Civilization's Infancy in Mesopotamia

The Lord God planted a garden in Eden, to the East:
... the tree of life also in the midst of the garden,
and the tree of the knowledge of good and evil.
Genesis 2:8-9

Early Mesopotamian cultures B.C.

Iraq has a history that fascinates anyone even slightly interested in the civilized world, since civilization was born in the city-states of Mesopotamia 6,000 years ago. To adapt one of Ben Johnson's sayings: "To be tired of Iraq is to be tired of life". Here one finds the first traces of agriculture and the trading that ensued, the beginnings of organized religion, the development of mathematical methods, the flowering of the arts and architecture. Here is found the first form of writing and the beginnings of literature (including the first story of creation and the flood) which made possible the pursuit of knowledge and economic order within an organized government. Later civilizations were all influenced by Mesopotamia.

The cradle of civilization

It was Mesopotamia, the land between the Tigris and the Euphrates Rivers, that hosted the legendary Garden of Eden - if it existed anywhere. To emphasize this the ancient village of Al-Qurna singled out a tree ("Adam's tree") with a sign - in Arabic and English.
Chapter 1  Civilization's Infancy in Mesopotamia

On this holy spot where the Tigris meets the Euphrates this holy tree of our father Adam grew symbolizing the Garden of Eden. Abraham prayed here 2,000 years B.C.

Throughout Iraq loom ziggurat temples dating from 3,000 B.C. which recall the story of the Tower of Babel. One such ziggurat is Aqar-Quf (a suburb of present day Baghdad) marking the capital of the Cassites. In the south lie the ruins of Sumer where were found tens of thousands of stone tablets from the incredible Sumerian culture which flourished 5,000 years ago.

On some of these tablets, which were used for teaching children, are found fascinating descriptions of everyday life, including the first organized and detailed set of instructions on when to plant and when to harvest. Also in the south lie the ruins of Ur from which at God's prodding Abraham set out for the promised land. Here the Akkadians introduced chariots to warfare. Nearby on the west bank of the Shatt-el-Arab lies Basra which later became the home port of Sindbad the Sailor. The Marsh Arabs (Ma'dan) are found at the confluence of the Tigris and Euphrates in the south.

In the north of Iraq the gates of Ninevah (Ney-na-wah), the Assyrian capital with their imaginative stone winged-bulls mark the place where the prophet Jonah is said to have preached penance to the wicked inhabitants, all of whom repented, much to Jonah's chagrin. Later neighboring Mosul became the crossroads of the great caravan routes. Kirkuk is the oil center of the north and boasts of the tomb of the Old Testament prophet Daniel. The city of Mosul has given us the cloth that bears its name "muslin" as well as building materials, alabaster and gypsum cement with its remarkable strength and rapid-drying properties.

In the middle of Iraq lie the ruins of Nebuchadnezzar's Hanging Gardens of Babylon (Babel) close to the place where Shadrach, Meshach and Abednego sang their hymn of praise in the midst of the fiery furnace. Here Daniel read the mysterious Aramaic handwriting on the wall "mene tekel peres" (counted, weighed, divided) in the Aramaic or Chaldean language for Nebuchadnezzar and under the later rule of Darius, the biblical Daniel sat
Early Mesopotamian cultures B.C.

unharmed in the lions' den. The Old Testament "Daniel" story, probably written between 167-164 B.C., was borrowed from Babel and Persian literature and adapted for Jewish readership.

Judaism had been a presence in Mesopotamia since the Babylonian captivity from 586 to 538 B.C. Nearby, Xenophon and his 10,000 fought against the Persians and in 1700 B.C. Hammurabi composed his famous collection of laws. After conquering the world, Alexander the Great, at the age of 32 died an untimely death at Babel in 323 B.C. The Sassanid settlement of Selucia-Ctesiphon (Ma-da-in) boasted of a giant arch (the only remnant of the palace still standing) which was believed to have been the widest span of pure brickwork in the world. The Arch of Ctesiphon (Taq-ki-sra near Baghdad) testifies to the skill of its third century builders.

Early science

In History Begins at Sumer, Kramer tells of the third millennium B.C. Sumerian astronomers living along the Tigris River who noticed that there were roughly 360 days in the year. The missing five days were declared occasional holidays. This
number 360 was very convenient since it was divisible by many smaller numbers, so they divided each day into 360 gesh, which were later changed by the Babylonians to 24 hours with two levels of subdivisions. Present day use of minute and second is traced to the Latin translations of the Babylonian designations for these subdivisions: small bits (minuta -> minutes) and secondary small bits (secunda minuta -> seconds).

