persian) Khosroe I, who gave refuge to the neo-Platonic scholars from the School of Athens which had been closed by Justinian in 529. Here, great works of the Greeks, from Galen's medical treatises to the basic works in philosophy, were translated, again into Syrian. The Nestorian missionaries from Nisibis traveled into Arabia, just as the scholars and doctors from Gundeshapur centuries later gravitated toward Baghdad.



The city-building impulse: The Red Fort in Old Delhi, one of the magnificent fortresses built by the Moghals, 16th century Muslim emperors who established a national state in India in alliance with the Hindu kings.

Translation projects

In 765, Caliph al-Mansur had summoned the head of the Gundeshapur hospital to Baghdad to treat him. This learned man, Ibn Baktishu, was a Nestorian Christian and remained so, though he became the court physician, a tradition continued for generations by his family. Caliph al-Rashid sent emissaries to Byzantium in search of ancient manuscripts, which were then translated into Syrian and Arabic. Under al-Mamun (813-833) translation work became better organized, and the "House of Wisdom," which the caliph founded as an academy and translation center, with an astronomical observatory, grew into one of the richest libraries of the world. Everything they could lay their hands on was translated: Greek medicine from Galen, Hippocrates, and Paul of Aegina; Greek philosophy, especially Plato and Aristotle, Greek science of Ptolemy and Euclid, as well as Archimedes.

One of the foremost translators was the Nestorian Christian Hunayn ibn-Ishaq, who worked under the court physician Baktishu, until he was appointed head of the library. Ishaq oversaw all the scientific translation work, leading a staff of 90 students and translators. He himself translated from Greek into Syrian; his son, then, translated from the Syrian into Arabic. Ishaq's translations were so highly valued that al-Mamun paid him the equivalent in gold of the weight of the books he rendered into Arabic.

Treasures from Persia and India were also translated, particularly works of mathematics, and the Arab numerals, including the zero, adapted from the Indian system, were introduced. Works in astronomy, especially the Indian Siddhanta, were translated. Philip K. Hitti, in his *History of the Arabs*, writes: "In three-quarters of a century after the establishment of Baghdad the Arabic reading world was in possession of the chief

philosophical works of Aristotle, of the leading neo-Platonic commentators, and of most of the medical writings of Galen, as well as of Persian and Indian scientific works. In only a few decades Arab scholars assimilated what had taken the Greeks centuries to develop" (pp. 306-307).

Scientific contributions

By virtue of this immense translation effort, the caliphs made available in Arabic—a language which in the process became the main vehicle of thought in the educated world—the fundamental works of the ancients, thus making it possible for Arabs to study and re-trace, re-experience individually, the scientific breakthroughs which had been made by their predecessors. The introduction of paper contributed to the production and diffusion of books. As a result, Arab culture produced its own discoveries, contributing to universal human knowledge. Khwarizmi introduced the decimal system into mathematics, and wrote a book entitled *al-Jabr* (from which we have the word algebra), which was used as a textbook in Europe until the 16th century. Fundamental advances were made in the field of medicine by al-Biruni, Ibn Sina (who became revered in medieval Europe as "Avicenna"), al-Razi, and many others. Al-Razi, who wrote over 200 books on medicine, theology, and astronomy, was the first to develop diagnoses for various illnesses accompanied by fever, the first to develop treatment for smallpox, and the first to intuit the ways infectious diseases were transmitted. Ibn Sina, another giant source for Arab culture, was a Persian who wrote 170 books on philosophy, mathematics, astronomy, medicine, and theology. His *Canon of Medicine* was the leading textbook in European universities from the 12th to the 17th centuries. The Arab doctors developed advanced methods for surgery, including Caesarean sections and a

drainage for Gray Star of the eye, complete with anesthesia.

Such developments in the field of medicine were fostered by strict state supervision of the quality of doctors. Every doctor had to be licensed. Each surgeon had to go through intensive training, especially in Galen's writings; doctors were expected to make fundamental contributions to their discipline with original works. Furthermore, a network of social institutions was developed to promote medicine. Pharmacies prescribed medicines, all under the strict control of an inspector, who would appear unannounced any time day or night to make sure utensils were clean and prescriptions properly filled. In the 9th century, the first hospital was built in Baghdad, followed shortly thereafter by 34 more in the Islamic world. Hospitals had separate wards for different illnesses; patients were treated both as out-patients and in-patients. By the 11th century, mobile hospitals appeared, to reach patients in outlying areas, which was particularly important when epidemics appeared.

