

**ISLAM  
AND  
SCIENCE**

**A LECTURE**

**PRESENTED AT LA SORBONNE 29 March 1883**

**BY**

**ERNEST RENAN**

**2<sup>ND</sup> EDITION  
[24pp]**

[English translation by Sally P. Ragep, McGill University 2011  
with the assistance of Prof. Faith Wallis]



This work by Sally P. Ragep is licensed under a [Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License](https://creativecommons.org/licenses/by-nc-nd/3.0/).

© COPYRIGHT 2011 by Sally P. Ragep

[p. 1]

## ISLAM AND SCIENCE

---

Ladies and Gentlemen,

I have already so often experienced the kind patience of this audience that I have dared to chose, in order to expound it before you today, one of the most subtle of subjects, full of those delicate distinctions into which one must enter resolutely when one wants to bring out, more or less, the history of the field. What almost always causes misunderstandings in history is the lack of precision in the use of words that designate nations and races. One speaks of Greeks, Romans, Arabs as if these words designate human groups always identical to themselves, without taking into account changes produced by military, religious, and linguistic conquests—by fashion and great movements of all kinds crossing [p. 2] the history of humanity. Reality does not behave according to such simple categories. We French, for example, are Romans by language, Greeks by civilization, Jews by religion. The fact of race, central to begin with, always loses its importance insofar as the grand universal facts that go under the name of Greek civilization, Roman conquest, Germanic conquest, Christianity, Islam, Renaissance, philosophy, and revolution steamroll over the primitive varieties of the human family and force them to merge into a more or less homogenous mass. I would like to try to disentangle for you one of the greatest confusions of ideas we commit in this regard; I want to speak about the ambiguity contained in these words: Arab science, Arab philosophy, Arab art, Muslim science, Muslim civilization. The vague ideas that are held on this point result in many false judgments and even the practical mistakes can be sometimes quite serious.

Anyone with even the slightest education in matters of our time sees clearly the current inferiority of Muslim countries, the decadence of states governed by Islam, the intellectual sterility of races that derive their culture and education from that religion alone. All who have been to the Orient or to Africa are struck by what is the inevitably narrow-mindedness of a true believer, of that kind of iron ring around his head, making it absolutely [p. 3] closed to science, incapable of learning anything or of opening itself up to any new idea. From the beginning of his religious initiation, at the age of ten or twelve years, the Muslim child, until then [hitherto] still quite aware, suddenly becomes fanatical, full of a foolish pride in possessing what he believes is the absolute truth, happy with what determines his inferiority, as if it were a privilege. This senseless pride is the radical vice of the Muslim. The apparent simplicity of his worship inspires him with a contempt for other religions that has little justification. Convinced that God determines wealth and power to whomever He sees fit, regardless of education or personal merit, the Muslim has the deepest contempt for education, for science, for all that constitutes the European spirit. This bent instilled by the Muslim faith is so strong that all differences of

race and nationality disappear by the act of converting to Islam. The Berber, the Sudanese, the Circassian, the Afghani, the Malaysian, the Egyptian, the Nubian: once they become Muslim are no longer Berbers, Sudanese, Egyptians, etc. These are Muslims. Persia alone is an exception. It has kept its genius, because Persia was able to assume a separate place in Islam; it is basically more Shiite than Muslim.

To mitigate the adverse inferences that one is obliged to draw against Islam from this pervasive fact, many people point out that this decline, after all, is perhaps only transitory. For [p. 4] reassurance on the future, they appeal to the past. This Muslim civilization, now so diminished, was once very brilliant. It had scholars, philosophers. It had been, for centuries, the mistress of the Christian West. Why is it that what once had been the case could not be so again? That is the precise point on which I would like to focus the debate. Was there actually a Muslim science, or at least a science allowed in Islam, tolerated by Islam?

