ACADEMIES

A Dream of Alexander the Great, at the Crossroads of East and West

The Alexandria Library Will Be Reborn

The news released by the Egyptian government, that the international project to rebuild the old library of Alexandria was nearing completion, must be classed not merely as an item of specialist interest, but as an event of world historical importance. For, the Alexandria library was not merely one among many ancient institutions, to be commemorated for the sake of antiquity: it was a model of the educational institutions required to create geniuses, today as then.

Throughout history, mankind has created institutions of culture which prove to be the crucibles for scientific advance, among them, the Academy at Athens, the great Madrasas of the Islamic

Renaissance, the cathedral schools of medieval Europe, Groote's Brethren of the Common Life, the Humboldt education system, the *Ecole Polytechnique* of Gaspard Monge, to name only a few. And, from earliest times, the greatest advances in social progress have been associated with civilizations whose rulers placed emphasis on the importance of libraries: It was through the establishment of libraries that Greek culture radiated learning to broader circles.

In Islam, the great caliphs of the Abbasid dynasty (A.D. 750-1258) dedicated enormous sums of money and time to collecting books. The idea was, that in order for a society to advance, it must have at its disposal the best products of the human mind, from anywhere in the world, any religious tradition, and from any period of history. Thus, the legendary Baghdad caliph Harun al Rashid and his follower al Mamun, sent emissaries throughout the world, to find manuscripts of philosophical, scientific,



Scholars consult scrolls in one of the halls of the ancient library of Alexandria, in this Nineteenth-century illustration.

and other works. So, too, the immensely rich culture of Andalusia in Muslim Spain, was largely a product of the indefatigable efforts of leaders like Abd al Rahman III (A.D. 912-961) and Al Hakim II (A.D. 961-976), to collect the fruits of learning in central locations, for scholars and ordinary citizens to benefit from. Similarly, the advances of Renaissance Italy would be unthinkable without the collection of manuscripts by such humanists as Francesco Petrarca and the protagonists of the Council of Florence.

This practice goes back to the ancient world, to Greece, and the library at Alexandria was its most illustrious example. But it was not the only one, nor the first. Book collecting was widespread among intellectuals and political figures in ancient Greece. Even the Athenian tyrant Pisistratus (605-527 B.C.) was a lover of music and culture, and was reputed to be the first to commission a group to assemble and edit the works of the great epic poet Homer. He is also

reported to have been the founder of the first public library in Athens. It was known that the great dramatist Euripides (480-406 B.C.) had a large collection of books, although details about them are lacking. Plato (427-348 B.C.) collected manuscripts during his many travels to Magna Graecia, and his student Clearchus (d. 353 B.C.) was reported to have founded a library. In Pergamum, where a school of the Stoics was founded, the library, founded by Eumenes II, was known as the Pergameniana, and boasted 200,000 rolls of papyrus or parchment. (From the second century B.C., Pergamum was the center of the production of parchment, which was the writing materi-

al made from the skins of animals, used to produce books.) Antioch was another site of a great library in the ancient world, which, under Antiochus IV, became an intellectual center.

But the greatest library of all was that at Alexandria.

The Vision of Alexander the Great

It was Alexander, rightly named the Great, who, after having conquered Egypt, undertook to found a city bearing his name—as he would do throughout Asia-which was to be a commercial crossroads between East and West, as well as a cultural and scientific center of the world. Alexander made the momentous decision on January 20, in the year 331 B.C., when he saw the site at Rakotis, in the Nile delta, where the island of Pharos jutted out into the Mediterranean. He ordered his architect Dinocrates to chart out a plan for the city. In 323 B.C., after Alexander's untimely death, the satrapy of Egypt fell into the hands of Ptolemy, and it was under the Ptolemies—Ptolemy I Soter (323-283 B.C.) and his son Ptolemy II (285-246 B.C.)—that Alexandria city was developed.

The city, which was to become the largest in the Greek world, was divided into three districts, or quarters, populated, respectively, by Egyptians, Greeks, and Jews. Graced with ample wide avenues and magnificent marble and stone buildings, the city was considered indestructible. There were four great buildings which stood out above the rest. The first was the Soma, which was built to house the body of Alexander, embalmed and encased in gold. Next was the Serapeum, with the Temple of Serapis for worship. Then, there was the museum, located in the Greek quarter known as the Brucheion. This was actually a center of study, with lecture rooms, galleries, and housing for hundreds of students, who could reside there and study. The students undertook to copy manuscripts, to edit them, to study them, and to conduct research of their own. The institution which provided them the material, was the famed library, the

Alexandriana. The library was organized in ten large halls, each of which corresponded to a branch of learning. In each hall, there were thousands of manuscripts, carefully catalogued and classified.