Emphasis on education

That this policy outlook, oriented toward developing the productive powers of labor through education, a public health system, and the promotion of science, was characteristic of Arab culture is illustrated as well by developments in Sicily and Andalusia.

Parallel to the advances in agricultural output stimulated by land reform, cities grew up in Andalusia after the Arab conquest of 711 as magnificent centers of industry and learning. Cordova boasted 113,000 homes, 21 suburbs, 70 libraries, and many bookshops, mosques, and palaces (Hitti, p. 526). It was to Europe what Baghdad was to Arabia. It employed 13,000 weavers in its textile industry and also had a flourishing leather industry. Spain produced wool and silk, glassware, pottery, mined gold and silver, and produced items in iron and lead renowned the world over. Seville and Malaga developed into rich trading centers.

As in Baghdad, emphasis was placed on developing the creative capacities of the citizens. Al-Hakim II al-Mustansir (961-976), son of Abd al-Rahman III, patronized learning with generous scholarships and established 27 free schools in Cordova (Hitti, p. 530). He expanded the mosque of Cordova into a university, which attracted Jewish, Christian, and Muslim scholars from the whole world. Al-Hakim also built up a magnificent library, sending emissaries to Alexandria, Damascus, and Baghdad to buy books. His library had 400,000 volumes. The population of Moorish Spain was, as a result, the most advanced in Europe; according to one account, "nearly everyone could read and write," at a time when elsewhere in Europe literacy was largely a privilege of the clergy.

The power of poetic imagery

Of utmost importance in the development of an educated population was the fact that the language of the Koran was

Arabic. Already in Bedouin society, Arabic had shown itself to be a language of enormous poetic capability. Through the Koran, which is a poetic work, the language became richer, finding ways of expressing not only poetical ideas but also important scientific concepts. As Wilhelm von Humboldt remarked, the Arabic language shares with its sister Semitic language Hebrew the power of poetic imagery, but excels it in having a finely developed scientific capacity.

Since the Koran is the holy book, as revealed to the prophet by Allah, it is incumbent on every Muslim to read it in the original. This fact is of capital importance. As Islam spread, proselytizing among the pagans as well as the members of the various Christian sects into which the Byzantine Church had degenerated—the Monophysites in Syria and Egypt, the Nestorians in Iraq and Persia—it brought with it mass literacy in the Arabic language. Due to the role of the language, anyone who was a Muslim and expressed himself in Arabic came to be known as an "Arab." Not only the religion, but the language, therefore, became a factor of unification, and an absolutely crucial element in the spread of science and technology.

Implications for the present

The Arab world, and, beyond it, the nations of Muslim culture among non-Arabic speaking peoples, preserve a heritage which, if revived as a Classical culture, would prove to be an invaluable asset to reordering world affairs. Regrettably, there are too few leaders in the Arab and Islamic world who recognize this in practice. The sheikhdoms of the Persian Gulf have amassed fortunes from oil revenues, dressing themselves in the extravagant pomp they believe to have characterized the ancient caliphs, while their populations lie in poverty, ignorance, and slavery. Those, on the other hand, who have claimed a return to "Islamic purity," as is the case in Iran, have imposed a formal, "rigid constructionist" reading of Islamic law on an oppressed population, smothering the spirit of creative intellectual life necessary to progress. As a result, they have so undermined the growth of the physical economy that they have introduced population reduction policies, which fly in the face of Islamic teaching.

Regrettably, also, too few among the political leadership in the non-Muslim world know what Arab civilization and Islam have achieved historically; thus, even those among the ecumenically minded are hampered in outlining a workable approach to building an alliance for economic recovery, the only route to peace. It is by looking back to Europe in the 13th to 15th centuries, when some of the best minds of Christendom entered into an historic dialogue with Arab culture at the highest philosophical level, that one can learn how such a process may generate yet further breakthroughs in science, technology, and art. It provides an excellent example of how peoples from different cultures can "Strive together, as in a race, toward all that is God."