There is within the facts that are alleged a very real element of the truth. Yes: from about the year 775, until towards the middle of the 13<sup>th</sup> century, that is to say for around 500 years, there had been scholars in Muslim countries, very distinguished thinkers. One can even say that, during this time, the Muslim world had been superior in terms of intellectual culture to Christendom. But it is important to analyze this fact well in order not to draw wrong conclusions from it. It is important to follow century by century the history of civilization in the Orient in order to distinguish the various elements which led to this momentary superiority, which soon was changed to a quite marked inferiority.

Nothing is more remote from anything that one might call philosophy or science than the first century of Islam. The result of a religious struggle which lasted for several centuries and held the Arab conscience suspended between the various forms of Semitic monotheism, Islam is far removed from anything that could [p. 5] be called rationalism or science. The Arab horsemen who embraced Islam as a sort of pretext to conquer and plunder were in their time the finest warriors of the world; but they were certainly the least philosophical of men. An oriental writer of the thirteenth century, Abū al-Faraj, describing the character of the Arab people, expresses it thus: "The science of these people, in which they glorified, was the science of language, knowledge of its idioms, the texture of verses, the skillful composition of the prose...As to philosophy, God taught them nothing about it, and did not fit them for it." Nothing is more true. The Arab nomad, the most literary of men, is of all men the least mystical, the least inclined to meditation. The religious Arab is content, for the explanation of things, with a Creator God, governing the world directly and revealing himself to man by successive prophets. Also, as long as Islam was in the hands of the Arab race, that is to say under the four first caliphs and under the Umayyads, there did not occur in its midst any intellectual movement of a secular character. 'Umar did not burn, as is often repeated, the Library of Alexandria; this library, in his time, had almost disappeared. But the principle that he had caused to triumph in the world was in fact truly destructive of scholarly research and of various works of the mind.

Everything changed, when, about the year 750, Persia took [p. 6] over and the dynasty of the children of ‘Abbās was triumphant over those of the Banū Umayya. The center of Islam found itself transported to the region of the Tigris and the Euphrates. Now, that country was still full of the traces of one of the most brilliant civilizations that the Orient had known, that of the Sassanid Persians, who had reached its height during the reign of Chosroes Nouschirvan [Anūshirwān]. Art and industry were flourishing in these countries for centuries. Chosroes added intellectual activity there. Philosophy, driven from Constantinople, took refuge in Persia. Chosroes had books from India translated. Nestorian Christians, who formed the most considerable element of the population, were versed in Greek science and philosophy; medicine was entirely in their hands; their bishops were logicians and geometers. In the Persian epics, whose local color is borrowed from Sassanid times, when Roustem [Rustum] wanted to construct a bridge, he summoned a *djathalik* (*catholicos*, title of the patriarchs or Nestorian bishops) as engineer.

The terrible gale of Islam stopped in its tracks, for a hundred years, all the beautiful Iranian development. But the advent of the ‘Abbāsids seemed a resurrection of the brilliance of Chosroes. The revolution that brought this dynasty to the throne was made by Persian forces, under Persian leaders. Its founders, Abū ‘Abbās and especially Manšūr, were always surrounded by Persians. These men are, in a sense, the Sassanians resurrected [p. 7]; the intimate advisors, tutors of the princes, and the prime ministers are the Barmakids, a family of ancient Persia, very knowledgeable, faithful to the national religion, Zoroastrianism, and who only converted to Islam later and without conviction. The Nestorians soon surrounded these caliphs, who were barely believers themselves, and became by a kind of exclusive privilege, their first doctors. A city that has had in the history of the human spirit a quite exceptional role, the city of Ḥarrān, remained pagan and retained the entire scientific tradition of Greek antiquity. It provided to a new school a considerable group of scholars who stood apart from revealed religions, and who were especially skilled in astronomy.