Among the many accounts in the ancient world of the building of the fabulous library and museum, there are numerous divergences as to who actually constructed it, whether Ptolemy Soter, under the recommendation of Demetrius of Phaleron, in 295 B.C., or Ptolemy II, "Philadelphus," his son and successor. According to the version provided by Epiphanius (A.D. 320-403):

"Now, the successor of the first Ptolemy [Soter] and the second of the

kings of Alexandria was, as we said, Ptolemy, surnamed Philadelphus. He was a lover of all that is beautiful and of literature, and built a library in that same city of Alexandria in the Bruchium so-called . . . which he placed under the charge of one Demetrius of Phalarene. Him he bade collect the books in existence in every quarter of the world, and he wrote letters importuning every king and governor on earth to send ungrudgingly the books [that were within his realm or government]; I mean the works of poets and prose writers, orators and sophists, physicians, professors of medicine, historians, and so on.

"One day, when the business was proceeding apace and the books were being assembled from all quarters, the king asked his librarian how many volumes had [already] been collected in the library. He made answer to the king and said: 'There are already 54,800, more or less. But I hear that there is still a great mass of writings in the world, among the Ethiopians and Indians, the Persians and Elamites and Babylonians, the Assyrians and Chaldaeans, among the Romans also and the Phoenicians, the

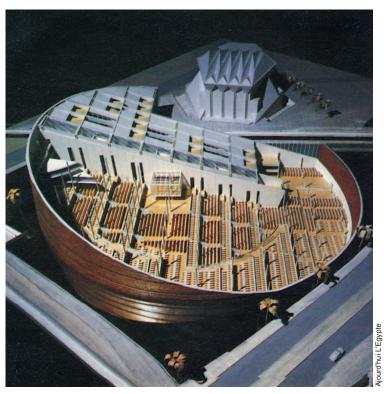
Syrians, and them of Hellas. . . . There are, moreover, with them of Jerusalem and Judaea certain divine books of the prophets, which tell of God and the creation of the world and contain all other teaching that is for the general good. Wherefore, O king, if it is thy Majesty's pleasure to send for these, also do thou write to the doctors in Jerusalem, and they will send them to thee.'"

This Ptolomy did According to an

This, Ptolemy did. According to an account given in an annotation in the Fifteenth-century parchment text of a work by the Roman playwright Plautus, known as the *Plautine scolium* from Caecius, the following occurred:

"Alexander of Aetolia, Lycophron of Chalcis, and Zenodotus of Ephesus, at the request of King Ptolemy Philadelphus by surname, who wonderfully favored the talents and the fame of learned men, gathered together the poetical books of Greek authorship and arranged them in order: Alexander the tragedies, Lycophron the comedies, and Zenodotus the poems of Homer and of other illustrious poets. For that king, well acquainted with the philosophers and other famous authors, having had the volumes sought out at the expense of

the royal munificence all over the world as far as possible by Demetrius of Phaleron (and other counsellors), made two libraries, one outside the palace, the other within it. In the outer library, there were 42,800 volumes; in the inner, palace library, 400,000 mixed volumes and 90,000 single volumes and digests, according to Callimachus, a man of the court and royal librarian, who also wrote the titles for the several volumes. Eratosthenes, not very much later the custodian of the same library, also makes this same statement. These learned volumes, which [Demetrius] was able to obtain, were of all people and languages; and the



Cut-away architectural model shows interior plan of the new library.

king caused them to be translated into his own language, with the utmost diligence, by excellent interpreters."²

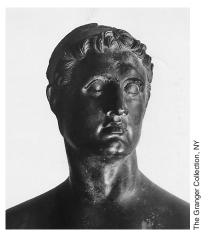
Ptolemy Philadelphus, who succeeded his father in 284 B.C., ruled over a vast empire, in a period of flourishing trade. He inaugurated vast infrastructure projects, promoted the construction of new cities, and encouraged immigration. During his rule, the empire counted about seven million inhabitants, liv-

ing in 33,000 cities and villages. Ptolemy's teachers, who imbued him with a love of classical learning, had been the poet Philetas, the grammarian Zenodotos of Ephesus, later the first head of the library, and the philosopher Straton, who taught him Greek and the sciences. Ptolemy Philadelphus followed the example of Alexander in his encouragement of nat-

ural sciences. It is related, that he sent emissaries abroad, in search of unusual animals, which he wanted brought back to Alexandria for study. His envoys travelled to India and throughout the Arab world, and brought back not only animals, but in-depth reports on the lands and customs they observed.