Around 2400 B.C. the Sumerians developed an ingenious sexagesimal system to represent all integers from 1 to 59 using 59 different patterns of wedges (cunei . . . cuneiform) which were usually imprinted in soft clay and later hardened. Integers from 60 to 3600 were then represented by a different symbol for 60 which was combined with the other 59 patterns. Like our decimal system it was positional so that the successive symbols were assumed to be multiplied by decreasing powers of 60. For instance, the number 365 in the decimal system would, in the sexagesimal system, be written 6 5 (= 6 times 60 + 5 times 1), just as 65 in our decimal system of base ten means 6 times 10 plus 5 times 1.

An adventuromsome, determined and curious reader with a calculator can verify that the Babylonian number 4 23 3 6 (equals 4 times 60 times 60 + 23 times 60 + 36 times 1) represents 15,816 in our decimal system. In their grasp of the workings of arithmetic the Babylonians were far superior to the Greeks of later centuries. The latter used letters for numbers (so 888 would be ωπη) and they would have trouble multiplying a simple problem like 12 times 28 which would be τβ times κη. The multiplication rules for letters were beyond the reach of an ordinary person.

Kramer uses as his main source the content of tens of thousands of Sumerian tablets, uncovered in this century from 1902 on, which date back to 2,400 B.C. and reveal a rich literature long before Greek civilization. These remarkable tablets gave us the first Farmer's Almanac filled with astronomical and mathematical data, proving that Sumerian schoolboys were learning the Pythagorean theorem 1,800 years before Pythagoras (circa 585-500 B.C.) was born. In this mainstream of our own cultural background, the Mesopotamian civilization, a fortuitous event in the evolution of arithmetic symbols occurred through the adoption of Sumerian "cuneiform" symbols by the Akkadians to represent their Semitic language as it became more popular in Mesopotamia.
Later Mesopotamian cultures A.D.

Christian presence since the first century

Iraq's Christian community dates back to Apostolic times. In *The Nestorians and Their Muslim Neighbors* (p. 24), John Joseph relates the traditions claiming that the Apostles, Jude Thaddeus, Bartholomew and Simon first planted the Christian faith in the north of Iraq. Also he notes the belief that St. Thomas stopped in Mesopotamia on his way to India. In the third century the Nestorian and Jacobite Christians became the most important advisors to the rulers of Mesopotamia. Their influence and ability to spread Christianity lasted for centuries.

The dominant rite now is that of the Chaldean Catholics. Others represented to a lesser degree are: Jacobites, Syrian Catholic, Armenian Orthodox, Armenian Catholic, Greek Orthodox, Greek Catholic (Melkite), Nestorians and Latin Catholic. The totality of Christians constitutes a small minority of less than 5% of Iraqis. The multiplicity of rites, however, in this small minority has led to friction, jealousies, and disputes which have prevented the Christian presence from being an effective Christian witness. After Vatican II, however, there has been a marked growth of the ecumenical spirit.

Three major seminaries were founded in Iraq during this century. One is at Dora just south of Baghdad and two are in Mosul, St. Peter's for the Chaldeans conducted by Chaldean priests and St. John's Syrian Seminary conducted by French Dominicans who also run a high school in Mosul. The Chaldean Sisters are the Daughters of the Immaculate Conception who had a number of schools for girls. In the first part of this century native Dominican Sisters ran 10 schools with 2,500 students. Chaldean Antonian monks in the monastery of St. Hormiz near Alqosh and the Carmelite Fathers do parochial work.

In the early days of the Society of Jesus while St. Ignatius was still alive, Jesuits passed through Baghdad on their way to the China mission. Recorded in the *Monumenta Historica Societatis Jesu* are the travels of Jesuits Gaspar Barzée and Raymond Pereira sometime between 1549 and 1567 and later Nicolas Trigault between 1612 and 1614. During the 17th century several dozen Jesuits made such a journey including one of the greatest Jesuit missionaries, Alexander de Rhodes, who labored in Indochina and who eventually was buried in Ispahan, Iran. Jesuit Brothers Bernard Sales and George Berthe died in Baghdad in 1661 and 1664. During this century the time had come for the Jesuits to return to Baghdad.
Islamic civilization

In the seventh century came the Muslim Conquest and the Baghdad Caliphs had more to offer than Sindbad, Scheherazade with her 1,001 stories, Aladdin and his wonderful lamp, Ali Baba and the forty thieves. The city of Baghdad became a center of Muslim power, the capital of the Abbasid Empire for five centuries (750-1258 A.D.), and the center of a flourishing Arab culture. In 1232 A.D. the Caliph Al-Mustansir founded, in the middle of Baghdad, Al Mustanseria, one of the earliest universities. However, later in the 13th century Baghdad was plundered by the Mongols and stagnated for centuries.