Baghdad rose as the capital of this Persian renaissance. The language of the conquest, Arabic, could not be supplanted, no more than the religion entirely denied; but the spirit of this new civilization was essentially mixed. The Parsis [Persians] and the Christians prevailed; the administration, the police in particular, were in the hands of the Christians. All these brilliant caliphs, contemporaries of our Carolingians—Manšūr, Hārūn al-Rashīd, Ma’ mūn—were barely Muslims. They practiced externally the religion of which they are the leaders, the popes, if one can express it thus; but their mind is elsewhere. They are curious about everything, especially exotic and pagan matters; they inquire about India, the old Persia, and Greece especially. Sometimes, it is true, pious Muslims [p. 8] introduce to the court strange reactions. The caliph, at certain times, turns devout and sacrifices his infidel friends or free thinkers. But then the breath of independence regains the upper hand; then the caliph recalls his scholars and his companions of pleasure, and reconvenes a free life, to the great indignation of Muslim Puritans.

That is the explanation of this curious and captivating civilization of Baghdad, whose features are captured in the tales of *A Thousand and One Nights* for all imaginations. It is an odd mixture of official rigor and secret leniency, an age of youth and inconsistency, where serious art and the arts of the life of enjoyment were flourishing due to the protection of the outspoken leaders of a fanatic religion. The libertine, although still under the threat of the most cruel punishments, was flattered, and sought the court. During the reign of these caliphs, sometimes tolerant, sometimes reluctantly persecuting, free thought developed; the *mutakallimūn* or “disputers” held meetings where all religions were examined according to reason. We have some kind of an account of one of these meetings made by a participant. Permit me to read it to you, as M. Dozy translated it.

A doctor from Kairouan [Qayrawān] asked a pious Spanish theologian, who had traveled from Baghdad, if during his stay in that city he had attended meetings of the *mutakallimūn*.

“I attended two times, answered the Spaniard, but I took care [p. 9] not to return there.

— And why? his questioner asked him.

— You shall judge, replied the traveler. At the first meeting that I attended were found not only Muslims of all kinds, orthodox and heterodox, but also unbelievers of Guebres, materialists, atheists, Jews, Christians; in short, there were unbelievers of all species. Each sect had its leader, charged with defending the opinions they professed, and each time that one of these leaders entered the room, all rose as a sign of respect, and no one resumed his place before his leader was seated. The room was soon full, and, when it was packed, one of the unbelievers began to speak: ‘We are here to reason, he said. You know all the conditions. You Muslims, you will not put forward reasons drawn from your book or based on the authority of your prophet; because we believe neither one nor the other. Everyone must limit his arguments to those drawn from reason.’ All applauded these words. You understand, adds the Spaniard, that after having heard such things, I did not return to that gathering. I was asked to visit another; but it was the same outrage.”

A veritable philosophical and scientific movement was the result of this momentary slowing down of orthodox strictness. Syrian Christian doctors, the continuators of the last Greek schools [p. 10], were deeply versed in Peripatetic philosophy, in mathematics, in medicine, and in astronomy. The caliphs employed them to translate into Arabic the corpus of Aristotle, Euclid, Galen, Ptolemy: in a word, the whole of Greek science possessed at that time. Some active minds, such as al-Kindī, began to speculate on the eternal problems that man has asked without being able to solve. They were called *filsof* [faylasūf] (*philosophers*), and from then on this exotic word took on a bad connotation as designating something foreign to Islam. *Filsof* among Muslims became a dangerous name, often leading to death or persecution, like *zendik* and later *farmaçoun* [free-mason]. It was, admittedly, rationalism of the most comprehensive kind that occurred within Islam. A kind of philosophical society, who called themselves the *Ikhwān al-Şafā*, “the brothers of sincerity,” undertook to issue an encyclopedia of

philosophy, remarkable for its wisdom and elevated ideas. Two great men, al-Fārābī and Avicenna, soon joined the rank of the most comprehensive thinkers who ever lived. Astronomy and algebra, especially in Persia, underwent remarkable developments. Chemistry continues its long underground work, which is revealed to the outside by some astonishing results, such as distillation and perhaps gunpowder. Muslim Spain begins these studies following the Orient; the Jews bring to it an active collaboration. Ibn Bājja, [p. 11] Ibn Ṭufayl, Averroes raise philosophical thought, in the twelfth century, to heights where, since antiquity, no one had seen it reach.