This great library became the center of learning of the world for over nine hundred years, and, in particular, a repository of the great accomplishments of Classical Greece. It attracted the greatest minds of Hellenistic culture like a magnet, minds like Straton, the comic poet Philemon (c. 361-262 B.C.), the geometer Euclid (fl. c. 300 B.C.), the physician Herophilus, Theodoros, the philosopher Hegesias of Cyrene, the poet Callimachus (c. 305-240 B.C.), his pupil Eratosthenes (275-194 B.C.), and many more. Among the librarians said to have been appointed to supervise the great institution, were Zenodotus, the tragic poet Alexander of Aetolia, Callimachus, and Eratosthenes. Others included Apollonius of Alexandria, the lexicographer Aristophanes of Byzantium (257-180 B.C.), and Aristarchus of







UPI/Corbis-Bettmann

Dynasty founder Ptolemy I Soter, a general of Alexander's army (top). His son, Ptolemy II Philadelphus (left). Cleopatra, last of Egypt's ruling Ptolemies (right).

Samothrace (c. 217-145 B.C.). And, because of the library, Alexandria became a center radiating the heritage of Classical (i.e., Platonist) philosophy and science throughout the Greek-speaking Mediterranean, in the years preceding and following the birth of Christ—as reflected in both the works of the Jewish philosopher Philo of Alexandria, and the New Testament *Gospel of John* and *Epistles of Paul*.

From the time of the reign of Ptolemy II, the king himself was an integral part of the intellectual process centered in the library. It is reported that Philadelphus, eager to expand his learning, went to listen to the lectures given by the scholars, and, like his father and Alexander, organized literary competitions.³ Under his son and successor, Ptolemy Euergetes (246-221 B.C.), this tradition was carried forward, as the ruler attracted more men of learning to the city, and actively participated in the

research activity they carried out. It was in the reign of Ptolemy Euergetes, that the great Eratosthenes was invited to Alexandria, from Athens. He arrived in 228 or 226 B.C., and took on the responsibility of librarian. Eratosthenes, who was renowned as a grammarian, poet, philosopher, historian, and mathematician—indeed, revered as a "second Plato,"—conducted research, experiments, wrote, and taught, until his

death in 196 B.C.⁴

The Ptolemies' dogged determination to make Alexandria the center of learning, led them to send emissaries worldwide in search of manuscripts. Ptolemy Philadelphus chased the volumes in the library of Aristotle, as well as various versions of the Homeric epics. In fact, he bought so many works, that he had to enlarge the library, to accommo-

date them, and in 250 B.C., new rooms were made available in the Serapis temple. It is related, that in their zealous search for knowledge, they would borrow famous manuscripts—for example, Ptolemy Physikon managed to get originals of the plays of Aeschylus, Sophocles, and Euripides-and have them copied, only to send back to the owner not the original, but the copy! The first 200,000 rolls were collected by Demetrius of Phaleron, according to the First-century B.C. Jewish historian Josephus. And the number increased, as the Plautine scolium documents, to 532,800. Later, the number was reported to be 700,000. Among these were large numbers of translations, including the translations into Greek of the Hebrew holy texts, the Old Testament. It is also related, that Euergetes II, in his zeal to maintain the primacy of the Alexandria library, forbade the export of papyrus, hoping thereby to limit the trade in writings. It was as a result of this embargo, that his competitors in Pergamum invented parchment.⁵

The books, or rolls of texts, were carefully catalogued in the immense

library. Callimachus, as librarian, undertook the task of organizing biographical and bibliographical tables of the works of poetry and prose. It is reported that Callimachus produced a work on the Museum, now lost; a "Table and Register of Dramatic Poets, chronologically from the earliest times"; and, "Tables of all those who were eminent in any kind of literature, and of their writings," the first comprehensive history of literature, in 120 volumes.⁶ The mere existence of such works by Callimachus attests to the character of the Alexandria library, as a highly organized center, where virtually everything known to exist in literature, history, philosophy, and sciences, was available, along with supplementary critical and bibliographical aids.