Baghdad then endured four centuries of Ottoman domination and mismanagement which ended with the British occupation following World War I. After this long ordeal Baghdad grew steadily into a modern city, especially after World War II. Among the significant events which shaped modern Iraq were the discovery of oil, the establishment of the Hashemite Monarchy, the overthrow of this same Hashemite monarchy and the establishment of the Republic in 1958.

The majority of Iraqis are Arabs. There is a large minority of Kurds and a lesser percentage of Turks, Iranians, Chaldeans, Assyrians and Armenians. According to the 1965 census about 95 percent of the eight million (in 1990 eighteen million) inhabitants were Muslims. The Muslims of Iraq are divided into Sunnites and Shiites, with the latter forming the majority. Southwest of Baghdad lies Najaf and the city of Karbala which is the shrine of the imam El-Hussein ibn Ali and an important pilgrimage site for Shiites.

About the middle of the ninth century Bait Al-Hikma, the "House of Wisdom" was founded in Baghdad which combined the functions of a library, academy, and translation bureau. A very conspicuous creative work of the Arabs lies in mathematics and astronomy. Arab astronomers have left quite a discernible impact on maps of the heavens and given us such words as azimuth, nadir, and zenith. Our mathematical vocabulary includes such borrowed terms as algebra, algorithm (from al-Khwarizmi), cipher, surd, and sine.

The "House of Wisdom" turned toward the ancient Babylonians in order to return to primary sources instead of relying on Greek translations. It continued for several centuries and eventually took in boarding students from Europe and all over the known world. Bait Al-Hikma flourished long before Paris, Salamanca, Bologna, Prague, or Oxford.
The Jesuit educational commitment

On many Jesuit campuses in the world one will find buildings with the same unpronounceable names of Jesuit scholars and saints. It takes little effort for a student of culture and scholarship to discover the Jesuit influence on poetry, philosophy, geography, art, drama, ballet, science, mathematics, politics, theology, asceticism, education, religious freedom and history. Today the Jesuit Society has 24,400 members (4,700 in the U.S.) in 1,825 houses, in 112 countries.

Jesuits as scholars and explorers

Jesuits have always been explorers, scholars and educators. They came to Brazil in 1565 and by 1615 they had five colleges/universities in Brazil. And long before the pilgrims arrived in Plymouth in 1620, the Jesuits arrived in Florida in 1566. Their foray into Paraguay in 1588 which was celebrated in the movie "The Mission", lasted for 160 years and resulted in a massive collection of 57 settlements run for and governed by 113,000 Paraguayan natives where Jesuits taught them how to live together in security and in comfort while defending themselves against the Spanish slave traders. By 1700 this Paraguayan civilization was so advanced that they were printing their own books and were writing music that competed with the Gregorian Chant.

John Jacques Rousseau, hardly an admirer of the Jesuits, called it one of the most altruistic ventures of human history. This noble enterprise was destroyed by the Spanish King Charles III in a brutal massacre in 1767 because the Jesuits had prevented the Spaniards from kidnapping the natives for their profitable slave trade.

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Explorer Eusebio Kino and Saint Ignatius Loyola

Over 400 stamps (40 countries) commemorate Jesuits

Two of the fifty statues in Statuary Hall in the Capitol in Washington, D.C. are Jesuits: Eusebio Kino and Jacques Marquette. Five of the eight largest rivers of the world were first charted by
Jesuit explorers and the border between Russia and China was plotted by the Jesuit Ferdinand Verbiest 300 years ago. Jesuits have been working in Russia for four centuries, many were jailed by communists in this century, some of whom today are being considered for beatification. China recently announced that a monument to the famous Jesuit scientists of the 17th century will be erected in Zhaqing - China of all places! Since 1948 China jailed 120 Jesuits. In fact, no other religious order spent as many man-years in jails as the Jesuits have.

**Jesuits as educators**

Through the centuries many Jesuit scholars have impacted society in every intellectual pursuit, but especially in the field of education. Some find it curious that historians place Ignatius Loyola with the world's great innovators of education from Socrates to Dewey. It was Ignatius' original plan that his energetic, well-educated men form a band of roving missionaries like Francis Xavier who would preach and administer the sacraments wherever there was the hope of accomplishing the greater good. It soon became clear to Ignatius, however, that schools offered the greatest possible service to the church. He realized how critical changes in a whole society could come through education, so he revised his original plan and became an enthusiastic champion of systematic education.