Such is this great philosophical ensemble, which is commonly called Arab, because it is written in Arabic, but in reality it is Greco-Sassanid. It would be more accurate to say Greek; because the truly fertile element of all of this came from Greece. One was worth something, in these times of decline, in proportion to what one knew of ancient Greece. Greece was the unique source of knowledge and correct thinking. The superiority of Syria and Baghdad over the Latin West came solely from the fact that the Greek tradition touched them more closely. It was easier to have a [copy of] Euclid, Ptolemy, or Aristotle at Ḥarrān or at Baghdad than at Paris. Ah! if only the Byzantines had wanted to guard less jealously the treasures that at this moment in time they hardly read; if, from the eighth or ninth century, there had been [the likes of] Bessarion and Lascaris! This strange detour would not have been necessary which made Greek science arrive to us in the twelfth century, via Syria, via Baghdad, via Cordoba, via Toledo. But this kind of secret providence that, when the torch of the human spirit happens to die out in the hands of a people, another is found to raise it and reignite it, gave a value of the first order to the work, without which it would have fallen into obscurity, of these poor Syrians, these persecuted *filsof*, and these Ḥarrānians whose disbelief [p. 12] placed them beyond the pale of humanity. It was through these Arabic translations of scientific and Greek philosophical works that Europe received the ferment of the ancient tradition necessary for the flowering of its genius.

In fact, while Averroes, the last Arab philosopher, was dying in Morocco, in sadness and abandonment, our West was in full awakening. Abélard has already sounded the call of a reborn rationalism. Europe has found its genius and begins that extraordinary evolution, whose end point will be the complete emancipation of the human spirit. Here, on Mont Sainte-Genevieve, was created a new *sensorium* for the work of the mind. What was lacking were the books, the pure sources of antiquity. It seems at first glance that it would have been more natural to go and ask the libraries of Constantinople, which contained the originals, rather than translations which were often mediocre in a language that lent itself little to Greek thought. But religious discussions had created between the Latin world and the Greek world a deplorable antipathy; the tragic crusade of 1204 had only exasperated it. Moreover, we had no Hellenists; it would be necessary to wait another three hundred years for us to have had a Lefevre d'Étaples, a Bude.

In the absence of true authentic Greek philosophy, which was in the Byzantine libraries, people went to Spain to search for a Greek science that was badly [p. 13] translated and falsified. I will not speak of Gerbert, whose travels among Muslims are

quite doubtful; but already in the eleventh century, Constantine the African is superior in knowledge to his time and his country, because he received a Muslim education. From 1130 to 1150, an active college of translators, established in Toledo under the patronage of the Archbishop Raymond, transmitted into Latin the most important works of Arabic science. In the early years of the thirteenth century, the Arabic Aristotle makes its triumphant entry into the University of Paris. The West has shaken off its inferiority of four or five hundred years. Hitherto, Europe has been scientifically reliant upon Muslims. Towards the middle of the thirteenth century the balance is still uncertain. From 1275 roughly, two movements become evident: on one hand, the Muslim countries plunge into the saddest intellectual decay; on the other, Western Europe for its part resolutely enters upon this great path of scientific research for truth, a huge arc whose amplitude still can not be measured.