How the Library Was Destroyed

That such an institution could come into being, flourish, and grow, was due to the efforts of political and intellectual leaders who fully understood the crucial significance of the spread of knowledge, as the precondition for social and economic progress and stability. By the same token, it was thanks to the personal depravity and political wretchedness of later political leaders, in the Roman Empire and later, that the great library and museum were destroyed.

There are many historical versions of what happened to the library, at times contradictory. But what can be ascertained, for certain, is that the first seri-

ous blows to it came from the worst of the Roman emperors.

The scene had been set, from the reign of Ptolemy Philopater to Ptolemy Euergetes II (221-116 B.C.), for disaster, as the Ptolemies, though ostensibly still committed to patronizing science and the arts, themselves fell into decadence. As a result of misrule, tyranny and corruption, social unrest spread, and open factionalization between Alexandria and Rome emerged fol-

lowing the death of Ptolemy Euergetes II in 116 B.C.. This climaxed in 48 B.C., when Julius Caesar arrived in Alexandria, to battle Pompey and Cleopatra. In

the ensuing war between Caesar and the Alexandrian fleet, fires ravaged the city. According to the account of Dion Kassios: "Now, there were battles by day and by night, and many buildings went up in smoke: the naval and other arsenals, the grain storehouse, and the *library*, the richest and grandest of that day, so it is reported, was burned to the ground."

To which the historian Geord Klippel adds: "On this occasion, 400,000 book scrolls, along with the gracious halls where they were housed, fell victim to the flames within a few short hours, and world literature suffered an irreplaceable loss, which is all the more painful for us, because with this destruction in Alexandria of so many invaluable works of antiquity, the most important sources for our history were lost forever."

Cleopatra, who was reportedly well



The Granger Collection, NY



Emperors of Rome ruled Egypt and Alexandria after the Ptolemies. Augustus, first Roman Emperor (top). Caracalla (left). Diocletian (right).

educated in Greek, Latin, Egyptian, Ethiopian, and other Eastern languages, knew the value of the library which had been destroyed, and, after the assassination of Caesar, prevailed upon Mark Antony to transfer 200,000 volumes which were housed in the library at Pergamum, to Alexandria.

Peace was reestablished after the civil wars under the reign of Octavian (Emperor Augustus), and the library was rehabilitated. The fame attached to the name of Alexandria remained such, that virtually all the Roman emperors tried, in one way or another, to present themselves as protectors of learning. Even the notorious tyrant Tiberius (ruled A.D. 14-37) tried to profile himself as a lover of the sciences, and wrote poems in various languages. The emperor Claudius (ruled A.D. 41-54) supported the library, and even enlarged it. A scholar of Greek, Claudius also arranged for lectures to be held in the museum on Etruscan and Carthaginian history.9 Even the psychotic Nero put himself forth as a friend of the arts, not only defending them, but aspiring to be a poet himself. The same can be said of Vespasian and Titus, Trajan and Hadrian.

The turn for the worse occurred under Caracalla (ruled A.D. 211-217). This bloody tyrant, who traversed his provinces, plundering and killing as he went, was made the subject of ridicule by the Alexandrians, in a series of poems and stories.¹⁰ To teach them a lesson,

Caracalla proceeded into the city, and gave the order to his troops to enter houses and slaughter everyone indiscriminately. One account has it, that he entered Alexandria under the pretext of wanting to pay homage to Alexander. He made great show of respect for the city's founder, by visiting the Soma, and then went to the Temple of Serapis, allegedly to worship. Caracalla ordered all the

youth of the city to line up in phalanx formation, according to age and size, because, he said, he wished to admire them. Instead, he gave the order to his troops, to slaughter the unarmed youth, and plunder the city. Blood ran through the streets in rivers. The library survived, but barely. It was reported, later, to be standing, but with no occupants.

Further devastation occurred at the hand of Zenobia in A.D. 270, and in 295, Diocletian laid siege to the city, slaughtering the people and burning the buildings. Diocletian gave the order to seek out what books remained and destroy them by fire.

Under Theodosius the Great (A.D. 375-395), the wave of destruction which swept over Alexandria moved under the pretext of eliminating paganism. With the Edict of Theodosius, it was decreed that all the temples and pagan idols had to be destroyed. This included not only the Temple of Serapis, but, apparently, also the library and its works, which were eliminated in A.D. 389. Three hundred thousand volumes were stolen or destroyed, and the members of the museum were forced either to embrace Christianity or to flee. 11 Thus, three hundred years later, when the Arabs arrived under 'Amr ibn al-'As, and the authority of 'Umr ibn al-Khittab, conquering Egypt and Alexandria in about A.D. 642-46, there were very few rolls left in library's once glorious collection.