From the very beginning these Jesuit schools became one of the most influential exponents of Catholic reform, and this novel Jesuit enterprise was later called "a rebirth of the infant church". But this is not the reason why institutions like the Sorbonne in Paris and Columbia University's Teachers' College in New York City engraved "Loyola" on their walls. Ignatius' particular contribution to education was the fact that he realized education was not an end in itself but rather a means to lead the student to care about other human beings. The genius and innovation he brought to education came from his *Spiritual Exercises* whose object is to free a person from predispositions and biases, thus enabling one to make free choices. They are based on the premise that people who are free enough to say that the world is good, will recognize their own goodness and will live happy and fulfilled lives and be more concerned about fellow human beings.

*Jesuit physicist Roger Boskovich on a recent Croatian banknote*
Ignatius infused this ideal of service into the existing pattern of humanistic education and then fashioned these into an orderly process. The norms of instruction, known as the Ratio Studiorum or plan of studies, established certain basic characteristics for the Jesuit program which included a respect for the varying capacities of students. The organizational genius of Ignatius and his followers, focusing on the individual, stabilized classical and scientific studies gave them a popularity which even Erasmus was not able to achieve. Ignatius' innovations were perpetuated by his followers so that two centuries later in 1750 Jesuits operated 740 endowed Jesuit schools across Europe - all free of charge - paid for by benefactors and the state. Jesuits were called the schoolmasters of Europe during these centuries, not only because of their own schools but also for their pre-eminence as scholars and for the thousands of textbooks they composed.

**Jesuit success in education**

Among the characteristics which contributed to Jesuit success and to a new international educational style, John O'Malley, S.J. in his book *The First Jesuits* includes the fact that the schools welcomed students from every social class. Also they borrowed the insistence on self-activity which reflected the plan of the *Spiritual Exercises*. Jesuits sponsored a clear, coherent, and basically simple religious program, adaptable to students of different ages and backgrounds which sought to move the student beyond merely pious practices to an inner appropriation of ethical values. They used confraternities such as the Marian Sodalities to further articulate their religious program. All of these characteristics later became quite evident at Baghdad College, consisting not only in written compositions and oral repetitions in the classroom, but also in plays, disputations, and other spectacles open to the public.

The Jesuits were on the whole better educated and motivated than most pre-university schoolmasters almost anywhere in Europe. Further, they tried to influence their students more by their example than by their words. They repeatedly inculcated in one another the importance of loving their students, of knowing them as individuals and of enjoying a respectful familiarity with them. Whenever these ideals were achieved, they were crucially important in contributing to a school's success. Failure to achieve them would perhaps be even more telling. The blend of these features resulted in all educational programs that in some parts of Europe appeared as an improvement on practices already in operation, in other parts as a stunning innovation. (O'Malley, 1993, p.226)
The network of Jesuit schools

This largest of all religious orders and largest missionary society in the Church educates 1.5 million students. Today there are 90 Jesuit colleges in 27 countries. In the United States the 28 Jesuit colleges and universities have over a million living graduates. There are also 430 Jesuit high schools in 55 countries (46 are here in the United States). In these schools the Ignatian system of values has attracted exceptionally competent faculty and highly qualified students who form a Jesuit network in pursuit of the same goals.

Graduates of Jesuit schools are expected to make mature commitments to values and should acquire the self-discipline to live by these values. They should tolerate diversity of perspective and have a critical respect for their own cultural tradition. They should have developed competence in the skills of analysis, judgment and expression and be aware of their interdependence with their fellow men and women. They should know that theirs is a privileged position in a world where most people are poor and oppressed by the conditions they live in. They should be "men and women for others," that is, the good things, material and spiritual, which they want for themselves they should want for others too. They should be able to see in their own lives signs of a transcendent life and means of access to it. In Jesuit schools the Catholic tradition is nourished and there is a vibrant liturgical life as well as a faith perspective that motivates students and faculty to serve the marginalized.

Ignatian education, which began in 1547, is still committed today to the service of faith, of which the promotion of justice is an absolute requirement. Because of this, both Jesuit and lay educators in Jesuit schools have been a thorn in the side of tyrants for more than four centuries. Jesuits were often dismissed from countries and frequently involved in awesome controversies. They battled remote Roman clerics who during the "Chinese Rites" controversy forbade Jesuits working in China to allow Chinese converts to show traditional reverence for their ancestors because it seemed like ancestor worship. The ill-informed Roman decision proved a disaster for the Jesuit effort to spread the faith. Jesuits were a fearsome threat to the Spanish slave traders working in Paraguay because they organized the natives into defensible settlements as they had done for the Huron Indians in Canada a century previous. One recent example is the murder by the El Salvador military of the two housekeepers and six Jesuits who were determined to promote justice and to spread the Ignatian vision, teaching love and concern for others, which is the Jesuit program.