Woe to him who becomes useless to human progress! He is almost immediately suppressed. When the science which is called Arab has inoculated its germ of life into the Latin West, it disappears. While Averroes arrives in the Latin schools with a celebrity almost equal to that of Aristotle, he is forgotten in the home of his coreligionists. Shortly after the year 1200 or thereabouts, there is no longer a single [p. 14] renowned Arab philosopher. Philosophy had always been persecuted within Islam, but in a way that hadn't been successful in suppressing it. From 1200, the theological reaction prevails completely. Philosophy is abolished in Muslim countries. Historians and polymaths speak of it only as a memory, and a bad memory. Philosophical manuscripts are destroyed and become rare. Astronomy is tolerated only for the portion used to determine the direction of prayer. Soon the Turkish race will take the hegemony of Islam, and its total lack of philosophical and scientific spirit will prevail everywhere. From that period onward, with few exceptions such as Ibn Khaldūn, Islam will no longer be broadminded; it has killed science and philosophy in its midst.

Gentlemen, it was in no sense my intention to diminish the role of this great science called Arab that marks a milestone so important in the history of the human spirit. Its originality has been exaggerated on several points, notably with respect to astronomy; it is not necessary to go to the other extreme, deprecating it excessively. Between the disappearance of ancient civilization in the sixth century, and the birth of European genius in the twelfth and thirteenth, there was what one might call the Arab period, during which the tradition of the human spirit was created by the regions conquered by Islam. This science called Arab, what did it have that was Arab in reality? The language, nothing but the language. The Muslim conquest [p. 15] had brought the language of the Hejaz as far as the end of the world. It happened for Arabic as it happened for Latin, which became, in the West, the expression of feelings and thoughts that had nothing to do with ancient Latium. Averroes, Avicenna, al-Battānī are Arabs, just as Albert the Great, Roger Bacon, Frances Bacon, Spinoza are Latins. It is just as great a misunderstanding to credit Arabic science and philosophy to the Arab as to ascribe all of Latin Christian literature, all the scholastics, the entire Renaissance, all science of the sixteenth and part of the seventeenth century to the account of the city of Rome, because all of that is written in Latin. What is quite remarkable, in fact, is that, among the philosophers and the

scholars called Arabs, there is only one, al-Kindī, who was originally Arab; all the others are Persian, Transoxianans, Spaniards, people of Bukhara, of Samarqand, of Cordova, of Seville. Not only are these not of Arab blood; but they have nothing of the Arab mind. They use Arabic; but they are inhibited by it, just as the thinkers of the Middle Ages are constrained by Latin and break it to their purposes. Arabic, which lends itself so well to poetry and to a certain eloquence, is an instrument very inconvenient for metaphysics. Arab philosophers and scholars are generally quite poor writers.

This science is not Arab. Is it at least Muslim? Has Islam offered these rational [p. 16] discourses some protected assistance? In no way whatsoever! This beautiful movement of study is entirely the work of Persians, Christians, Jews, Harrānians, Ismā'īlīs, Muslims internally rebelling against their own religion. From orthodox Muslims it received nothing but curses. Ma'mūn, one of the caliphs who showed the most zeal in introducing Greek philosophy, was damned without pity by the theologians; the troubles that afflicted his reign were presented as punishments for his tolerance for foreign doctrines to Islam. To please the crowd stirred up by the imams, it was not uncommon that books of philosophy and astronomy were burned in public places or were thrown into wells and cisterns. Those who cultivated these studies were called *zendiks* (infidels); one would strike them in the streets, burn their homes. Often the authority, abiding by the crowd, would put them to death.

Islam, in reality, has then always harassed science and philosophy. It finished by stifling them. But we must distinguish two periods in this regard in Islamic history: one, from its beginnings until the twelfth century; the other, from the thirteenth century until our present time. In the first period, Islam, undermined by sects and tempered by a kind of Protestantism (the so-called mu'tazalism), is much less organized and less fanatical than it was in the second period, when it fell into the hands of the Tartars and [p. 17] Berber races, races which are coarse, brutal, and without intellect. Islam is peculiar in that it obtained from its adherents a faith continuously gaining in strength. The first Arabs who joined in the movement hardly believed in the Prophet's mission. For two or three centuries, disbelief is hardly concealed. Then comes the absolute reign of dogma, without any possible separation of the spiritual and the temporal: a reign with coercion and corporal punishments for those who do not practice; a system, finally, that has hardly been surpassed, in acts of torture, save by the Spanish Inquisition. Freedom is never more deeply wounded than by a social organization where dogma reigns and dominates absolutely civilian life. In modern times, we have seen two examples of such a regime: on one hand, the Muslim States; on the other, the former Papal State when it held temporal power. And we must say that the temporal papacy exerted an impact only on a small country, whereas Islam crushes vast portions of our globe and maintains there the idea which is most opposed to progress: the State founded on an alleged revelation, dogma governing the society.