Rebuilding the Library Today

It is most fitting that it is an Arab government that has decided to reconstruct this wonderful institution, especially given the widespread acceptance of the slanderous myth—wholly contrary to the documented historical record—that the Alexandria library was destroyed by the Arabs during the period of Islamic expansion. As the historical record shows, the library was a most resilient institution, which held up over centuries, in the center of a fight to the death between those forces—present in various cultural traditions—which promoted the spreading of knowledge as the means to uplift and develop human society, and those forces dedicated to the idea of the tyranny of the few, who might impound such knowledge as a secret weapon, to maintain control over the ignorant masses.

The idea to rebuild the library goes back to 1974, and is attributed to Egyptian historian Mustafa al-Abbadi. The ambitious project was designed not only to commemorate the historic library, but to replicate it for the modern world. On June 26, 1988, Egyptian president Hosni Mubarak laid the foundations for the building, accompanied by the directorgeneral of UNESCO, which issued a call to individuals, organizations, and countries to support the project. An **International Committee for Supporting** the Funding Campaign, was established at the request of Egypt. In 1990, \$230 million was pledged, mainly by Iraq, Saudi Arabia, and the United Arab Emirates. The Egyptian government has underwritten the budget.

The first phase, building the substructure, at a cost of \$60 million, was completed in December 1996, by the Egyptian state company, together with Italian partners. The second phase started immediately thereafter, for the construction of the main building, which is to be ten storeys high. This part, which will cost \$120 million, is being constructed by Arab contractors and a British company. The library should have 69,000 square meters (750,000 square feet) of floor space, and should be able to house eight million volumes, in addition to hundreds of thousands of manuscripts, tapes, compact discs, and videos. In the words of Yousri El Hakim, who is the engineer heading up the construction monitoring unit, work is proceeding at a rapid pace, so as to complete it this year. "We have 400 workers from all over the world," he said, "working 24 hours a day in two shifts. . . . We should be finished by the end of 1998." El Hakim added that although UNESCO had been instrumental in the initiating phase of the project, "now it is 100 percent Egyptian, under the ministry of higher education."

The project leaders are trying to replicate the efforts of the Ptolemies, in gathering important works from all over the world. As the project manager Dr. Mohsen Zahran reports, the new Bibliotheca Alexandrina received a government budget for purchases, and 350,000 books have been acquired thus

far. In addition, governments and institutions from around the world have generously contributed magnificent items for the center. Among them, is a complete microfilm record of the priceless Arabic manuscripts in the Escorial Library in Spain, donated by the Spanish Royal Family in June 1997. France has donated several important books, including a copy of the Bible printed by Gutenberg. According to a protocol signed between Egypt and France, a grant of 4.4 million French francs is to be allocated for an advanced, multi-lingual data system, which will effectively constitute an index linked to the world's scientific networks. Already, 130,000 traditional and electronic data channels have been obtained, and personnel for the library are undergoing training locally and overseas. Australia has offered a \$10,000 grant-in-kind, which includes books published in Australia. The public library of the city of Starazaogra in Bulgaria will donate a rare copy of the Holy Quran to the library. The copy, which was received by Egypt's ambassador to Bulgaria, dates back to the year 1278 of the Hijra.

Thus, if the project reaches completion at the end of this year, the world will be considerably richer. The revived library of Alexandria should become, like its namesake, a center of learning and research, with emphasis on the civilizations of ancient Egypt, Greece, and the Eastern mediterranean. Scholars from throughout the world should flock there, as their ancient counterparts did, to study, deliberate, research, teach, and generate new discoveries.

-Muriel Mirak Weissbach

Additional illustrations appear on the inside back cover of this issue.

NOTES

1. Edward Alexander Parsons, The Alexandrian Library: Glory of the Hellenic World, Its Rise, Antiquities, and Destructions, (Amsterdam-London-New York: Elsevier Press, 1952), pp. 101-102. 2. Ibid., pp. 108-109. 3. Dr. Geord Heinrich Klippel, Über das Alexandrinische Museum, drei Bücher (Göttingen: 1838), p. 124. 4. Ibid., pp. 140-141. 5. Ibid., p. 161. 6. Parsons, op. cit, pp. 208-209. 7. Quoted in Klippel, op. cit, p. 186. 8. Ibid., p. 187. 9. Ibid., p. 211. 10. Ibid., pp. 226-227. 11. Ibid., pp. 251-252.