Liberals who defend Islam do not know it. Islam is an indistinguishable union of spiritual and temporal, it is the reign of dogma, it is the heaviest chain that humankind has ever borne. In the first half of the Middle Ages, I repeat, Islam tolerated philosophy,



because it could not [p. 18] prevent it; it could not be prevented, because it lacked cohesion, and was ill-equipped for terror. The police were in the hands of Christians and principally engaged in pursuing the conspiracies of the 'Alids. A great many things passed through the mesh of this very loose net. But when Islam had at its disposal masses of armed believers, it stifled everything. Religious terror and hypocrisy become the order of the day. Islam has been liberal when it has been weak and violent when it has been strong. Let us then not give it praise for what it could not prevent. To honor Islam for philosophy and science because it was not annihilated from the start is as if we honored theologians for the discoveries of modern science. These discoveries were made despite the theologians. Western theology has not been less of a persecutor than that of Islam. Only, it did not succeed, it did not crush the modern spirit, as Islam crushed the spirit of the countries that it conquered. In our West, theological persecution only succeeded in one country: that is in Spain. There, a terrible system of oppression stifled the scientific spirit. Let us hasten to say, this noble country will take its revenge. What occurred in Muslim countries would have happened in Europe if the Inquisition, Philip II and Pius V had succeeded in their plan to stop the human spirit. Frankly, I find it hard to be grateful to people for not carrying the evil they were unable to accomplish. No; religions have their great and beautiful hours, when they [p. 19] console and lift up the weak parts of our poor humanity; but it is not necessary to complement them for what is born in spite of them, and for what they sought to prevent. One does not inherit from the people that one murders; one ought not let persecutors benefit from the things that they have persecuted.

However, that is what one is doing when one attributes to the influence of Islam a movement which occurred despite Islam, against Islam, and that Islam, fortunately, was unable to prevent. To honor the Islam of Avicenna, Avenzoar, Averroes, is like honoring the Catholicism of Galileo. Theology hampered Galileo; it was not strong enough to stop him; this is not a reason to be grateful to it. Far be it from me are words of bitterness against any of the symbols in which the human conscience sought peace in the middle of insoluble problems presented to him by the universe and its destiny! Islam has beautiful parts as a religion; I never entered into a mosque without a deep emotion — if I may put it this way, without some certain regret that I am not a Muslim. But, for human reason, Islam has been only harmful. The minds that it closed to light were already without doubt closed by their own internal boundaries; but it persecuted free thought, I will not say more violently than other religious systems, but more effectively. It made the countries it conquered a field closed to the rational culture of the mind.

[p. 20] In fact what essentially distinguishes the Muslim is the hatred of science, the conviction that research is useless, frivolous, almost impious: the science of nature, because it is in competition with God; the science of history, because when applied to times prior to Islam, it would revive ancient mistakes. One of the most curious witnesses in this regard is that of Shaykh Rifā'a, who had lived several years in Paris as a chaplain of the Egyptian school, and who, after his return to Egypt, wrote a work full of the most curious observations about French society. His fixed idea is that European science, especially its principle of the permanence of the laws of nature, is a heresy through and through; and it must be said, from the Islam perspective, he is not entirely wrong. A

revealed dogma is always opposed to free inquiry, which can contradict it. The result of science is not to expel, but always to distance the divine, to distance Him, I say, from the world of particular facts where people believe they see Him. Experience causes the supernatural to pull back and restricts its domain. But the supernatural is the basis of all theology. Islam, by treating science as its enemy, is only consistent; but it is dangerous to be too consistent. Islam has succeeded but to its misfortune. By killing science, it has killed itself, and has been condemned worldwide to complete inferiority.

When we start with this idea that inquiry is [p. 21] something that is detrimental to the laws of God, we arrive inevitably to intellectual laziness, lack of precision, inability to be exact. *Allāh a 'lam*, “God knows best what is,” is the final word of any Muslim discussion. In the early days of his stay in Mosul, M. Layard desired, being the lucid thinker that he was, to have some data on the population of the city, its trade, its historical traditions. He appealed to the qādī, who gave him the following answer, which I owe the translation to a friendly person:

“Oh my illustrious friend, Oh joy of the living!

“What you ask of me is both useless and harmful. Although all my days have been spent in this country, I never dreamed of counting the houses, or inquiring about the number of their inhabitants. And, as to what merchandise this one puts on their mules, that one at the bottom of his boat, truly, it is a thing that doesn't concern me. For the early history of this city, God alone knows, and He alone will be able to say how many errors His inhabitants drunk before the conquest of Islam. It would be dangerous for us to want to know of it.

“Oh my friend, oh my ewe, do not seek to know what doesn't concern you. You came among us and we gave you greetings of welcome; go in peace! In truth, all the words you said to me do me no harm; because the speaker [p. 22] is one, and the listener is another. According to the custom of men of your nation, you traveled through many lands, until you no longer found happiness anywhere. We (God be praised!), we were born here, and we have no desire to leave at all.

“Listen, oh my son, there is no wisdom at all equal to that of believing in God. He created the world; should we attempt to equal Him in seeking to penetrate the mysteries of His creation? Behold that star orbiting up there around that star; look at that other star that drags a tail and which takes many years to come and so many years to go away; let it alone, my son; the one whose hands formed it will know well [how] to manage and to direct it.

“But you will tell me perhaps: “Oh man! begone, because I am wiser than you, and I have seen things that you do not know!” If you think that these things have made you better than I am, be doubly welcome; but me, I bless God that I do not look for what I do not need. You are instructed in things that don't interest me,

and what you have seen, I disdain. Will vaster knowledge make a second stomach for you, and your eyes, which pry into everything, will they find paradise for you?

“Oh my friend, if you would be happy, cry “God alone is God!” Do no harm at all, and then you will not fear men or death, because your hour will come.”

[p. 23] This qādī is very philosophical in his way; but here is the difference. We find the qādī’s letter charming; and he, he would find what we are saying here abominable. For a society, moreover, the consequences of a similar mindset are fatal. Of the two consequences that bring about the lack of a scientific mindset, superstition or dogmatism, the second is perhaps worse than the first. The Orient is not superstitious; its great evil is rigid dogmatism, which was imposed by the strength of the entire society. The goal of humanity is not to rest in resigned ignorance; it is the implacable war against the false, the struggle against evil.

Science is the soul of a society, because science is reason. It creates military superiority and industrial superiority. It will one day create social superiority, I mean a state of society where the amount of justice that is compatible with the essence of the universe will be procured. Science places strength in the service of reason. There is in Asia elements of barbarism analogous to those that formed the first Muslim armies and those great cyclones Attila and Genghis Khan. But science bars their path. If ‘Umar, if Genghis Khan had been confronted with good artillery, they would not have gone beyond the limits of their desert. One should not restrict oneself to the occasional aberration. Much has been said, and from the earliest times, against firearms, and yet they have contributed much to the victory of civilization. For me, I [p. 24] am convinced that science is good; it alone furnishes arms against the evil that one can do with it, that ultimately it will serve only progress, I mean true progress, that which is inseparable from respect of mankind and freedom.